

The New Information Professional: Vision and Practice

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Final Report

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Abstract

Budget pressures and proliferation of accessible information on the World Wide Web are among the reasons why several organizations have closed their libraries. Some visionaries suggest that to be viable under these conditions, information professionals should be more integrated with the work of organizations, becoming members of functional teams and providing both traditional and specialized services to these teams. This report describes a case study of four news organizations, two that have adopted this new model for the information professional, and two that have not. Data from newspaper articles and responses to surveys are examined for evidence that the new model influences how services are provided and valued. Although few differences are observed, findings demonstrate the benefits of this model for collaboration.

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The New Information Professional: Vision and Practice Final Report

1. Overview

Organizations today operate in a competitive environment where they must be innovative and cost effective, and they must accomplish more with fewer resources. Organizations also change, and the roles within them change as well. Sometimes the change is rapid, and other times it is more subtle and evolutionary. While change comes from many sources, technology has often been a catalyst for it. Organizations are more dependent than ever on technology to assist workers in assessing customer needs and potential markets, in delivering products and services, and in improving operational efficiency. The exponential growth of telecommunications networks and the availability of information through the Internet have made it more difficult to identify and evaluate, from a sea of resources, what is most critical for an organization's survival. The need for well-trained, experienced information professionals has never been greater, yet the role of the library as the center where information needs are addressed is being challenged.

Budget pressures have caused some corporations to close their libraries in favor of providing workers access to organizational intranets, online databases, and the resources of the World Wide Web. Among the organizations to succumb to these pressures and close their doors are the Apple Computer library in 1997,[1] the Universal Studios research library in 2000,[2] and the Time-Warner corporate library in 2001.[3] As more people turn to the Internet and other online sources for their information needs, the library's role in the corporation is in question. Scholars and practitioners are struggling to understand the implications of these developments on our institutions, our professions, and on the information-seeking needs and behaviors of our patrons and customers. Some have predicted that libraries and librarians will become obsolete.

Another vision for the future is more optimistic and suggests that the technological environment will enable information resources and information professionals to become more valued and more closely integrated with the work of an organization. These visionaries predict that information professionals will be members of collaborative teams who assist staff in defining information needs, compiling document collections, anticipating and satisfying requests, delivering resources and services to the team, training new employees, and providing input into the design of organization-wide systems, technologies, and collections.[4,5] Organizations that are able to reengineer processes, jobs, products, and services and to integrate information technologies to their advantage, fit Zuboff's description of "informed" organizations.[6]

This vision of the future is an exciting one, but one that raises questions. How receptive are workers within an organization to collaborating with information specialists whose roles and backgrounds may be different from the specialties of the team? How

receptive are information professionals to moving from a centralized information center to a decentralized and specialized department or work group? What characteristics of organizations, work groups, and information professionals are required for this vision to succeed? What role will information technology play in realizing the vision? Finally, what are the implications of this vision for educating information professionals for the future?

This study was designed to address some of these issues. The primary research questions are whether this vision for the future, of information professionals integrated with and supporting the work of teams, will create new roles for information professionals; and whether their efforts as part of these teams will be valued differently from organizations where they remain in a separate, centralized information center. This project examines these questions within the domain of the newspaper industry. The methodology followed is a case study comparing organizations where information professionals have been assigned to editorial departments and teams of reporters with those where roles are centralized in the newspaper library. Two organizations of each type were selected.

This study is relevant to the field of librarianship in several ways. Many organizations have begun to close their libraries as a cost-saving measure, and this trend is not limited to corporations. Even public libraries and academic libraries have closed and consolidated branches to reduce costs. Some have suggested that these closings are in part a failure of information professionals to be visible and valued by those in power, [7] so it will be useful to look at what others in the organization know about what information professionals do. Results from this study may be useful to other organizations contemplating new roles for libraries and librarians in order to increase the value and improve the visibility of services. Additionally, schools of library and information science need results of studies like this one to monitor a changing profession and to prepare professionals to meet new challenges. Finally, this approach supports the Special Libraries Association's (SLA) emphasis on the value of evidence-based research in identifying problems and solutions within the field.[8]

The report is organized into brief chapters, including a background of the problem, the methodology followed in this inquiry, the results of the study, a brief discussion, and a summary with recommendations for future work.

2. Background of the Problem: New Roles for Information Professionals

In her remarks at the 1997 ASIS Annual Meeting, Jose-Marie Griffiths, then Chief Information Officer at the University of Michigan, identified critical characteristics of what she called the “new information professional” to include: 1) the ability to guide, from a position of leader or follower, in the face of an uncertain future; 2) collaboration skills; 3) agility in setting and rearranging priorities; 4) the ability to empower people; and 5) the ability to analyze and understand the capabilities of the institution or organization, of the units within it, and of the individuals who make up those units. She invites us to focus on our role as guide, through a commitment to the success of those who work in the organization by *decentralizing services and resources to support user groups more effectively* (my italics); and by promoting change.[9] At the core of these ideas is a vision of organizations driven by people who work in teams. Tom Sudman, Founder and President of Digital AV and opening speaker at the 1999 ASIS Annual Meeting, also envisions work as the product of groups and the role of the information professional as gatekeeper and knowledge manager.[10]

Griffiths and Sudman extend the view of libraries beyond a repository of knowledge and a center for research to a vision of libraries echoing that prescribed by David Levy and Catherine Marshall for digital libraries. In a 1995 article for the *Communications of the ACM*, they define digital libraries as decentralized, having a somewhat more ephemeral quality than print collections, supporting groups of collaborators as often as individuals working alone, and offering access to more than just “digital” resources.[11]. Their emphasis on change, on collaboration, and on collections that are more likely to be integrated with the work of an organization suggest an environment needing the talents of Griffiths’ new information professional.

The importance of technology and technological skills in supporting collaboration in work groups is well documented. Bikson and her colleagues studied the role of computer-mediated work and productivity and they found an important role for technical resource consultants who are “bilingual,” i.e. comfortable and competent with technology but able to work and communicate with people who are not.[12] They discovered a role for individuals within the work group who become experts in using an information system and then serve as trainers and technical support agents for their coworkers. This behavior was observed as well by Nardi, who designated these workers as “gardeners.”[13] This role is one of the tasks Griffiths prescribes for the new information professional, and the role is important because information technology is so central to organizations today. The technology introduced to the organization that Bikson studied changed much of the work there, and individuals responded with either “task reinvention” or “tool reinvention.” Task reinvention occurs when workers reengineer work processes to fit the capabilities of the technology, and tool reinvention occurs when modifications are made to the technology to suit the workers’ need. Task reinvention is more common, probably because it is under the control of the workers themselves. But because it *is* under the control of the workers, it may be largely invisible to top level managers who may be unaware of the costs associated with reengineering tasks. Other work may not get done, individuals may perform tasks that are above (or beneath) their

qualifications, or beyond their job descriptions, and roles may become interdependent in ways that were unanticipated. Tool reinvention is a more direct approach to implementing technology, but it may require the cooperation of a vendor or manufacturer who is reluctant to alter a product, the approval of management, reallocation of funds, and perhaps delays in product delivery. Either type of reinvention involves learning to master new procedures or features, and someone must bring the work group up to speed and maintain productivity through system upgrades and product updates.

Bikson and her colleagues described the success of one organization in implementing technology by examining three groups of traits:

- organizational characteristics,
- characteristics of the technology, and
- implementation characteristics.

Successful organizational characteristics include being people-oriented, knowing what is required to motivate people, and having a congruence between vision and action. Technology characteristics that ensure success are being mission-focused, user-driven, and designed to accommodate modification and change. Implementation characteristics include planning, willingness to take risks, creative tension in decision-making from the top-down and from the bottom-up, user involvement, an adaptive training program, and organizational learning (the ongoing management of change). These characteristics support the argument for a technological and information mediator for organizations, someone who understands the capabilities of the technology, the culture of the organization, and its weaknesses.

Lippincott considered organizational characteristics as well in studying collaboration between academic libraries and computing centers. She describes a successful collaboration as occurring between them when “each unit considers the collaborative endeavor to be mission critical,” implying a shared vision, mutual respect between the divisions, and discouraging power struggles.[14] Michelson looked at implementation characteristics in the form of team building and collaboration at MITRE Corporation where information professionals, who are called “knowledge managers” became fully integrated members of collaborative teams. There, the role of the knowledge manager is to anticipate information needs, assist in building the information infrastructure for the team, conduct training, and be responsive to the needs of the group and the overall organization. The MITRE experiment was so successful that an additional knowledge manager was hired for the group.[15] As Lippincott predicted, the success at MITRE was due in part to a commitment by the organization, the collaborative efforts of those in the group, and mutual respect among the organization’s departments. Additionally, the characteristics of the technology were a factor as resources were made available to the members of the team through online, distributed networks. Resources included not only traditional databases and document stores, but electronic news feeds and listservs.

Successful teams are an essential characteristic of dynamic organizations. In the current economic climate, organizational charts change faster than they are created and communicated, and it is more important than ever that members of an organization understand the organization's culture and find ways of working with others to accomplish the organization's mission. Information professionals must understand the problems of the organization, the language and the environment, and be able to communicate with other members and departments effectively. This premise is articulated by Paul for newspapers, suggesting that "Reporters and editors mostly do not have a perception of librarian/researchers as anything less than fellow journalists. We have to think of ourselves that way, too." [16]

In Putting *Our Knowledge to Work: A New SLA Research Statement*, the Special Libraries Association recognized the challenge facing information professionals in a climate of change, stating: "The roles of information and library professionals are changing and expanding as the scope of practice of the profession broadens beyond physical collections and reference service towards remote access and systems development." [17] A commitment to research that is evidence-based, reflecting the work that special librarians do, is clear. News librarians, in particular, have heard the call for change. One of the most active groups within SLA, members are committed to moving the profession forward and to becoming more proactive in affirming their value to the organizations that they serve. Members urge better relationships with the newsroom and with management, and a select group of them participated in a summit in November 2001 at the School of Communication and Journalism, University of Minnesota, to recommend a plan of action for the future. [18, 19, 20, 21]

Newspapers are as vulnerable as other organizations to the demands of a networked society. Newspapers have embraced information technologies for such functions as editing, printing, researching, archiving, and for reporting from a distance. They have access to stories from multiple wire services to supplement local news, and they are under pressure to deliver the news as soon as it happens. Most papers offer editions for the World Wide Web, and this has required that organizations acquire skills and processes for producing, maintaining, and funding these sites. [22] In an era of the large news organization and media service, it is more important than ever for these organizations to recognize a niche and define an identity that will secure their survival. With all the competition, it has never been *more* important to contain costs or to serve readers effectively.

Compared with other media, the strength of newspapers is in the depth of the reporting and analysis and in the ability to provide details that a broadcast cannot. To do this well requires meticulous research and fact-checking, good writing, and commitment of staff to the quality of the product. The failures are well-documented and contribute to public skepticism toward the media. [23] Following such incidents as those of journalists Jayson Blair and Rick Bragg at the *New York Times*, it is clear that there is need for the roles that news researchers play in these institutions.

Newspapers offer a unique opportunity to analyze organizational teams. Reporters often collaborate on stories, as evidenced by the reporter's byline and contributor acknowledgments at the end of an article. Researchers form an important part of these collaborative teams. Researchers are typically news librarians who assist reporters in obtaining background information for a story and in verifying facts. These information professionals perform other roles as well. The goals of this study are to investigate whether the vision of the new information professional as part of a functional team has been realized within news libraries, and to identify the organizational and technological factors (observed previously by Bikson and Lippincott) that influence the emergence of this role. Newspaper organizations were selected because some of these organizations have redefined their library services by integrating information professionals within various editorial departments, while other organizations have not. Comparing these experimental structures with the more traditional ones may yield useful knowledge of the organizational factors that are conducive to creating successful teams as well as yield valuable information about the requirements of these positions and the skills needed to succeed.

3. Methodology

This study begins with a question and an assumption. The *question* is whether there is evidence that integrating information professionals within functional teams of an organization will result in their work and their roles being valued more than in organizations where they are apart from reporters in a central library. The logical way to approach this problem is to find an industry where both models are practiced and compare them. The newspaper industry was selected for this purpose. The *assumption* is that researchers who are accepted as equal and valued members of the team will have their contributions acknowledged along with the reporters and editors on the team. The question and assumption were tested in a pilot study that led to additional questions and the current research. A brief discussion of the pilot study follows.

The Pilot Study

During a four-week period from Sunday, May 13, 2001 to Saturday, June 9, 2001, two major newspapers were analyzed and compared to determine how individual contributions to a story, other than the authors' contributions, were acknowledged. The purpose of the pilot study was to test the above assumption and develop a methodology before proceeding to a more formal inquiry. One of the newspapers maintains centralized research services, while the other follows the "new" model of integrating researchers among editorial departments. Articles from the newspapers were compared to determine if researchers were more likely to receive acknowledgments when they are assigned to editorial desks. Acknowledgment patterns confirmed the assumption and differed so much between the two papers during the first two weeks of the study, that issues from six additional papers were examined during the last two weeks for broader comparison. One of the additional newspapers assigns researchers to editorial desks, and the other five centralize their research services, bringing the total to eight newspapers, six with centralized research services and two with researchers assigned to editorial teams.

Although all sections of the newspapers were examined in the pilot study, the articles taken from page one of the first section, usually labeled section A and dealing with the major news stories, were most similar and therefore most comparable across organizations. Format, volume, content, scope, and sectional categories vary widely between papers, making comparison difficult beyond the first page stories. The average number of front-page stories ranged from a low of 5 to a high of 8 per newspaper each day. Major national and international as well as local stories were covered to some degree in each of the newspapers, and the assumption was made that similar types of research would be needed by reporters to write their stories.

There were 428 articles in the pilot study, including 204 (48%) from the two papers with decentralized research services, and 224 (52%) from the six papers with centralized services. Interesting patterns emerged from a content analysis of the data:

- Ninety-eight (22.9%) of the 428 articles acknowledged the contributions of other writers, researchers, wire services, correspondents, or editors. There

were 124 individuals whose efforts were acknowledged, with researchers (16) making up 12.9% of those contributions. Other reporters (72) account for more than half (58.1%) of the contributions.

- Stories that have two or more authors in the byline acknowledged other writers, researchers, correspondents, or wire services more often than stories with only one author.
- Most of the Section A stories covered national news, followed by local news, international news, and finally other (scientific research, health discoveries, etc., that were not specific to local, national, or international policies or problems).

To look more closely at the phenomenon of acknowledgments, articles from *all* sections of the newspapers that specifically listed some type of contribution were analyzed. A total of 266 articles were included in this study – 98 from page 1, and 168 from other pages of the newspaper. Of this group, 62% were from section A (including page 1 as well as stories that began on other pages within Section A); 21.4% were from the local or state news sections, and 16.6% were from other sections (arts, sports, health, business, features, etc.). The topical emphasis was upon national and state/local news, with 43.6% of national interest, 40.6% local, 13.9% international, and 1.9% science, health, or other. The newspapers with decentralized services account for a larger percentage (65.8%) of the contribution-acknowledging articles. The numbers suggest a relationship between assigning researchers and acknowledging contributions, but the data are limited and the study was informal and unsystematic.

Among the 266 articles that acknowledge the contributions of others: 67.7% cited other writers, 16.9% cited correspondents and editors; 13.2% cited researchers, and 12% cited wire services. (The total percentage exceeds 100 because some of the articles cite both researchers and reporters, for example). Closer analysis of those named as contributors show 17 unique researchers named, 135 unique writers, 8 wire services, and 17 correspondents. One researcher was given credit for assisting with 16 articles, and the Associated Press represented approximately half of the wire service acknowledgments. No reporter was listed as a contributor more than five times and most were mentioned only once.

Different acknowledging behaviors were observed in these organizations, and some of the behaviors observed may be related to the type of research services provided (centralized or team-based). Although results are inconclusive because the sample was not random and the study was informal, the observations raise further questions for investigation, including the following:

- 1) Do reporters perceive the roles of researchers differently when researchers are assigned to editorial departments?
- 2) Do researchers in organizations where services are decentralized perceive their roles differently from researchers in organizations where they are centralized?

- 3) How do reporters value the services and contributions of researchers compared with other contributors?
- 4) Do these acknowledgment patterns hold up over time, and what other factors may account for differences among organizations?

One factor influencing patterns of acknowledgment in newspapers may be the news librarian special interest group within SLA. Traffic on the *Newslib* list was monitored over a six-month period and during that time there was discussion that encouraged researchers to seek acknowledgment for their contributions. The role of the professional organization as change agent merits further study.

Additional Research Questions

While newspaper stories may provide a comparable measure for comparing organizations, acknowledgment behaviors are meaningless out of context. To understand why patterns differ, if they are different, requires examination of other organizational characteristics. Additional research questions raised from the pilot study include:

- 5.) What are the characteristics of the organizations that have integrated information professionals within editorial departments? Are there characteristics that distinguish them from other organizations? Are they more likely to demonstrate the traits of being people-oriented, motivating, and maintaining congruence between vision and action observed by Bikson?
- 6.) What are the characteristics of the technology used to support decentralized organizations? How do they compare with organizations maintaining centralized research desks? How is the technology being used in these organizations? Is there evidence that it is user-driven and able to accommodate change as found in previous studies?

Methodology for the Current Study

The research design employed to address the above six questions includes a more formal, expanded version of the pilot study, and additional tasks to verify findings and place them in context. The goal of the follow-up study is to assess the organizational, technological, and implementation characteristics of the organizations, and to compare organizations with centralized research services to those with decentralized services. The following sections describe briefly the organizations and participants, the tasks, and the evaluation methods employed in this project.

1. Organizations

Four newspapers were selected for this case study, two of them are organized according to the traditional model of researchers located in a centralized library facility where questions come to them, and the other two have researchers assigned to a particular beat with a team of reporters and editors. In the latter case, the researchers

work in the newsroom. The four newspapers are located geographically along the East Coast of the United States, but in different major cities. Each of the organizations is owned by a large news service (but no two are owned by the same service) and each is ranked among the top 100 newspapers in the country in circulation. Given the wide numeric spread of these four organizations within the top 100 (circulation for the largest is in the vicinity of 750,000 and for the smallest, under 200,000), data were collected separately on other newspapers with comparable circulation totals to check for any effect that size might have.

The four newspapers will be referred to here as the *Banner*, the *Messenger*, the *Recorder*, and the *Dispatcher*. Brief profiles of these organizations follow under their fictional names.

The Banner

The *Banner* is published in a major city in the Middle Atlantic region of the U.S. It is the major paper for the state, and its circulation is roughly 300,000. The newspaper has a long and distinguished history and was independent until the 1980's when it was acquired by a larger organization. It is currently part of a large news service, but the paper maintains a strong and unique identity within the city and state where it is published.

Researchers at the *Banner* are stationed in a central library adjacent to the newsroom. The floor plan is open and reporters may travel to and from the library unimpeded. There is a well-organized, accessible print collection, and the library maintains the archival and photo collections for the newspaper. The researchers create and maintain internal resources for the newspaper's intranet and are in the process of digitizing the archive. The library director has the rank of editor and the librarians/researchers are paid on the same salary scale as reporters. When the research editor was asked if journalists often credit researcher contributions, she replied that it was rare and would occur more often for the men on staff than for the women.

The Messenger

The *Messenger* is a major city paper in the Southeast, with a circulation of over 300,000. It has wide circulation within the state where it is published, and has limited distribution beyond the state. Although a young paper compared with other papers in the study, it is a respected one. It is owned by one of the largest news organizations in the country, and the influence of the parent organization is apparent.

There is one researcher at the *Messenger* who is assigned to the newsroom as part of the editorial team. She attends editorial meetings and is proactive in anticipating needs. This researcher not only supports the city beat and other beats as needed, but maintains the newspaper's intranet as well. She indicated that there is some confusion concerning the corporate policy for crediting researchers. Some of the editors claim that it is not the policy of the paper, while other editors may credit researchers with a byline

as well as a tagline. Most of the research staff work in the library, in an area adjacent to the newsroom. The library maintains the archive and performs tasks supportive of the business side of publishing, as well as conducts research. During recent years, the size of the research staff has diminished, but the demands remain high. The research editor remains committed to the assignment of a researcher to the newsroom as part of that team, despite increasing workloads and deadline pressure, and has made efforts to add positions there.

The Recorder

The *Recorder* is published in the capital city of a Southeastern state, and therefore devotes much of its coverage to state news. Its circulation of less than 200,000 is the smallest of the four papers in the study. The newspaper was independent until the mid-1990s when it was acquired by a larger news service with several other holdings, including other capital city papers. The paper maintains much of its local identity.

Researchers at the *Recorder* are located together in a library that is adjacent to the newsroom. The passage between is open and accessible, and at the time of the site visit, the library was a busy place. There seemed to be as many reporters there as researchers, all interacting. Researchers at the *Recorder* are often credited for their contributions.

The *Recorder* is an organization where reporters often get experience before moving to larger organizations in larger news markets. As such, there are opportunities for young reporters to establish their careers. Newspapers in larger markets will typically hire only experienced journalists.

The Dispatcher

The *Dispatcher*, with a circulation of approximately 750,000, is one of the top newspapers in the nation. It is published in a major city and has national circulation and a reputation for quality.

Researchers at the *Dispatcher* are assigned to an editorial beat and their desks are located in the newsroom with the reporters. As with the *Banner*, researchers are paid on the same salary scale as reporters, but the *Dispatcher* research editor was quick to note that researchers start out lower on that scale than reporters do.

At the time of the site visit, the importance of the research function at the *Dispatcher* seemed evident. There were boxes of files being reviewed for background information around the researcher's desk, lists of names that were being verified for a reporter, and during the site visit, at least one reporter stopped by to exchange information about the status of a contact. The research editor attends the editorial meetings and takes a proactive role in shaping the work and providing research assistance. It is the policy of the paper to credit researchers for substantive contributions to an article.

The *Dispatcher* has a separate training room where researchers or other trainers may demonstrate software or train reporters to use it. The training function has increased over the years so that it is the responsibility of the researchers to train new reporters on much of the software used there.

2. Participants

Front page stories in these newspapers were analyzed for a three-month period, from September 1, 2002 to November 30, 2002, to identify the reporters who received bylines for the story, their roles (i.e., staff writer, foreign correspondent, etc.), the particular topic or news beat under which the story falls, the names and roles of any co-authors, and the names and roles of any reporters, researchers, or others who have been acknowledged for their contributions in taglines to the articles. The newspaper staff reporters and researchers who wrote or contributed articles during the period of the study were identified and were later surveyed to assess their knowledge about the roles of researchers and their views about the contributions of others to their reporting. The reporters were surveyed, whether they acknowledged contributions or not. Researchers who received acknowledgments for their contributions during the three-month period were also surveyed. There were 480 reporters who authored one or more articles during the period, and there were 35 researchers who received acknowledgments one or more times.

3. Tasks

The study consists of four research tasks. Each task was designed to address the research questions and to validate, expand, and clarify data from other tasks.

Formal and systematic study of the newspapers and their acknowledgment patterns

The first task addresses the question of whether reporters in organizations that assign researchers to editorial teams behave differently (i.e., are more likely to acknowledge the contributions of those researchers) than those in organizations with centralized research services. This task duplicates work performed in the pilot study, but is conducted over a longer period of time and more systematically to determine if acknowledgment patterns hold up over time.

The daily, front page stories of the four newspapers were analyzed for a period of three months, from September 1—November 30, 2003, to capture information about content, authorship, and acknowledgments. Analysis was limited to front page stories because they are usually the most important stories of the day, and because there is greater similarity across newspapers in this section. Results from the pilot study demonstrated that most (62%) of the stories that acknowledge contributions of others are found in the hard news sections (as opposed to sports, business, arts, etc.). Newspapers are relatively consistent and similar in the structure of their front pages, but there is

greater variety in the size and format of the whole section (usually designated section A). For this reason, to ensure results that are consistent and comparable across organizations, only the front-page stories were analyzed. (A copy of a sample data collection sheet for one newspaper for one day is included in Appendix A.)

As a result of the pilot study, a controlled vocabulary was developed for content analysis of the articles for the categories of story topic, or news beat, and for the roles identified in the articles' bylines and acknowledgments. The elements to be extracted from the articles for analysis include the following:

- **Newspaper**, identification of the source of the article as the *Banner*, *Messenger*, *Recorder* or *Dispatcher*
- **Organization type**, an indication of whether researchers are in a centralized library (type 1) or are assigned to work with reporters on a particular beat (type 2)
- **Date published**, the specific calendar day, month, year of publication, including the day of the week (Monday, Tuesday, etc.) (The raw data collection tool also included the specific edition – home edition, final edition, news stand edition, or other -- to enable us to recheck a fact later if needed, but edition was not captured in the database since it would not be used for the analysis.) The date was helpful in distinguishing stories with similar titles.
- **Article headline**, the title of the article as it appeared on the printed page
- **Beat**, the general, editorial desk designation for the topical content of the article. As indicated above, a controlled vocabulary developed from the pilot study was used for this field and includes the categories of *International*, *National*, *State & local*, *Science & health*, and *Other*. Certain rules were developed and applied to resolve ambiguities between categories (such as whether a particular SARS story should be classed under *Science & health* or *State & local*), and the data were double-coded for reliability.
- **Byline**, the names of the reporters who were given byline credit for authoring the article.
- **Byline role**, indicates whether the authors are employed by the newspaper as “staff writers,” “correspondents,” etc., or whether the story was acquired by the newspaper from a “Wire service” such as the Associated Press. This information is important because we were interested in analyzing only those stories that were authored locally by reporters who have access to the services of researchers. When there were multiple authors with different roles, each was included along with the appropriate role designation. (As indicated below in the discussion on the survey of journalists, the newspapers did not always identify these roles correctly.)
- **Continued**, the page inside the section on which the story is continued from page one. This data element was not actually used in the analysis, but served as a reminder to the researcher and coders to turn to that page to look for contributions. It was important to include this since many stories do *not* acknowledge contributions and those that do can be easily overlooked without a forced reminder to check the last line of the article.

- **Multiple authors**, a flag (yes or no) to indicate when there is more than one author in the byline. This was used as a trigger to create multiple records in the contributor file to link authors and contributors to a particular story. The flag is set only if true.
- **Contributions**, a flag (yes or no) to indicate that an article acknowledges contributions. The flag is used as a trigger to create a record in the contributor file for each individual or organization acknowledged in the article. The flag is set only if true.
- **ArticleNumber**, a unique and sequential number assigned to each article in the database. It serves as an accession number to facilitate manipulation of the data and to identify unique records for statistical analysis.
- **Contributor**, the name of any individual who contributed to the intellectual content of an article. Contributor information is maintained in a relational file linked to the article file by article number (ArticleNumber) in a one-to-many relationship. There is a record for each contributor identified along with the individual's role (staff writer, researcher, correspondent, editor, wire service, or other) in the organization. The contributor file includes a data field for the role of the individual relative to the article, i.e., whether the contributor was the *author* who was given a byline, or whether the contributor was acknowledged in a tagline for a "supportive" role. This allowed us to identify all of the authors and researchers to receive surveys.

The data were entered into an ACCESS database for descriptive analysis, and were later converted to SPSS for statistical processing. The stories were analyzed to determine if there is a relationship between acknowledgment behaviors and **Organization type** (researchers assigned to the library or to editorial teams).

At the end of the three months, there were 2,036 stories in the sample. Some of these stories (242, 11.89%) were excluded from the final analysis because they were produced by wire services or originated from another paper. (See Table 1 and Table 2). There were 1,275 (62.62%) stories written by reporters who were employed by their local papers that acknowledged *no* contribution beyond the byline. There were 576 stories (28.29% of the total) that acknowledged contributions of others, but only 519 (25.49%) were authored by reporters employed at the local paper. (Other stories that acknowledged contributions were authored by wire services, or by reporters employed at another paper, and they are excluded from further analysis.)

Newspaper	Total articles in sample	Articles contributed by wire services	Stories authored by newspaper staff
<i>Banner</i>	521	32	489
<i>Messenger</i>	442	82	360
<i>Recorder</i>	470	128	342
<i>Dispatcher</i>	603	0	603
Totals	2,036	242	1,794

Table 1. Total Articles by Organization
Page 1 stories, September 1 to November 30, 2002

Table 2 describes the articles in the study by organization type.

Organization Type	Total articles	Total articles authored by staff	Articles without acknowledgments	Articles (by staff) acknowledging contributions	Articles acknowledging researchers
1. Centralized	991	831	628	203	34
2. Editorial team	1,045	963	647	316	54
Totals	2,036	1,794	1,275	519	88

Table 2. Articles by Organization Type
 (Research services are 1-centralized or 2-assigned to an editorial beat)

Data from the newspaper study will be compared to assess acknowledgment patterns by organization and by organization type. Whether the differences, if observed, are meaningful or not rests on the assumption that researcher acknowledgments are a tangible sign that they are valued by the journalists in the organization. Acknowledgment is one means of recognizing the contributions of researchers, but there may be other factors that influence this practice. To understand better the context for these behaviors, and to determine whether journalists in different organizations perceive roles of researchers differently, it is advisable to ask them, and that is the reason for task 2.

Survey of journalists

All of the journalists who authored the stories that were identified in task 1 above, and who are staff writers at one of the four newspapers, were asked about the kind of assistance they received on those stories. Surveys were designed to be brief (one page, front-and-back) and were pretested for clarity and for appropriateness of content. Journalists were asked about assistance received from other reporters, editors, and wire services, as well as researchers, and they were asked to rank the importance of these

contributions to their work. Finally, they were asked to indicate the kinds of tasks researchers typically perform at their newspaper. (See Appendix B for a copy of the journalist survey). Excluded from the survey are reporters who received bylines for page-one stories, but are employed by a wire service such as the Associated Press or by another newspaper whose story was picked up for the local paper, and reporters who are assigned to a foreign bureau. These individuals were excluded because they did not have access to the newspaper’s researchers.

We initially identified and mailed surveys to 530 unique reporters who published articles on the front pages of these newspapers during the three-month period. We later discovered that this number included 16 who had been incorrectly identified as staff writers by their respective newspapers and another 25 who were foreign or special correspondents assigned to remote bureaus that were coded incorrectly. The errors were discovered when the surveys were returned to us. Removing those individuals from the analysis left 486 reporters as potential subjects. Analysis of survey responses reduced the total by six more, to 480. These six individuals had been identified by their newspapers as “staff writers,” but are actually researchers or correspondents. In each case, they were listed in the byline as a coauthor and designated as “Staff writer” by the newspaper, crediting the individual researcher or correspondent, but not the role, in the byline. These individuals received our survey, but did not complete them, and notified us to explain.

Ninety-one surveys were returned in response to our initial mailing. A follow-up mailing was posted to try to boost the response. The follow-up yielded 11 additional responses, bringing the total to 102. The composition of those responses is described in the Table 3 below.

Newspaper	Surveys mailed*	Surveys returned	Percent returned
<i>Banner</i>	100	27	27.0%
<i>Messenger</i>	114	26	22.8%
<i>Recorder</i>	77	32	41.6%
<i>Dispatcher</i>	189	17	9.0%
Totals	480	102	21.6%

Table 3. Journalist Surveys

*The number of surveys mailed to the reporters who were not assigned to foreign or national bureaus. Those assigned to foreign or national bureaus were eliminated because they did not have access to on-site news researchers or libraries.

The low number of responses was disappointing, but not unexpected and not unusual. Reporters were given the option of returning hard copy (a stamped, addressed

envelope was enclosed for this purpose, and 94 surveys were returned using this method) or of completing the survey online (only 8 respondents chose that option).¹

Of the 480 journalists in the final analysis, i.e. those who authored or co-authored at least one story appearing on the front page of their newspapers between September 1, 2002 and November 30, 2002, 292 (60.83%) acknowledged the contributions of others at least once. There were 84 (17.5%) reporters who acknowledged the contributions of researchers at least once. While the low response rate from reporters may be partially explained by the fact that reporters who acknowledged the contributions of researchers in their stories were more likely to respond to the survey than those who did not, it appears that at least a few of the surveys were returned by reporters who did not acknowledge researcher contributions. Comparisons between surveys returned and researchers acknowledged by reporters for the four papers appear in Table 4.

The acknowledgment patterns of these journalists revealed that while only 519 articles of the 1,794 authored locally acknowledged contributions of other reporters, researchers, correspondents, editors, or wire services, 292 (60.83%) of the 480 reporters who authored those stories acknowledged the contributions of one or more individuals in at least one of the stories they authored. These results are different from the pilot study (of the 182 reporters identified in the pilot, only 40, or 21.98%, acknowledged the contributions of others), suggesting that the longer period of analysis (3 months instead of 1) makes a difference.

Newspaper	Number of Reporters in the study	Number of surveys returned	% returned	Number of Reporters who Acknowledged Researchers	% acknowledging researchers
Banner	100	27	27.0%	6	6.0%
Messenger	114	26	22.8%	12	10.0%
Record	77	32	41.6%	23	29.9%
Dispatch	189	17	9.0%	43	22.8%
Totals	480	102	21.6%	84	17.5%

Table 4. Reporter comparisons by newspaper: Who returned surveys, acknowledged researchers.

¹ In a previous research project, participants who were given only one option (email) for responding to a survey demonstrated a better response rate than those same participants when provided multiple options. That method was not an option here because reporter anonymity would have been lost.[24]

Researcher Survey and Site Visit

The third step in the assessment of the role of researchers in news organizations was to get the researcher's view. Researchers were surveyed to gather information that could be compared with the reporters' responses. The surveys were designed and pre-tested for clarity and appropriateness of content. Site visits were made to three organizations at the start of the project and to one at the end of the project to gather additional, organizational information. Site visits allowed the researcher to see firsthand the dynamics between the researchers and the journalists and to gather organizational demographics in context.

There were 35 researchers whose contributions were acknowledged by reporters at some point during the three months of the study. Surveys were mailed to these researchers, with 9, or 25.7%, of the surveys returned. A copy of the researcher survey is included in Appendix C.

Newslib analysis

Many news researchers are members of the Special Libraries Association, a professional association that offers programs and opportunities for skill development and for mentoring. Within SLA, the News Division is a special interest group for news librarians. This group has developed into a coherent community of practice that influences the way many of these researchers and other information professionals conduct their work. Communication among the division is conducted largely through *Newslib*, a listserv. Researchers share information about useful sources, sometimes take reference queries to *Newslib*, and often use the list to solicit advice on matters ranging from the best search strategies to use in retrieving information from a database to pointers on selecting imaging systems for converting microfilm. A researcher who is employed by a newspaper outside this study, and who provided feedback on early versions of the survey, indicated that the list is invaluable to her. The newspaper where she works has a smaller circulation and fewer resources than the newspapers in this study, so she relies on the list as an extension of her library's resources and capabilities.

The purpose of tasks 2.2 and 2.3 above was to question reporters and researchers concerning the kinds of assistance researchers provide to reporters and how they are valued. Messages from the *Newslib* listserv were analyzed for the month before and throughout the period of the newspaper study to see if researchers from the four papers in the study were active there, and if any of them sought assistance from their colleagues on the stories reported. A total of 1,376 messages were analyzed from August 1, 2002 to November 30, 2002. While researchers from the four newspapers posted contributions to the list during the study, they did so either to share information or to respond to a research question issued by someone at another paper. None of the researchers at these papers sought research assistance on the list during the period of the study. They may have contacted knowledgeable individuals independently, but they posed no reference questions to *Newslib* during this period.

Limitations of the Methodology

Some of the questions asked of reporters and researchers are scaled and can be analyzed with quantitative techniques. Other questions are open-ended and require qualitative analysis. The technique utilized for analyzing newspaper and open-ended survey questions is content analysis. Content analysis research is often criticized based upon bias related to sampling, validity of codes, and coder reliability. Each of these issues is discussed below.

Sampling

The sample size of the study is limited and somewhat arbitrary. Sampling is a concern in research utilizing content analysis – how to select the items to be analyzed to ensure they are representative and unbiased. The organizations selected are not random, but are prominent state, regional, or national newspapers among the top 100 in the nation in circulation. They were chosen because of their organizational structure (two with centralized research services, two with researchers assigned to editorial desks) and because, with one exception, they were accessible (within a day's drive) to the researcher.

Sample articles include all of the front-page stories that appeared in the four papers over a period of three months. These articles were not selected at random, but include all of the page-one stories in all four newspapers that were written by staff reporters. Front page stories were chosen based on results from the pilot study that analyzed *all* sections of the newspaper and found that a large percentage of the stories acknowledging contributions appeared on the front page. Data from the pilot study also show that acknowledgments occur most often on stories from national or state and local news beats. Eliminating the state and local sections of the paper means that there may be a significant number of acknowledging stories that are omitted from analysis. However, there was too much variation among the papers in the content and structure of the local sections (sometimes “local” was a city beat, sometimes a state, and sometimes both) to allow meaningful comparison. Additionally, the most important state and local stories are usually reported on the front page and will therefore be represented in the sample.

By sticking with the page-one stories, especially those with a national and international focus, we expect coverage across newspapers to be similar and to require similar kinds of research support. To serve as a check on this sample, a second database was created with data on articles from front page stories of other newspapers in the nation from the same period. Newspapers chosen were from different geographic areas, and they represented both larger and smaller circulation patterns to assess differences based on size. These measures were undertaken to reduce the potential sampling bias for the articles. While analysis of these papers showed similar coverage by topic, the acknowledgments were lower than the study sample, and no researchers were acknowledged directly. (One of the papers acknowledged the contributions of their news “service” which may have been inclusive of researchers as well as reporters and correspondents). None of these papers assign researchers to editorial teams.

There is a potential sampling bias concerning the surveys as well. Reporters who were mailed surveys received bylines for articles appearing on the front page of the newspapers throughout the study. We wanted the views of reporters who did not seek the assistance of researchers as well as those who did. Approximately 22% of those questioned actually returned the surveys, and fewer than 18% of the reporters who received bylines acknowledged the contributions of researchers. The responses suggest that those who do *not* seek assistance from researchers may be under-represented here. The sample may also be skewed by age and experience. While it is likely that these journalists are representative of staff in large newspapers, they will be somewhat older and more experienced than staff at smaller papers because major newspapers tend to hire experienced reporters. It is important to study larger papers, however, because they are more likely to have full-time, professional research support, and because the larger numbers of employed staff make it more feasible to assign researchers to editorial teams. Smaller organizations may lack the resources to decentralize their research services.

Researchers who were acknowledged for their contributions were also surveyed. Researchers who are employed by the newspaper, but who did *not* receive an acknowledgment during the three months of the newspaper analysis, were not included. While their responses are of interest and may be insightful, they were not surveyed simply because there was no convenient way to identify them.

Validity and reliability

Validity of categories and reliability of coding are additional concerns for research that utilizes content analysis. The categories identified for the article analysis are straightforward and are taken directly from the language and structure of the newspapers. The one exception is the category of news beat. In most cases, the beat could be inferred from the title and dateline, but there were a few cases where it was not clear. Researchers examined clues in other parts of the story to assist in making a determination. Informal rules were developed for coding the beat and the categories were double-coded. Disagreements were resolved by discussion.

Analysis of the survey responses was a more subjective process. The categories used were taken directly from the participant responses to open-ended questions. Sometimes, participants categorized their answers in terms of the question. For example, one question asked whether journalists received assistance from researchers for providing background information, verifying a fact, finding personal contact information, or providing technical training. Some journalists responded by circling those options in the question. The surveys were designed from conversations with journalists, and were pre-tested for validity. Therefore, categories were defined in terms used by journalists or according to pre-tested categories. The categories were double-coded for greater reliability.

4. Results

Task 1. Analysis of the Acknowledgment Patterns

Data from the newspaper study included 2,036 articles that appeared in the four newspapers between September 1, 2002 and November 30, 2002. The articles were split almost evenly by *type* of organization -- newspapers with centralized library services contributed 49% of the articles and newspapers with decentralized services contributed 51%. Of the 2,036 articles, 576 articles (28.3%) acknowledge the contributions of individuals in addition to those reporters who receive bylines for the work. There were 460 articles (50.2%) that were co-authored and 231 of these acknowledged contributions. The remaining 1,568 (60%) were authored by a single reporter and 345 of these acknowledged contributions of others. Regardless of the type of research services available to them, reporters who collaborate on a story give credit to others more often than reporters who author a story alone. Among the roles acknowledged are other staff writers/reporters, wire services, researchers, correspondents, database editors and others. (See Table 5).

When articles that originated from wire services are excluded from the study, 1,794 remain that were authored by staff reporters. Among these, a slightly higher percentage (53.7%) appeared in newspapers where researchers are assigned to editorial teams. The difference is due in part to the fact that it is the policy of one of these papers to avoid using wire service stories on page one.

A goal of this research is to look for evidence of the new information professional, as defined by Griffiths, Sudman, Michelson, and others, in newspapers that have adopted a team-based model for research services. We anticipated that the reporters in organizations where researchers were part of their editorial teams would be more likely to acknowledge the contributions of those researchers, that they would value the contributions of researchers as much as the contributions of other members of the editorial team, and that researchers would in turn identify with the organization and define their roles somewhat differently from researchers in a centralized library. The first test of the hypothesis is an analysis of the acknowledgment patterns of the page-one stories.

Articles	Total	Acknowledge Contributions	Percent	Total authored by staff	Acknowledge Contributions	Percent
All	2,036	576	28.3%	1,794	519	28.9%
Multiple-author bylines	468	231	49.4%	461	230	49.9%
Single-author byline	1,568	345	22.0%	1,333	289	21.7%

Table 5. Articles Acknowledging Contributions Comparison Based on Multiple Authorship or Single Authorship

Summary of Findings

Correlations were computed between **Organization type** (centralized research center or researchers assigned to teams) and **Contributions** (acknowledgments for contributions of individuals other than byline). While minor differences were observed – i.e., a weak, but statistically significant correlation of .092 -- the relationship is too weak to be meaningful, and does not support an influential role for organizational type. A *slightly* stronger correlation (.273, significant at .01 level) was found between **Multiple authors** (more than one individual receiving a byline) and **Contributions**, and this is consistent with results of the pilot study. (See Table 6 & 7 for frequencies, and Table 8 for correlations). Articles with multiple authors acknowledged other contributions more often than articles with only one author. This is consistent with our expectations about the behavior of individuals in teams. Further, there is a weak (.156), but statistically significant correlation between **Organization type** and **Multiple authors**. This *may* indicate that organizations assigning researchers to editorial teams encourage collaboration, but results are inconclusive. Researchers who were asked about this during site visits knew of no incentives or policies favoring collaboration.

On the surface, there appears to be no organizational differences in how often the contributions of *researchers* are acknowledged. Indeed, only 28 in 100 stories acknowledged *any* contribution other than the reporter’s byline. Of the stories acknowledging contributions (519), other reporters were acknowledged in stories most often (382), followed by researchers (88), wire services (77), correspondents (38), other² (9), and database editors (6), in that order.

The stories that acknowledged contributions of other reporters, researchers, correspondents, etc. were more often reporting state and local news (47.2% of

² The classification “other” refers to categories that appeared only once, including a photographer, for example, and individuals from external, specifically-named news sources.

acknowledging articles). Science and health reporting and “other” categories (sports, entertainment, etc.) rarely acknowledged contributions beyond the byline.³

Beat	Frequency	Percent	Cumulative Percent
International news	347	19.3%	19.3%
National news	487	27.1%	46.5%
State & local news	847	47.2%	93.7%
Science & health	73	4.1%	97.8%
Other	40	2.2%	100.0 %
	1,794	100.0%	

Table 6. Article Frequency by News Beat

Role	Frequency
Staff writer	382
Researcher	88
Correspondent	38
Wire service	77
Database editor	6
Other	9

Table 7. Article acknowledgments by role

*Total exceeds 519 because some stories acknowledge the contributions of more than one role.

Variable 1	Variable 2	Correlation coefficient (Spearman)	Significance level
Organization type	Contributions	.092	.01
Organization type	Multiple authors	.156	.01
Multiple authors	Contributions	.273	.01

Table 8. Observed correlation between variables

While the analysis of acknowledgments suggests little difference based upon **Organization type**, other patterns were observed. Acknowledging researchers was observed most often in the newspapers with the largest and the smallest circulations in the study. In the larger organization, the *Dispatcher*, the results may be attributed in part

³ This was true in the pilot study as well, even when all sections of the paper – sports, business, entertainment, etc. were included. The researcher at the *Dispatcher* explained that most of their science or health reporters hold degrees of specialization in their fields and do their own research.

to the size of the staff and the number of resources available to assign to a team.⁴ In fact, there are multiple researchers assigned to both the national and city desks. The frequency of researcher acknowledgments at this paper supports the research hypothesis that researchers assigned to teams will receive recognition for their contributions.

Newspaper	Total articles	Acknowledge contributions	Acknowledge researchers	Acknowledge reporters
<i>Banner</i>	489	129	4	114
<i>Dispatcher</i>	603	194	48	143
<i>Messenger</i>	360	122	6	82
<i>Recorder</i>	342	74	30	38
Total	1,794			

Table 9. Articles and Acknowledgments by Newspaper

(Acknowledgments of wire services and correspondents are included in the total contributions, but are not broken out by category in the table.)

The smaller organization, the *Recorder*, is more difficult to explain. Second overall in acknowledgments for researchers, the numbers are intriguing because there are more stories acknowledging researchers (30, or 8.8%) compared with reporters (39, or 11.4%) than at any other newspaper. The *Dispatcher* had a comparable percentage of stories acknowledging researchers (7.96%), but a comparatively higher percentage of stories acknowledging reporters (23.7%). Several possibilities are suggested, one being that there may be fewer reporters employed by the *Recorder*, requiring reporters to seek assistance from researchers more often to handle their workload. (The *Recorder* also had a larger number of wire stories, and this may support the “fewer reporters” argument.) Another possibility is the relative importance of state and local news. Both the pilot study and this one show that researchers are acknowledged most often for contributions to state and local news stories, and the *Recorder* is published in the state capital. A third possibility may be the composition and demographics of the reporter staff. Since the *Recorder* supports a smaller market, they may hire younger and less experienced journalists who require more assistance in using information sources. There are other possibilities as well, including formal or informal policy and the personal and professional characteristics of the research staff. Researchers were asked about how they would account for the difference. They agreed that there is an unwritten policy of giving credit to researchers when it is due, and that maintaining and analyzing local and state public records is something that is both important to their jobs and something they do very well. But the research staff is comparatively large and the researchers succeed, in their view, because they work well together and have built, in the words of one, a “reputation for providing quality and timely research; providing reporters with the tools

⁴ When asked about the large number of collaborations, a researcher at *The Dispatcher* responded that they just have more people to assign to a story. A researcher at *The Messenger* commented that occasionally a reporter will grant another reporter a co-byline for contributing a few facts. Neither of the researchers thought that there were any financial or organizational incentives to encourage reporters to collaborate.

they need at their own desk[s]; and training them how to do their own research to some degree.”

Having looked at how reporters acknowledge contributions, the purpose of the second task is to examine what reporters say about those contributions.

Task 2. Journalist Surveys

Results of the study of acknowledgment patterns suggest there is little difference based on organization type. Reporters were surveyed to see if there are differences in what they *say* about the assistance received.

Frequency of Assistance Provided

The first set of questions on the reporter survey addressed how often researchers, other reporters, editors, or wire services provided assistance on the stories published from September 1 to November 30. The answers are summarized for these roles in Table 10.

Source of assistance	None at all	Once	2-4 times	5-10 times	More than 10 times	Totals*
Researcher	8	2	31	25	36	94
Reporter	4	2	34	30	32	98
Editor	19	6	26	15	35	82
Wire service	18	10	32	21	20	83

Table 10. Frequency of Assistance Provided to Journalists on Page 1 Stories
*Totals do not include those who answered “none” indicated in the first column.

Correlations were computed between **Organization type** (centralized library or researchers assigned to teams) and the assistance sought from each of the above groups. While there appears to be a minor (.198), but statistically significant, relationship at .05 between **Organization type** and **Assistance sought from researchers**, and between **Organization type** and **Assistance sought from wire reports** (.234), the relationship is small. There appears to be a moderate correlation among the roles – individuals who sought assistance from other journalists, also sought assistance from researchers (.257 at .01), wire reports (.387 at .01), and editors (.562 at .01). These data support findings from the newspaper analysis that co-authored articles more often acknowledged contributions than individually-authored articles. Apparently when a reporter seeks assistance, he or she is likely to utilize multiple sources.

Reporters were asked to describe the types of assistance individuals in the above source groups provided to them in preparing stories. Analysis shows that some categories of assistance are provided by all groups (fact checking and/or verification,

providing background information, and perhaps sharing a contact name or phone number), but in general, reporters depend upon these groups for different kinds of support. A discussion of the types of assistance provided by researchers, other reporters, editors, and wire services follows.

Assistance from researchers fall under seven categories, including the following:

1. Provide background information. Researchers provided background information from court and other public records, hard-to-find articles, photographs, information about lawsuits, a timeline of events, and biographical information about individuals. One reporter commented specifically on the important role that researchers play in locating information about people, including performing background checks and verifying their potential as a source.
2. Find a telephone number, address, or contact information. Reporters said that researchers were particularly helpful in locating phone numbers (including unlisted numbers), addresses, and directions to an address with limited clues. Researchers sometimes located neighbors and relatives of victims or subjects of a story, and occasionally arranged interviews for the reporters. Researchers sometimes research and supply a name and contact information of an expert on a subject or topic.
3. Verify a fact. Reporters often turn to researchers to verify facts to be used in a story, or to verify that information provided by someone else is accurate.
4. Researchers provide technical assistance and training to reporters. Researchers train reporters to use databases such as Lexis/Nexis, and other online sources, such as the U.S. Census. They may also demonstrate to a reporter how to go about finding information.
5. Answer a question. This usually involves searching a database or print source for information that a reporter is unable to find himself/herself, so often researchers receive the tougher questions.
6. Perform data analysis. Reporters indicated that they sometimes turn to a researcher to assist with data analysis, such as mining data for trends, putting together charts that illustrate relationships and trends, and producing maps and other aids.
7. Find a source. Reporters occasionally turn to researchers to find sources of information, including specific books and periodicals, translations of articles, and materials on a particular subject. Sometimes researchers pull files and past stories that meet the reporter's need. One reporter remarked that researchers often will recommend a new source of information, and he/she "wish[es] they would do more of this."

The categories of assistance provided by researchers overlap those provided by other reporters. Other reporters:

1. Co-author a story. Co-authoring or collaborating on a story in some way was mentioned most often as the type of assistance provided by other reporters. Reporters often share ideas, contribute to the writing and rewriting of each other's stories, co-report, and share sources. They may work with each other in flushing out an idea and occasionally work together throughout a long term investigation or project.
2. Provide a telephone number, address, and name or suggest a contact for a story. Other reporters provide leads based on knowledge and experience that the reporter who is assigned to a story may not have.
3. Provide background information. Reporters often turn to other reporters for background information on a story. This includes providing public records and suggesting sources for background info.
4. Verify a fact. Reporters turn to other reporters to verify a fact.
5. Gather facts. Reporters may assist each other by helping to gather facts as a story unfolds. Reporters make calls, interview subjects, get feeds from the field, and find information sources to assist others on a story.
6. Advise and guide. Reporters turn to each other for advice on how to approach a story as well as for feedback and criticism on a story as it takes shape. Most reporters in the study indicated that they would seek advice from other reporters for their expertise or knowledge on a topic or "area different from mine."

Editors provide the broadest range of support to reporters, and this is somewhat surprising since fewer reporters indicated that they sought assistance from editors than from any of the other groups on the survey. When asked about the kind of assistance that editors provide, the answers included:

1. Provide direction on the approach, structure, and tone of the story. Reporters turned to editors for their story assignments, for suggestions, and for advice on organization and scope. The reporters used phrases such as "help figuring out the angle," "helping me to look at the broader picture," "talk about who to include," and "suggest what is important to a story" in their descriptions. They referred to editors as a "coach" and "sounding board."
2. Recommend sources. Editors not only provide direction for approaching a story, but locate and recommend people, documents, and provide tips on possible leads.
3. Edit a story. Editors help in the writing and rewriting of a story, help to craft a lead, provide "substantive and stylistic" help with the writing, catch mistakes, improve copy, assist with word choice, correct spelling, and trim the story if space is limited. Editors provide feedback and make recommendations for how to improve or refine a story.
4. Supply background information. Reporters receive help from editors in getting background on a story or issue. Editors provide clips and other

information and share their historical knowledge. Editors may even write timelines and biographical pieces to accompany a story.

5. Help with graphic preparation. Editors help in the preparation of charts and graphs, and may solicit assistance from the graphics department on behalf of the reporter.
6. Gather and verify facts. Editors assist a reporter in gathering information, make phone calls to verify facts, and pass information along to reporters in the field.
7. Do “everything possible.” Responses from reporters indicate that they rely on editors for many things. One reporter described an editor who took dictation from him for a story phoned-in from the field in order to make a deadline. Another reporter said that an editor had dealt with other editors “to give me the time and support” needed to complete a story.

Reporters rely on stories produced by wire services and other newspapers as well. Evidence of this relationship is apparent in the frequency with which reporters acknowledge the assistance of these services in their writing. Crediting wire reports is more than local policy, it is a legal requirement of the copyright law. Among the ways that wire reports assist reporters are the following:

1. Provide background. Wire stories are sometimes used to provide background information for a story the reporter is working on. Reporters may take an idea from a wire story and add local information to it, write a companion story from a local angle, or extract descriptions of events or conditions in other cities or states that relate to local stories.
2. Use facts. Wire stories may provide details or filler for a local story (properly attributed, of course). Sometimes they are used as short inserts or sidebars to the main story. One reporter indicated that he/she will use information from wire stories that is not available elsewhere. They may also use pictures from wire services for illustration.
3. Double check facts. Wire stories are used sometimes to verify spelling or to check events and details. Often, quotes from a speech will be taken (or verified) from wire sources.
4. Provide leads to new sources and new stories. Wire stories are read by reporters sometimes for leads to new stories and for possible new sources for current stories. This is particularly important for breaking news, as often the wires learn of events first. One reporter noted that he/she will “google 10 X daily” to get a lead on a story.

While reporter responses provide some overlap and some noteworthy differences among the roles described above, one pointed out that it is not the *quantity* of assistance sought that matters, but the *quality* of that assistance and its timeliness. The next section addresses how the reporters value the input from researchers.

Quality of Assistance Provided

Reporters were asked to rank the contributions of the above groups in preparing their stories. In addition to reporters, researchers, editors, and wire services, the category of personal contacts outside of the newspaper was listed for a more thorough perspective. The summary data for all respondents are described in Table 11, and are compared in Figure 1.

Position	1 (most important)	2	3	4	5 (least important)
Personal contacts	63	13	8	9	8
Other reporters	16	32	27	23	5
Researchers	15	21	33	19	13
Editors	11	33	20	21	26
Wire services	4	12	20	21	43

Table 11. Importance of Contributions of Others

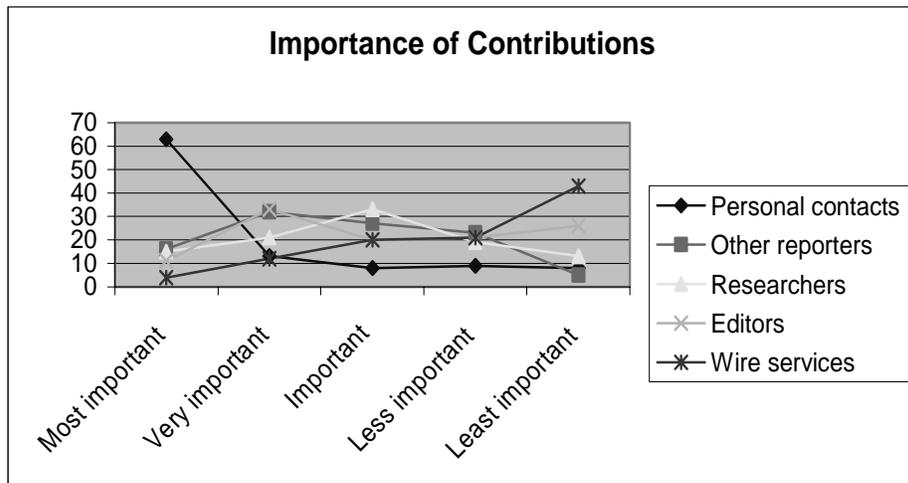


Figure 1. Relative importance of contributions

Personal contacts provided the most valuable assistance to 61.8% of the reporters who responded to the survey. Other reporters, researchers, and editors at the newspaper

followed and were fairly evenly ranked. Wire services were deemed least important. The assistance provided by researchers, according to the reporters they helped, was valued nearly as much as that provided by other reporters, but other reporters were acknowledged four times more often.

Awareness of functions performed by researchers

The next question tested reporter awareness of the functions performed by researchers for their organizations. The list was inclusive of tasks performed at each of the newspapers. It was produced from information recorded in interviews with researchers prior to the study and it was reviewed by researchers prior to use. All of the functions were recognized by at least some of the reporters, but only about 20% of the respondents recognize that researchers sometimes write background summaries for journalists and only about 38% indicated that researchers sometimes digitize media. When asked what other functions researchers perform, the most frequently mentioned task was to “track people down” or to track sources for information.

There was a difference between the two types of organizations (centralized research services or researchers assigned to teams) in the average number of functions recognized. Twelve services were listed on the functions list, including one marked “other” that allowed journalists to specify one or more additional activities. Organizations with centralized research services recognized an average of 8.72 functions performed by researchers, but organizations with researchers assigned to teams recognized an average of 7.62 functions. (Other measures of central tendency, median and mode, were also higher for the centralized type.) This difference, though small, may indicate that researchers assigned to centralized libraries actually perform a greater variety of functions than researchers who are assigned to research teams. Researchers who are assigned to editorial teams may not have responsibility for maintaining the news archive, for example. Another possibility is that reporters who must seek assistance from researchers in a centralized facility may have more of an opportunity to witness them doing other things, or may relate their work more directly to the artifacts of that environment.

Years of experience

Since one of the desired outcomes of this study is to gain a better understanding of trends in the environment that may relate to other special libraries, we asked journalists to indicate their years of experience. We thought it would be useful to know if researchers are valued as much by junior reporters as they are by those who are senior or near the end of their professional careers. More responses were received from senior reporters than junior reporters, and that may be due in part to a skewed population. Newspapers in larger markets such as these usually require experienced reporters. Forty-four of the respondents have between 11 and 25 years of experience, and only 11 have

fewer than five years of experience. According to the comments made, there is evidence that reporters in all experience levels value researchers.

Some of their comments follow:

“While I do not frequently need the help of a researcher, such assistance is vital in some stories.” (*Reporter, 5-10 years of experience*)

“[they suggest information sources] somewhat – I wish they would do more of this.” (*Reporter, 5-10 years of experience*)

“Researchers are invaluable to my job and to the success of my work product.” (*Reporter, 11-25 years of experience*)

“Good researchers are invaluable to writers!” (*Reporter, more than 25 years of experience*)

Task 3. Researcher surveys

Characteristics of Researchers

Surveys were mailed to the 35 news researchers who were acknowledged by the reporters for their contributions. The purpose of the surveys was to gather input from the researchers to compare with reporter responses, and to validate impressions obtained during the site visits.

Nine of the 35 researchers (25.7%) responded to the surveys. Responses represent both types of organizations, with five respondents from organizations with centralized research services and four from organizations with researchers assigned to an editorial beat. However, seven of the responses were from researchers at two of the newspapers, and they are the same newspapers that acknowledged contributions of researchers most often, the *Recorder* and the *Dispatcher*.

Researchers were asked first about their experience, educational background, professional affiliation, and organizational position. Their responses are summarized in Table 12.

Organizational type and researcher	Years of Experience	Highest educational degree	Professional affiliations*	Organizational role
Centralized				
Researcher 1	3	M.L.S.	SLA IRE	Researcher
Researcher 2	5	M.L.S.	SLA IRE	Researcher
Researcher 3	15	M.L.S.	SLA SCIP	Librarian
Researcher 4	8	B.A. in English	IRE	Journalist Researcher
Researcher 5	2.5	M.L.S.	SLA	Researcher Librarian
Assigned to teams				
Researcher 6	29	B.A. in Poli. Sci. & History	SLA IRE SNLA	Journalist Researcher
Researcher 7	9	M.L.S.	SLA	Researcher
Researcher 8	26	M.L.S.	SLA	Librarian
Researcher 9	23	M.L.S.	IRE	Researcher

Table 12. Researcher Demographics

*SLA=Special Libraries Association, *IRE=Investigative Reporters & Editors

*SCIP=Society of Competitive Intelligence Professionals

*SNLA=State News Librarians Association

The four researchers at organizations where researchers are assigned to an editorial beat have more years of experience (average of 21.75 years) than those at organizations with centralized research services (average of 6.7 years). Seven of the researchers have a professional degree in library and information science and seven of them (not necessarily the same seven) are members of SLA. The News Division of SLA is strong, and at least one of the researchers above is a member although she does not have a library degree or identify herself as a librarian. It is noteworthy that all of the researchers who responded to the survey indicated that they are members of at least one professional association. A check of the membership rolls of three of the professional associations listed above identified 21 of the 35 researchers from the study (60%) who are members.

The researchers were asked to characterize their positions as journalist, researcher, librarian, a combination of those, or other. Seven of them identified themselves as “researchers,” one of whom also checked “librarian.” The two researchers without professional library degrees identified themselves as researchers and “journalists.” Two of the respondents identified themselves as “librarians” only. The

question was asked primarily to determine if researchers who are assigned to editorial teams perceive themselves differently from those in centralized research centers. These results indicate no difference.

Three questions on the researcher survey were posed to compare answers with reporter responses, and three questions were asked to gather comparable information about the work that researchers perform. Answers are discussed below.

Kinds of Assistance Provided to Reporters

Researchers were asked about the kinds of assistance they provided to reporters. Their answers were compared with those of reporters and were found to be similar. Two types of assistance identified by researchers that reporters did not mention are: 1) obtaining access to a database, and 2) writing a section of an article based on research, or compiling chronologies and fact boxes based on research. Other than these functions, there is agreement between what reporters say they received and what researchers say they provided. This is true for both organization types.

When researchers were asked about how journalists showed their appreciation for the assistance, they mentioned credit in the tagline most often, followed by a personal thank you, occasional byline, praise, and “sometimes an email to my boss.”

Responsibilities of Researchers

Researchers were asked to pick from a list the responsibilities they perform at the newspaper. This is similar to a question asked of reporters. There were twelve items on the list, including the category of “other” to allow researchers to add any functions that may have been overlooked. Responses from both types of organizations were similar, averaging 8.8 items for the researchers from centralized facilities, and 8.5 from those where researchers are assigned to teams. Researchers in both types of organizations and all demographic categories agree about the work they do, and there are no differences based on **Organization type** concerning which of the twelve items were checked.

Researchers were asked to identify which responsibilities are the most important. Their choices were:

- Research the answers to questions (7 chose)
- Training, web access via the intranet and public records access (1 chose)
- Create and maintain databases (1 chose)
- (In addition to researching the answers to questions) “We need to continue to be experts at finding information and solving problems.” (1 chose)
- (In addition to researching the answers to questions) Manage a staff of researchers and suggest information sources (1 chose)

Major Challenges Faced

Researchers were asked to describe the major challenges they face in their positions. Their responses are grouped into the four categories that are discussed below.

1. Lack of resources. News research requires access to expensive databases, funding for training to keep skills fresh, and competitive salaries. Budgets for special libraries are drying up, and news libraries are no exception. Frequently, reporters want to do their own searching, and often on expensive databases with minimal training. The problem is exacerbated by a dynamic online environment where new software releases and upgrades are routine.

Researchers labor under deadlines just as reporters do, and they find that time is another scarce resource, made more so by increasing workloads and, in some cases, diminishing staff.

2. Keeping up-to-date professionally requires that researchers learn about technologies that might benefit operations within the organization and about new, useful information sources as they become available or as they are needed. In news organizations, this is essential, and it is one way that the News Division of SLA has been so helpful. With inadequate financial resources, researchers often seek help from each other through *Newslib*, and through sessions organized for them at the SLA annual meeting.
3. Explaining the role that researchers can, and do, play is a challenge for the research editors. Often reporters avoid seeking help from a researcher because they think they can do it on their own. One researcher said that her greatest challenge is to get information to the reporters, especially when they will not ask for it. Her strategy has been to build a comprehensive intranet, featuring links to sources on hot topics as they arise. Another researcher indicated that it was a challenge to advocate the “desk researcher” model to management and to encourage reporters to make researcher acknowledgments routine. At that same newspaper, another researcher said that it is a challenge to get upper management to *understand* the role that researchers play.
4. One of the researchers who is located in a bureau that is miles away from the city where the newspaper is published, serves a team of reporters who operate at the bureau. She is isolated from other researchers and from the “essential organizational gossip.” Although this was mentioned by one researcher only, it is a potential problem for researchers allocated to editorial teams.

Most Important Skills

Researchers were asked to describe the skills that are most needed to succeed on the job. Those described include:

1. Ability to communicate. The ability to communicate encompasses everything from being a good listener and being able to conduct a successful reference interview, to presenting the results of research in an informative, concise, and timely manner. Researchers often summarize information they gather by providing tables, timelines, and prose that inform without overwhelming the reporter who made the request. Communication skills help researchers to be better trainers and problem solvers, and aid researchers in negotiating contracts with vendors.
2. Research skills. Good research skills include the ability to find and identify appropriate information sources as well as to extract needed information from those sources.
3. Computer skills. Computer skills include the knowledge of, and facility with, a variety of hardware and software applications in addition to searching databases. Researchers need knowledge of HTML to create and maintain Web sources, and they are frequently required to utilize statistical and graphics software for data analysis, and to build databases for this purpose.
4. Multitasking. One researcher remarked that his most valuable skill was in multitasking – to be able to conduct a database search while talking on the telephone, for example. Researchers often work on more than one problem at a time, and managing that workload without letting anything fall through the cracks is a challenge.
5. Attention to detail. Accuracy is essential for fact-checking and for researching a problem. A reporter can be fired for inaccurate reporting, so the researcher must be as accurate and thorough as possible to be valued in the newsroom.
6. Problem solving skills. Problem solving skills are important in all aspects of information management, and this means not only conducting a good reference interview, but assessing the utility of sources and being able to determine when a lead is promising or poor.

The Role of Information Technology

Researchers were asked how they use information technology to carry out their responsibilities. Two researchers did not respond to the question and a third indicated that she did not *understand* the question, but provided an answer anyway. The purpose

of the question was to see if researchers were reporting uses of technology for building digital collections and databases to support their teams as expected for the new information professional. While traditional uses of technology for database searching and electronic communication are common at all sites, there is evidence of other kinds of tasks as well. Building databases, Web resources, and collections of information for use by teams were tasks identified by researchers at two of the organizations. One researcher described the evaluation of new technologies as a critical responsibility, and finds it a challenge to identify and acquire those that will fit the organization's needs. Another researcher noted that proficiency with all of the software utilized within the organization is necessary because "invariably reporters will need help with it."

Task 4. *Newslib* Analysis

Messages on the *Newslib* listserv were monitored and analyzed for several weeks before and during the study to determine if any of the researchers at the four newspapers used the list to assist them in their work. While several of the researchers from these newspapers were active on the list and answered questions posed by others, none of them used the list to pose research questions. During the site visits, when the issue of the listserv was raised, two of the researchers expressed reluctance to use the list for research. Instead, they valued it more for the opportunity to exchange information with other researchers about useful sources and about issues affecting the profession.

5. Discussion

Six research questions described earlier in this report motivated this research. In this section, we will discuss results as they relate to these questions. The results of this study cannot be generalized to other environments, and must be qualified further by the fact that the survey data on which the findings are based came from less than 25% of those who received surveys.

1. *Do reporters perceive the roles of researchers differently in organizations where researchers are assigned to editorial teams?*

The only noteworthy difference between the responses of reporters at organizations where researchers are assigned to teams and those of reporters at organizations where researchers are assigned to a centralized library is in their identification of the variety of tasks that researchers perform. Reporters in organizations with centralized research services tended to identify a greater variety of tasks, but the difference is small (by one). Further, reporters claim that they value the contributions of researchers about the same as those of other reporters and editors, and that they turn to researchers for similar types of help; but, with the exception of the *Recorder*, reporters acknowledged the assistance of other reporters far more often. There is no obvious reason for the acknowledgment behavior at the *Recorder*, although several possible explanations have been offered and some combination of them is the likely cause. One point not mentioned in the earlier discussion is the fact that researchers often support long-term, investigative reporting, and the newspaper has received awards for these projects in the past. Contributions of researchers to these types of projects may be more substantial and worthy of acknowledgment than simple fact-checking. At the *Recorder*, we observed a busy research center with reporters and researchers having discussions, reviewing information at a terminal, and exchanging notes. The level of energy was high.

While we stress that there is a very small, inconclusive correlation between the type of organization and researcher acknowledgments, the relationship may be stronger than it first appears. Organizations that assign researchers to editorial teams do not necessarily assign *all* of their researchers to editorial teams. At the *Messenger*, for example, only one researcher is assigned to the newsroom, and at both newspapers where researchers are assigned to teams, the team-based researchers were acknowledged most often. During the site visits, we observed easy exchange of information among researchers and reporters in the newsroom as equals across cubicles.

2. *Do researchers in organizations where they are assigned to editorial teams perceive their roles differently from those in organizations assigned to a central library?*

When asked specifically about what they call themselves, and the kind of work they do, researchers at both types of organizations responded similarly. Most of those responding consider themselves to be “researchers,” they identified on average about the

same number of tasks for which they are responsible; and most indicated that answering research questions is their most important function. One noteworthy, but minor, difference is that researchers who are part of editorial teams commented on the need to get information to reporters who do not ask for it and the need to get management to understand their role. These researchers are more experienced on average than others who responded, and are likely more confident of their skills and aware of what they *can* contribute. Being part of the editorial team, and within organizations with a limited career path, may make them more aware of the differences between the status of reporters and researchers. One aspect stressed by researchers at organizations with centralized research services was the need for researchers to work well together.

3. *How do reporters value the services of researchers compared with the contributions of other groups?*

As previously stated, reporters say that they value the assistance of researchers about the same as they value that of other reporters, editors, and correspondents, and more than wire services. Some reporters said that there are things that only a researcher can do. Reporters turn to researchers for really difficult research questions when they cannot find things on their own. Repeatedly, reporters indicated that researchers search public records of all types, and are often able to find a contact based upon the slimmest piece of information. Reporters place highest value on contacts outside of the organization for information in preparing stories, but they rely upon researchers, editors, and other reporters to help identify those contacts. Despite what they say, reporters rarely acknowledge researchers for their assistance – only about 5% of the stories that appeared in the papers acknowledged researchers.

4. *Do the acknowledgment patterns (observed in the pilot study) hold up over time, and what other factors may account for differences among organizations?*

Data from one month of analysis in the pilot study showed a stronger relationship between the organization type and acknowledgment patterns than this study shows. The increase in data from this longer study is gathered more uniformly and presents a more meaningful observation. The pilot study revealed that when writers collaborate, they tend to acknowledge the contributions of others as well. That trend was supported by this study. It may be that organizations that permit, encourage, or reward collaborative efforts are more likely to produce stories that acknowledge contributions from a variety of sources, including researchers.

5. *What are the characteristics of organizations that have integrated information professionals into editorial teams?*

Possibly the most significant difference between the organizations that have integrated information professionals among organizational teams and those that maintain centralized research services is the willingness to take risks. This is one of the traits that Bikson identified as an important organizational characteristic for implementing new technologies. When organizations introduce new technologies, workers respond with

either tool reinvention or task reinvention, and the latter is more common. In a sense, assigning researchers to editorial teams is a form of task reinvention. Technology has made research so convenient through the Internet, that reporters often do their own research rather than seeking help from the research center. But reporters recognize that there are times when they need help from an information professional. Having that assistance in the newsroom is more convenient than in a library a few steps away, and convenience influences use. There are risks associated with restructuring organizations, and only a few newspapers have attempted this change.

One of the researchers at the *Dispatcher* described for me the courage required, when she was first assigned to the beat, to ask the editor for permission to attend the editorial meetings. His response was “Just go!” Within a few weeks, doubts about being accepted and appreciated were overcome and she was a fully-contributing member of the team. She is now active in the Investigative Reporters and Editors professional association, making presentations along with reporters, editors, and other researchers and she considers herself to be a journalist as well as a researcher.

A researcher at the *Messenger*, the other organization that assigns a researcher to the news desk, has been a pioneer in developing the newspaper’s intranet and her own blog as a resource for information. The organization has in the past been innovative and committed to the concept of having researchers in the newsroom, but recent budget cuts have strained the research center’s resources. Recent changes and stress in the organizational culture have had an impact on the researchers. The ability to take risks and to be innovative has been diminished. A second researcher planned for the newsroom has not been funded.

5. *What are the characteristics of the technology used to support decentralized organizations? How is it used? Is there evidence that it is user-driven?*

One of the questions on the researcher survey addressed the use of technology. Most researchers indicated that they use technology every day, all the time. Searching online resources, communicating via electronic mail, creating and maintaining databases and Web sites, and using spreadsheets and graphics programs for data analysis and display are some of the ways that researchers utilize technology. There is no evidence of differences based on type of organization as such, although at the *Dispatcher*, the research editor described a greater variety of applications than others did. Also at the *Dispatcher*, researchers have responsibility for formal training of reporters, and there is a training room for this purpose. The training and technical assistance role is more formalized there than in the other organizations, but it is something researchers are called on to do frequently at all sites.

6. Summary

There is evidence that researchers in these organizations are engaged in the kinds of activities that were envisioned for the new information professional. But it is far from certain that the model of researchers as part of editorial teams will replace the model of a research center, or even that it should. It is clear from interviews with researchers that they recognize the challenges ahead. Newspaper circulation is down, large services motivated by profit are acquiring independent news outlets, and the ubiquitous Web misleads many information users into believing that all knowledge is available and accessible there. Researchers know that their professional survival is threatened, and have made efforts accordingly to become more visible in their organizations. Assigning researchers to editorial teams and encouraging reporters to acknowledge their contributions are ways of making their presence known. But there is evidence from the success of the *Recorder* that the centralized research service model is still a viable alternative for news libraries. Its example reminds us that no solution is a panacea, that organizations differ, and that the best solutions are those that fit the circumstances.

Barbara Semonche, librarian at UNC's School of Journalism and administrator of the *Newslib* list, shared a story that sheds some light on how far researchers have come. There is a scene in *All the President's Men* where Robert Redford, playing Bob Woodward, is sitting at a desk. A slender young woman approaches him and hands him a folder. She tells him that she was unable to find any information about Kenneth Dahlberg in the clipping file, but that she *was* able to find a photograph, and she hands it to him. We see little of her during this brief exchange, and she walks away. The photograph shows Dahlberg with Hubert Humphrey, and Woodward is able to make the Minnesota connection, find Dahlberg, and fill in a critical piece of a puzzle to a story that ended a Presidency. The woman was a researcher, and she walked away from the desk without even a "thank you." According to the story, Mr. Woodward's wife, on seeing the film, asked him if he ever thanked that young woman. He could not even remember who she was, but he asked around, and others in the newsroom assured him it was Liz Donovan. By that time, Liz had left the *Washington Post*, but he sought her out and offered her a share of the prize he won for the story. Liz refused the prize, because she could not remember specifically finding that photograph. She remembered the story, but at that time, early in the investigation, it was just another story, and just another research assignment. Whether Liz found the photo or not, the fact remains that a researcher showed the resourcefulness to check another source when the more likely one failed, and it made a difference.

Today, it is far more common to recognize the contributions of researchers, particularly in lengthy, investigative reports. These researchers say that typically they receive acknowledgments in taglines, occasionally in a byline, and almost always receive a "thank you" for their efforts. It is neither the praise, nor the acknowledgment, that motivate them, nor should it be; nevertheless, acknowledgment ensures visibility and symbolizes value.

The findings from this study must be viewed with caution. The surveys represent the views of between 20-28% of the reporters and researchers who were contacted. It is possible that those who responded utilize research services and value them more than those who did not respond. Still, there is a consistent message from all four tasks that teamwork and collaboration are important to the viability of research services, whether it be the researcher in the editorial team, the researchers among themselves, or researchers in a larger community of practice. Future work will look more closely at these associations to assess the strength of relationships and to identify other influences they may have on organizations.

There are implications in these findings for the Special Libraries Association, and for educators of information professionals. The news division of SLA is a valuable community of practice that serves its membership well, but it is not the only organization doing so. Perhaps reaching out to partnerships with organizations such as IRE, building stronger links between journalism and librarianship, will strengthen the status of news librarians and will benefit both professional groups. News libraries are staffed not only by trained librarians, but by others who have experience with online searching and information retrieval. As long as research remains the most important task of the news librarian, then skill and experience in retrieving information will be weighted most heavily in hiring decisions. This practice may not be serving news libraries well in the long-term, particularly if it inhibits the library's ability to shift emphasis away from research to other tasks such as training and resource evaluation. Additionally, schools of journalism are offering courses in computer-assisted reporting and research that not only parallel offerings of schools of library and information science, but sometimes replace them through joint programs and departments.

We must not be afraid of these changes, but must embrace them and adapt. We can no longer afford to perform in the background, providing quality services and going home at the end of the day satisfied with having done a good job. We have to demonstrate our value and be recognized for it. For libraries, quality service has typically meant responsiveness to users, understanding their needs and fulfilling them. The challenge facing news librarians, and perhaps all libraries, is to do this more proactively. We exist in times when electronic networks bring us closer virtually, but put greater distance between us physically. A viable alternative for the distance problem is for information professionals to become part of departmental teams, bringing specialized services to specialized groups. There are risks associated with this model – increased exposure and more direct accountability being two – but there are potential benefits for us and for those we serve.

Notes

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Appendix A
Sample Data Collection Form

Newspaper Data Collection Form

Newspaper: The Recorder **Organization Type:** 2 **Edition:** Home
Date: Wednesday, November 27, 2002

ArticleNumber: 1
Headline: Wagstaff case has ripple effect
Topic: State & local
Byline: Lynne Green Role: Staff writer
Continued: page 14, A
MultipleAuthors:
Contributions:
Contributors: Role:

ArticleNumber: 2
Headline: Women feel force of HIV
Topic: Science & health
Byline: Ben Greene Role: Wire service
Continued: page 6, A
MultipleAuthors:
Contributions:
Contributors: Role:

ArticleNumber: 3
Headline: State delves into wrongful convictions
Topic: State & local
Byline: Mark Robinson Role: Staff writer
Continued: page 14, A
MultipleAuthors:
Contributions:
Contributors: Role:

ArticleNumber: 4
Headline: Hunt for weapons starts today in Iraq
Topic: International
Byline: Vijay Karani Role: Wire service
Continued: page 6, A
MultipleAuthors:
Contributions:
Contributors: Role:

ArticleNumber: 5
Headline: Man, toddler missing after mom's death
Topic: State & local
Byline: Nolan Eveready Role: Staff writer
Continued: page 14, A
MultipleAuthors:
Contributions: yes
Contributors: Juliana Wilson Role: Staff writer

*PLEASE NOTE: Above entries are fictional, but structure is accurate.

Appendix B

Journalist Survey

Journalist Survey, Research Support

The following questions apply to stories you have been investigating or writing over *the past three months*. Please check the answer which best describes your experience during this time period. If you need additional space to describe the assistance received, please use the back of the form.

1. How often have you received assistance from researchers in preparing a story?
___ not at all ___ once ___ 2-4 times ___ 5-10 times ___ more than 10 times

What kinds of assistance did you receive? (find a telephone number, verify a fact, supply background information, technical training, etc.)

2. How often have you received assistance from other reporters in preparing a story?
___ not at all ___ once ___ 2-4 times ___ 5-10 times ___ more than 10 times

What kinds of assistance did you receive? (find a telephone number, verify a fact, supply background information, co-author, etc.)

3. How often have you received assistance from editors in *preparing* a story?
___ not at all ___ once ___ 2-4 times ___ 5-10 times ___ more than 10 times

What kinds of assistance did you receive?

4. How often have you received assistance from wire services in preparing a story?
___ not at all ___ once ___ 2-4 times ___ 5-10 times ___ more than 10 times

What kinds of assistance did you receive? (used facts from a story, background information, etc.)

5. Please rank the following in order of how helpful they have been to you in preparing stories over the last three months. Rank them in order of 1 being most helpful to 5 being least helpful. If the help received was about the same, you may rank the groups as such.

___ other reporters ___ wire services
___ researchers ___ personal contacts external to the newspaper
___ editors

6. Which of the following functions are you aware of that researchers provide at your newspaper? Please check ALL that apply, but leave it blank if you are uncertain.

- research the answers to questions
- train reporters/staff on how to use information systems
- maintain Web resources
- maintain print resources
- maintain the news archive
- share/post topical information
- digitize media
- create and maintain databases
- supply background information
- summarize information in written form
- suggest information sources
- other (please specify)

7. How long have you been employed as a journalist? (Please check one)

- less than 5 years 5-10 years 10-25 years more than 25 years

Thank you for your participation! Any questions about this research may be addressed to Deborah Barreau, barreau@ils.unc.edu, School of Information & Library Science, 100 Manning Hall, UNC-CH, Chapel Hill, NC 27599-3360, or you may check the project Web site at <http://ils.unc.edu/~barreau/nip.htm>. You may complete the survey electronically by going to <http://ils.unc.edu/~barreau/subdir/newsurvey.html>.

Appendix C.
Researcher Survey

Researcher Survey

Background information:

1. How many years have you worked as a news researcher? _____
2. Are you assigned to (check ONE)
___ a centralized researcher / library staff of your organization, or
___ a particular editorial desk or beat?
3. Where is your desk located relative to the newsroom (check ONE)
___ in the newsroom
___ in the library adjacent to the newsroom
___ in the library on another floor
___ other (please specify)
4. Please indicate your educational background (check all that apply):
___ B.A. in (subject) _____
___ M.A./M.S. in Communication or Journalism
___ M.L.S./M.S./M.I.S. Library & Information Science
___ Ph.D. in (subject) _____
___ no degree
___ other (please specify)
5. Do you consider yourself to be:
___ Journalist
___ Researcher
___ Librarian
___ Other (please specify)
6. Please list any professional organizations of which you are a member.
(Examples: SLA, IRE, etc.)

Job-specific Information

7. What kinds of assistance do you provide to reporters (find a telephone number, verify a fact, supply background information, technical training, etc. – please list all that apply)?

8. How do reporters and editors typically indicate their appreciation and value of your effort?
9. What are your responsibilities at the newspaper? {please check all that apply}
- research the answers to questions
 - train reporters/staff on the use of information systems
 - maintain Web resources
 - maintain print resources
 - maintain the news archive
 - share/post topical information
 - digitize media
 - create and maintain databases
 - supply background information
 - summarize information in written form
 - suggest information sources
 - other (please specify)

Which of these responsibilities do you perceive to be *most* important?

10. What are the major challenges you face in your position?

11. What skills are most important to you in your position?

12. How do you use information technology to support your work?

Thank you for your participation!