Levels of Engagement Framework:
Meeting Users at the Intersection of Need and Know-How

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Introduction

The Levels of Engagement Framework is a multi-purpose model that depicts the way in which users can interact with the library’s products and services. The framework was intentionally designed from the perspective of the user’s information need. It makes transparent how patrons can interact with the library’s services. It consists of four levels of engagement, illustrated in Figure 1: acquire, search, organize, and embed. Users can identify a level that matches their information need. From that, a distinct set of actions and best practices are initiated by the librarian. The Levels of Engagement Framework acts as a tool for librarians who support institutions that have a primary focus on research that leads to outputs such as publications, product development, and advancements in a certain field. Users in this environment are more likely to engage with librarians across multiple levels of the framework. The best practices recommended in this paper are based on experiences of the library staff at Educational Testing Service.

![Figure 1](http://www.bing.com/images)
Librarians who engage in multiple levels of the framework, demonstrate the versatility of a librarian’s skills. The framework may point out activities that librarians are not doing but should consider adding to their services. In most libraries, time and resources are allocated to operational work: circulation, interlibrary loan, resource management, and cataloging. These tasks, while necessary to any library’s sustainability, do not comprehensively reflect the rich skillset of the 21st century librarian. This framework encompasses both traditional and innovative library work. It describes ways that the librarian can enhance operational tasks and identify opportunities to engage in complex information transactions.

The primary level of the framework is related to acquiring a known item. In this case, the user has approached the information specialist with a request for a specific item. This type of transaction is essentially a request for access. The next level initiates when the item is unknown or the user is seeking information about a topic. At this level, the user does not have a specific knowledge object in mind. The librarian engages with the client to co-create a strategy for retrieving content. These general transactions (acquiring known items and searching for items) serve as the foundation for engaging in more advanced knowledge solutions. The third level of the framework is organizing information to facilitate search, discovery and re-use of data. At this level, the librarian’s data management skills, which tend to be underutilized, are employed. Activities include digital curation and the creation of metadata and taxonomies. The fourth level involves embedding with a specific research group or project team within the organization. As a research partner, the librarian becomes a member of the team and provides customized, targeted research at the point of need. Moving from left to right along the levels of engagement, the librarian becomes more invested in the information exchange and begins to directly influence the outcome of the work. To increase the organizational value-add of the exchange, the librarian should seek to engage with groups or projects that support the goals of the organization. Aligning the library’s services with critical, high impact projects, demonstrates the capabilities and value of the library, making it indispensable.

The Levels of Engagement Framework can be used to promote the library’s products and services as well as serve as a guide for allocating the library’s resources. Typically, librarians promote their offerings by presenting a list of products and services. In this scenario, users are responsible for matching their information need to the appropriate service. However, this approach is problematic if the services are unfamiliar. Librarians should consider the framework to help define what the library can provide. Some returning patrons may know exactly how to use library resources, but not all users are able to categorize their information need by matching it to a specific service. Librarians can function as the intermediary between the products and services, helping users discover ways in which they can fulfill an information need by interacting with the library.

In terms of resource allocation, the framework can act as a starting point for evaluating the current and ideal state of the library. Resource allocation and evaluation should be considered in terms of the collection and the library staff’s skillset and bandwidth. Librarians can decide how much time should be dedicated to each level and shift focus if needed. These decisions should be made in the context of how the organization will benefit from focusing on one level over another, while balancing the many demands of library maintenance. The library may experience greater support from leadership if focusing on a certain level can be connected to making better decisions to support the organization.
Level I: Acquire

Acquisition occurs when the user knows the item needed, but the content is not accessible. This level can exist in both a physical and virtual library setting. Users may browse or independently search for the item they need. Once they determine the item is inaccessible, they may approach the library with a request to acquire the item. If possible, librarians should note the preferred communication method of the user. For example, does one research group focus on communicating through a social media outlet like Yammer or LinkedIn? Does one user serve as a communication liaison for a group? Is there a notable difference between requests made through instant messenger versus those submitted through email or a request form? These insights should guide the library staff when communicating new resource features or distributing an announcement to an individual or group. Identifying the preferred method of communication may be useful for promoting acquired items, continuing the conversations with the user regarding content-delivery and enhancing the visibility of the library (Ard & Livingston 2014). When the library has an understanding of the nuances of communication within different user populations, it can become a more prominent resource for users looking to acquire an item.

The library functions as a conduit to information. Patrons may approach the library as an initial option or as a last resort. Regardless of when they arrive, they have come to the library because they need a piece of inaccessible information and the librarian acts as an intermediary. Existing as both a portal for accessible information and as an information broker is commonplace for most libraries including the ETS Library. The ETS Library maintains a library web-based portal that provides direct access to resources as well as promotes resources that are available only upon request. For example, the ETS Library subscribes to highly-customized content from a vendor that provide analytic reports on various markets. Although these reports cannot be shared company-wide due to a copyright restriction, they can be shared with a certain number of users. To engage our users, the ETS Library advertises the topics of these reports through organization approved social media and email. Users may then contact the library staff to request the item.

ACQUIRE: TRACK AND ANALYZE

Delivering the item to the patron is only part of the library's role in acquisition. Librarians should record and analyze transactions to reveal user behavior and research needs which can help shape the library collection. Capturing this data will provide a clear and accurate understanding of user information needs. When determining how or why to track these transactions, the librarian should ask: What does this transaction reveal? Will logging this information justify library activity? How will this help the library understand its role within the organization? Can the data be leveraged to further engage with the patron?

In addition to tracking circulation activity, the ETS Library tracks items requested through interlibrary loan (ILL) and book purchases. The staff classify these items as acquisitions because the item is known but the user cannot access the content. ILL transactions are recorded in order to understand high usage periods, justify the cost of the ILL subscription, track the
money saved by using the service, ensure that the library is within copyright compliance, decide what subscriptions should be added to the library’s collection as well as monitor trends in requests. Capturing book purchase requests is another example of acquisition tracking. Requestors fill out a form that includes the following information: the requestor's name, business unit, the title of the item, and the purpose or business justification. The business justification serves as evidence of the library’s contribution to teams and projects. These two examples of acquisition, interlibrary loan and book purchasing, may seem similar, but the way they are tracked vary because they serve different purposes within the library’s collection.

The two examples in the previous paragraph are considered the most common items of acquisition: books and journal articles. But acquiring items can also consist of acquiring resources, databases, or perhaps even a service for an individual. In one particular case in the ETS Library, a researcher had been following a journalist through social media but was only able to access a limited amount of content that the journalist had written. Since this content could help inform her work, she contacted the library and asked if it would be possible to acquire the resource for her and some of her colleagues. After evaluating the resources and requesting a trial subscription, the library added it to the collection. The library staff now has a better understanding of how this resource impacts the researcher’s work and the reach of library services. If the librarian believes the information services are not being leveraged, a close assessment of acquisition can reveal opportunities for further engagement with patrons.

Acquiring known items that are inaccessible to the user tells the patron population that the library is not only interested in knowing what is needed but takes action upon those requests. Users should know that librarians can potentially acquire items to help inform their work, and librarians should capture the requests being made in order to enhance the library’s collection. In this setting, users actively help to shape the content of the collection. As new resources are acquired, consideration should be given to removing items that may not serve the same purpose they once did.

**Level II: Search**

When users explain the kind of information they require without an exact item in mind, librarians search for content to fulfill that need. Searching is a solution to the request that begins "I need information on..." The librarian should initiate the typical reference interview and gather as much insight and context about the information need as possible. Librarians should understand the culture of the user population and be able to gauge how comfortable the user is with sharing the details of their project. They should listen to the user’s needs, provide solutions, and keep the conversation on-going so that the search can be agile and sustainable. An effective reference interview requires asking for clarification, restating the request, and agreeing on next steps and deliverables. Examples of useful questions to ask are "Can I send you some preliminary information to see if it’s relevant?" or "Are three peer-reviewed citations a sufficient deliverable?" When the librarian is clear on the information need, the search is more likely to be successful. In some cases, the librarian would conduct the search, locate relevant items, and deliver the information. In other instances
co-searching, where the patron and librarian construct the search together, is more appropriate. This process is usually repeated and refined to deliver more accurate information unless the need has been fulfilled. During this process, librarians should seize the opportunity to expose other library services, such as acquiring items, offering learning lessons, or setting up RSS feeds.

If acquisition is the foundation for developing the collection, then search is the foundation for developing a user’s information retrieval skills. To search is to explore the unfamiliar; it is an entryway to learning and discovery. In the digital age, and with diverse user populations, search methods will vary. Observe or ask users how they are connecting to information. The ETS Library discovered that many users relied on Google Scholar for content and bypass the library portal page. Instead of redirecting users to content in the library’s subscriptions, the library integrated access to its content into the Google Scholar search results. Librarians should continue to educate users on the limitations of popular search engines but neither the librarian nor the user should dismiss them. Mastering the search settings in both library databases and popular search engines, particularly sites that "specialize in indexing different spheres of the web" (Ard & Livingston 2014, 521), produce a more comprehensive set of search results. Librarians should acknowledge the patron’s method of information retrieval and respond with suggestions for improving the search strategy. If users do not have the skillset to navigate information resources to answer in-depth research questions, librarians should consider engaging in co-searching with the client, designing information literacy lessons, or offering database instruction. Each of these search related activities can lead to developing library-centered partnerships.

**SEARCH: CO-SEARCHING & INFORMATION LITERACY**

Users may approach the librarian to discover resources relevant to their topic or to better understand the functionality of a database. Librarians should recognize the opportunity to work with these researchers both instructively and collaboratively. The ETS Library encourages client co-searching where both the staff and patron construct the search based on the reference conversation. Co-searching is best implemented through layered questioning that focuses on the goal of the project. Together, librarians and users can strategically build the elements of a search.

In one case, a patron approached the ETS Library to better understand and maximize the use of a database for a meta-analysis. While the individual was well versed in the content, she needed to better understand the search functionality of the database. Since the patron worked remotely, the librarian determined that Skype for Business would be the best method of communication. During the initial conversation, the user elaborated on the purpose of the request. The conversation uncovered the user’s need to share information with researchers outside of the company and organize the information for the research group's internal use. The conversation also allowed the librarian and user to discuss potential resources which resulted in the librarian demonstrating how to use those resources.

In the following weeks, remote co-searching via Skype for Business continued. The benefits of screen-sharing did not end with the researcher watching the librarian’s screen. Instead, the librarian gave control to the user and was able to watch how she navigated the databases. Through screen-sharing capabilities, the librarian was able to see how searches were conducted, observe the selection of content, and make suggestions for improvements. It was the librarian's
responsibility to monitor and guide the live search as well as note the selected citations. As time went on, the researcher became more independent and would consult the librarian as needed. As a result of this engagement, the library positively impacted the outcome of the project and became an indispensable resource for this group.

In other instances, the ETS Library consulted with group leaders to understand their information gaps. After these consultations, library staff designed learning sessions to teach those user groups how to navigate library resources. Most sessions focused on effectively selecting resources and finding ways to leverage them by filtering and using advanced search options. In these sessions, users can observe how the librarian strategically searches for information while learning about the intricacies of the database. Users can then practice searching and share their experience with the librarian. Librarians can benefit from observing the user experience, especially when implementing customization options or upgrading a database. If the time spent searching is not fully used to the advantage of both the user and the librarian, then questions could potentially go unasked or information could go unfound; the outcomes are not as rich as they need to be (Siess 2010). There is a multi-layered benefit to creating one-on-one search sessions or group learning sessions. On the basic level, the librarian is connecting the user to the information, resource or necessary search strategy. In addition, this time together builds relationships and allows users to connect a service to a person whom they can contact in the future. Finally, these sessions are a type of outreach that identify the library as the prominent resource for information literacy.

**SEARCH: ALERTS & RSS FEEDS**

The library may be responsible for news curation and dissemination within the organization. With this task, the library can strategically align itself to individuals or groups who require up-to-date information. The ETS Library provides a daily news service to the company covering twenty topics related to the organization’s business. It relies on RSS feeds and alerts to collect the data. The content is vetted by library staff and then shared via social media (Yammer). On a smaller scale, the library repeats this process for researchers who need to stay informed on how a topic is evolving in the news or in publications.

If a library has electronic access to journals, it should communicate the option for users to create electronic alerts. In the case of the ETS Library, we have found that researchers who develop assessments require a variety of material written in a certain style. After identifying relevant journals, the library provided the researchers with instructions on how to receive notifications when new content is added to the journals. It is important to monitor the alerts to ensure that the content retrieved is relevant. Refining the search terms or selecting new sources of information can help limit the number of false hits. The librarian can be consulted during this process and assist in monitoring and updating the alerts. This creates a balance between the automaticity of information (the alerts) and the human-element (the librarian) that is necessary for successful information retrieval.
Level III: Organize

The third Level of Engagement addresses the needs of users who have data but need to effectively store and retrieve it. These individuals may have collected data while engaged in the first two levels, or they may have an existing dataset. The user approaches the library because their data is not structured in a way that enables search and discovery. In an ideal state, when users engage with the organized data, they should be able to seamlessly find, share, and reuse content. Reaching this ideal state requires close attention to the interaction among the resource, the data and the user. When engaging at this level, librarians demonstrate their expertise in designing schemas that facilitate the conversion of data to knowledge.

Organizing data requires collecting data objects, assigning metadata to those objects, and building an effective retrieval system. When librarians use taxonomies to organize information into customized libraries, they develop different types of relationships and connections within the information. In essence, the librarian is reapplying skills that are used to curate library resources. The difference is that instead of library hosted data, users are coming to the librarian with their own data that they need organized for their own purposes. The librarians’ skillset puts them in a unique position to serve as a liaison among the three key elements in data organization: the user, the schema and the technology.

The ETS Library has engaged with various users and teams to support data organization projects. The size and scope of these projects vary greatly, however the process of data organization remains consistent. For example, the library developed and curates a large-scale, publicly available database called ETS ReSEARCHER. This database, created in collaboration with ETS’s Research & Development staff, houses all published ETS research from its founding to the present. The research publications themselves are the data objects. The development of this resource required collaboration as well as clearly defined metadata that would respond to complex search queries. Controlled vocabulary and careful attention to consistency in populating the metadata, results in a successful search experience.

In contrast to this publically available database, librarians at ETS have worked with internal divisions to create repositories to house datasets. Hydock (2012) explains that “Managing the flow of data researchers generate is an ongoing challenge, and growing fast. Whether it’s in a biological research lab, an academic setting, or in the R&D center of a corporate enterprise, having research data that is accessible and organized is crucial to validating research results, and supports further innovation.” Being a research based organization, ETS has accumulated high volumes of datasets such as program data, survey and observational data as well as data from other institutions which is used to inform ETS’s research. Making this data findable and accessible, by applying metadata and controlled vocabulary, facilitates reuse and potential discovery. As an example, two separate divisions may be doing research on national high school dropout rates and how they relate to the achievement gap. If a data set related to these two topics existed in a searchable database, multiple user groups could access it to inform their own research. One user group may find that variables regarding demographics can reveal causal relationships. Another user group may instead filter through variables related to teacher
licensure or experience. By organizing the data and making it findable, the librarian has allowed the data to be analyzed and re-used for different purposes. The datasets, in the original form, are inefficient when trying to identify meaningful connections (Ard & Livingston 2014).

Regardless of the scope of the data organization, the library follows a distinct process for both the development of the taxonomy and the user interaction with the organized data. Taxonomies are built once the data objects are provided and metadata are assigned. The organization of the data addresses the immediate data classification needs; however, when designed correctly, it can reveal gaps in research or new research opportunities. Before any data is repurposed and organized, the library must first engage with the user to understand the need and the goal. The three elements of this process include consulting with users, selecting a storage platform, and determining the role of the librarian.

**ORGANIZE: THE CONSULTATION**

When a request is received to organize data, the first step is to understand the data in the context of how it applies to the user’s work. Investigate how the user intends to interact with the data and understand how having the data organized will improve the work flow. Increased productivity and informed decision making are some of the benefits of having data organized. Librarians should address the following question: if users approach the library with a pre-existing dataset, why does the data need to be repurposed or reorganized? At this stage, focus should remain on the gap and not the solution. Learning about the data and the user’s objectives will increase the effectiveness of the engagement. Librarians must fully understand the problem the user is experiencing as well as his or her goal in order to make an effective recommendation. Prompting the user to apply real life scenarios of data interaction is useful.

Data comes in all shapes and sizes. Users may have very structured, tagged data sets or the data may be inconsistent and random. The granularity of data can impact the way in which it’s organized. For example, an organization’s landing page or intranet home page, requires a high level, intuitive taxonomy. High-traffic pages demand easy-to-use taxonomies where users can quickly locate information with limited searching. In other instances, users need to organize complex data sets with various data types. Taxonomies developed for targeted users or intricate datasets may require a highly customized classification scheme. In these cases, each piece of data should be considered in terms of its relevance and necessity. The following list of questions can help guide the conversation. Keep in mind that beyond the initial conversation, there should be regular interaction as the process evolves. Objectives and goals need to be clarified and agreed upon among all stakeholders before taking action with the dataset. In addition, the answers to these preliminary questions may change as the librarian and the user become more familiar with the characteristics of the data. This list is not meant to be exhaustive and the conversation will not be linear. Rather each inquiry will lead to a deep dive into various aspects of the data which will then shape the solution. Once the data fields are defined, the user and librarian should be able to co-create a metadata scheme that is comprehensive as well as flexible.
**Library Consultation: Guiding Questions**

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<tr>
<th>Question</th>
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<tr>
<td>Why is this data important?</td>
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<td>How will organizing this data improve your work?</td>
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<td>Who will be using the data and in what capacity?</td>
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<td>What resources will be allocated to developing and curating the data structure?</td>
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<td>How will assigning metadata enhance the usability of the data and the taxonomy?</td>
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<td>What will users do with the data once it is retrieved (i.e. download, share, integrate)?</td>
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<td>How can using a controlled vocabulary facilitate search?</td>
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<td>Are there opportunities to automate data entry by using drop down menus and check boxes?</td>
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<td>How will individuals retrieve the data (i.e. free form search, controlled vocabulary, both)?</td>
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<td>Is the data confidential or are unique permissions required?</td>
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**ORGANIZE: SELECT A PLATFORM**

For librarians to successfully design and execute data organization projects, they must be knowledgeable of the software and platforms that are available and commonly used within the organization. As the questions above begin to unfold, the librarian and user should discuss solutions in terms of suitable technology that will enable success. A firm understanding of the taxonomy's purpose, combined with familiarity of the technology, enables the librarian to make a useful suggestion for an appropriate platform. Expect to find that users may have opinions about data platforms and could resist certain solutions. Librarians may need to find a balance between the technical skillset of the user and the demands of the data organization. In projects such as these, success is defined from the users’ perspectives. They need to work skillfully within the technology to make their data findable and usable. It may be necessary to acknowledge any technology learning curves and provide learning options for the users.

Popular options for dataset storage include applications such as Excel and SharePoint. Assess the pros and cons of available platforms in the context of the data to be stored. Identify the usage intent of the data. If the data is to be used to identify trends or make predictions, then the platform must be able to store the data in a way that can capture and filter the key data elements. The three most popular data platforms at the ETS Library are SharePoint, Excel, and data storage solutions provided by our integrated library system (ILS). SharePoint has structured compartments and predetermined parameters, making it a platform conducive to data analysis that can lead to decision making. Contrarily, Excel allows more opportunity for free form data entry and does not limit users to certain fields. Excel's ability to store and sort both quantitative and qualitative data make it a useful platform for summarizing data and identifying trends. Databases that host ILSs should also be considered for data organization. Recently, the ETS Library embarked on a project to create a data repository of data sets, surveys and transcripts that were used in writing research publications. The library’s ILS was selected to create an index of this data repository. It was determined that the format of the data and the need for advanced and Boolean searching was best supported by the ILS. Librarians should align the data storage solutions to the objectives of the data organization.
ORGANIZE: THE ROLE OF THE LIBRARIAN

As the project unfolds, there needs to be agreement on the librarian’s responsibility as it relates to the development, launch and support of the data organization project. Since the sustainability of the database is dependent on curation, it is beneficial to discuss the librarian’s role during the consultation and then again after the data has been organized since expectations may change. Examples of involvement can range from the librarian being consulted solely to define metadata to the entire database being developed and curated by the library staff. The common thread of these requests is that the requestor recognized that the librarian has the skillset to critically analyze data, ask targeted questions that uncover the need, and design solutions that make data findable.

Data organization puts the user’s needs upfront. When librarians organize data for users, their services are more apparent on the backend but the result is a more effective information retrieval system. Since patrons may not consider data organization in the scope of a librarian’s job, it’s important to advertise this service and present examples on how the librarian’s involvement can positively influence the outcome. When appropriate, offering data organization consultations while engaging in Levels I or II could potentially increase user engagement. This will increase awareness and promote the diverse capabilities of the library. Since libraries have limited resources it may be useful to assess large-scale requests based on how they align with the mission and strategic agenda of the organization. Contributing to high impact projects will further reinforce the necessity of the library.

Level IV: Embed

The fourth and final stage of the Levels of Engagement framework is embedded librarianship. Being embedded is not contingent on the location; rather it is a model of librarianship where the librarian partners with a particular group to provide customized knowledge solutions. These customized knowledge solutions include a wide range of services such as: collecting and analyzing market data, creating alerts, designing a data repository, or creating a presentation of findings. The objective is to help inform decision making which allows the group to achieve their goals more quickly and efficiently. In research and specialized libraries, the embedded librarian applies traditional library skills and services to function as a type of collaborator on projects (Carlson & Kneale 2011). These offerings may include services provided in the other Levels of Engagement but the difference is that they are targeted, and focus on one particular project or group.

Although librarians in an embedded role may develop a deep understanding in a particular subject area, subject matter expertise is not a pre-requisite. In some cases, subject librarians may engage in embedded work but for the purposes of this paper embedded librarianship is defined as using advanced information retrieval skills to fill gaps in knowledge related to a specific team or group. As time goes on, the librarian will become more
knowledgeable of the project and may be able to not only fulfill requests for information but also anticipate future information needs. This type of service varies greatly from traditional one-off transactions where the librarian fulfills a research request with limited context from the user. In some cases, a one-off transaction is perfectly appropriate. In the embedded environment, however, there is a need for continued engagement which tends to be related to research intensive projects or high stakes projects, meaning that the outcome could significantly affect the strategic agenda or finances of the organization. Groups that are targeted as essential to growth and innovation or groups with limited resources to support mission critical objectives are ideal candidates for an embedded relationship.

According to Shumaker, the factors that define embedded librarianship are Relationships, Shared Goals, and Customized, High Value Contributions (Shumaker 2012, 6). The first factor for a successful embedded model is a relationship based on trust, respect, and confidence in the librarian’s ability to make meaningful contributions to the team. Sometimes these relationships are formed organically through repeated contact with library services; in other cases the arrangement is initiated by management. Regardless of the origin, being able to establish a level of trust leads to a more productive work environment. Embedded librarians are confidants brought into the inner circle of a group with whom hypotheses and agendas are shared. At times, group members may be protective of their work so it is critical that guidelines concerning sharing and disseminating information are agreed upon. If librarians are working on high stakes projects such as new product development, acquiring or merging with a company or other company-wide objectives, all parties should be clear on what can be shared inside and outside the organization.

Shumaker’s second factor, “Shared Goals”, refers to having a shared understanding between the librarian and the team as to what success looks like. Since the librarian is making a significant investment of time and effort to work with the group, it is important that the expectations are agreed upon. Expect the librarian’s role and relationships within the team to evolve as the embedded engagement unfolds. In many cases, librarians may find that the need for their services peak in the beginning of the project when preliminary content is being discovered and wanes once the direction is established or if the project is passed off to another area. There are varying degrees of embedded engagement, but in some instances the line between the embedded librarian and the team begins to blur and they become one cohesive unit. Being transparent about the intended outcome will allow the group to interact and exchange information in a way that will facilitate achieving the goal. If the librarian does not agree with the direction or goal of the project, he or she should consider if the highest level of service can still be provided. This is an important consideration when working closely with a group. Success is more likely attained if all parties are in agreement on the best path to follow.

Shumaker’s third factor “Customized, High Value Contributions” explains why clients engage with librarians in an embedded relationship. It represents the value proposition which can be re-stated as follows: librarians involved in embedded work have the opportunity to significantly impact the outcome of a project by providing customized, on-the-fly, credible information that can provide evidence to support decision making or prove hypotheses. An embedded librarian is able to gain insights about the work style of the team members and how information flows among the group. This understanding allows the librarian to not only customize the information provided but also the format in which the data is presented. Certain groups prefer that information is disseminated via email or logged into a database. Embedded
librarians should consider the preferences of the team but should also recommend alternative ways to store and share information based on the format and type of data being collected. The librarian is in a unique position to recommend solutions and new workflows that will facilitate attaining the end goal. A common scenario the ETS Library staff has experienced is a situation where the team needs to make a decision but the information required to make the decision is either unidentified or is in an unstructured data format. In these cases, librarians can use their search expertise along with organizing skills in a way that will support analysis.

**EMBED: IDENTIFY PARTNERSHIPS**

Identifying embedded opportunities can be challenging. Librarians may be eager to engage in this level of engagement but may not know how to identify potential partners, how to re-allocate their existing workload or they may be skeptical as to whether they can get approval from leadership to invest time in this activity. In some cases, groups may be contacting the library requesting this type of support; in other instances, users may not be aware that this level of service exists. In either situation, librarians should be selective and deliberate in choosing a group with whom to partner. Carlson and Kneale suggest attending institutional events, talking with the user community, and “being able to ‘sell yourself’ and what you can contribute as a librarian towards new knowledge-based practices or products” (2011, 169). The ETS Library staff finds that through internal networking comes organic relationships that can evolve into rich partnerships.

Libraries tend to not have extra resources that can easily be spared. Librarians must recognize that not all patrons or user groups require a direct partnership. Some groups are entirely self-sufficient and use the library’s resources independently. Partners, on the other hand, require highly customized content and perhaps do not know the resources that are best suited to their needs because these needs have yet to be identified. The role of the librarian could be to guide user groups and shape the final output of their project. At the ETS Library, decisions regarding which group to engage with are made within the context of the strategic priorities of the organization as well as projects that would benefit most from the library’s support. Asking the following questions may help narrow the scope of which projects to offer this service: Which projects are heavily research oriented and could benefit from a direct partnership? Which projects are included on the organization’s strategic roadmap? Corporate and research libraries may find that the attention to certain areas of interest and exploration shift from year to year or may depend on market trends outside of the organization. Librarians should stay up-to-date on any changes in research direction through conversations and organizational announcements. In the embedded level of the framework, tracking the focus of the organization becomes a type of due diligence that may expose a potential partnership. If the selected endeavor is high profile, partnership approval may be easier to obtain.

**EMBED: EXECUTE EMBEDDED WORK**

Depending on the size of the library staff and the operational workload, the embedded librarian may have to request permission to allocate tasks to other staff members. In some cases,
operational work may be readjusted to fit the new work of the embedded librarian. The intensity of embedded partnerships vary; the lifespan of the project could determine the length of time the librarian is expected to be engaged with a group. Certain groups may ask that the librarian attend team meetings and report findings once a week, while others may request daily check-ins. Librarians should try to find ways to incorporate the research needed for the group into existing responsibilities, for example, adding alerts for new topics to an existing RSS feed. Regardless of the time allocated to the work, librarians should take this opportunity to consider ways to streamline operational processes making them as automated and seamless as possible to save time for the embedded work.

There is another aspect of an embedded role that goes beyond connecting people to information, which entails connecting people to other individuals with shared business directives. Due to the numerous information transactions handled by the library and by monitoring organizational announcements, the library staff has a unique perspective on who is working on what within the organization. By leveraging this information, in combination with a deep understanding of the project in which they are embedded, librarians can connect individuals across the organization who can inform each other’s work. The librarian’s role as a “connector” helps break down siloes, bridge information gaps, and add diverse perspectives to research and projects. The library can become the intermediary that enables research collaboration and knowledge sharing.

Over the past few years, the ETS Library staff has engaged in an embedded partnership with New Product Development (NPD). The relationship was initiated by the Vice President of the division that oversees the ETS Library with the intent to help inform decision making related to new products. In this role, ETS librarians have experienced the need to develop relationships, agree upon shared goals, and find innovative ways to make high value contributions. Each team the library staff has engaged with has a unique work style. One particular group looks to meet with the library staff twice a week while others prefer to communicate via email. In some cases, the librarian acts as an observer in team meetings, making note of potential gaps in information. In other instances, the librarian acts as a key team member, providing suggestions and guidance for the direction of the project. The common thread among these engagements is that librarians apply the services described in the first three levels of the framework (acquiring, searching and organizing) in a highly targeted, customized manner. The skillset of the librarian, combined with the deep understanding of the topic, allows the librarians to provide credible data so the team can move forward in confidence.

Conclusion

The Levels of Engagement Framework is not meant to convey that primary levels are less valuable than the other levels. The framework is fluid in that the levels not only build upon each other but also interweave, meaning you can participate in multiple levels in a single information transaction. Each level is unique and describes the kind of work librarians and information specialists should consider adding to their toolkit. The framework may also help librarians identify enhancements to pre-existing services. Adopting this framework may result in a library service model that is better equipped for handling requests that require critical analysis and customized deliverables. This positions the library as a resource for information intervention. In the age of information overload, the services of a librarian are needed more than ever for vetting
and filtering content in a way that focuses on relevancy not volume. The Levels of Engagement Framework describe the services available to help navigate the path to fulfilling an information need. Patrons can use the framework to learn how they can interact with the library while understanding that at the center of these services is the library staff’s knowledge and expertise. Library staff needs to surpass expectations and provide services, such as organizing data and partnering with groups, which can significantly impact the user’s work. This trend of moving away from brief questions towards more in-depth research and on-going consultations (Ard & Livingston 2014) is evidence of how library interactions are shifting. When librarians enhance their services in these particular domains, they are able to prove their value to the organization.

Endnotes


