

Crossing Disciplines, Creating Space: Using Drop-In Research Labs to Support an Interdisciplinary Research-Intensive Capstone Course

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Abstract

Research labs—scheduled group consultations—can be an effective means to provide focused library assistance to a high-needs class. Confronted with students from a single journalism history course suffering from library anxiety and requesting individual and intensive help from librarians, the authors developed over several semesters a set of best practices for conducting research labs. They found that holding one to two scheduled group consultations in the library during class time has helped librarians bring the amount of time spent on this one class down to a more reasonable segment of their overall workload, while also allowing them to provide flexible, individualized, and in-person support to students.

Keywords: academic libraries, information literacy, instruction, subject specialists

Introduction

In support of the Georgia State University Communication Department's capstone research seminar, History of News Media, we the authors—subject specialists for the History and Communication departments—developed a series of research labs as a means of addressing student needs. Structured as drop-in sessions with the two librarians circulating, advising, and answering research questions as they arose, these scheduled group consultations allowed us to provide individual assistance tailored to student needs while also containing those needs somewhat into regularly scheduled sessions. We also found that students used the research labs as focused research time and as sites for collaborative inquiry with other classmates. Buy-in from the instructor contributed considerably to the success of the labs. One instructor's willingness to give up class time for a scheduled lab, and, later, his presence at the labs, greatly facilitated student attendance; the instructor quickly became a fan of the labs and felt that student papers were better for the sessions. Finally, though initially conceived of as a supplement to our more formal instruction sessions, the research labs also contributed to our instruction efforts by providing clear and direct information about what kinds of assistance the students needed. We have consistently retooled our formal instruction in response to information gained from the lab sessions. Ultimately, these sessions have benefited everyone involved: we have been able to streamline our support of a challenging course, the students have received individualized assistance, and the instructor has seen the value to himself and his students of collaborating with library instructors.

Literature Review

As Cardwell, Furlong, and O'Keeffe (2001) have noted, identifying literature on research clinics has been challenging due to the range of terminology used to name or characterize them, including terms like "personal research clinics," "term paper clinics" or TPCs, "Individual Research Consultation Service" or IRCS, etc. The literature to date on research clinics has focused primarily on one-on-one, appointment-based clinics, staffed by librarians or Masters of Library Science (MLS) students. Auster, Devakos, and Meikle (1994) and Avery, Hahn, and Zilic (2008) have discussed the use of MLS students for drop-in or scheduled consultations; Rothstein (1989) describes using his clinic as an assignment in a library science class where the students staffed the clinic. The literature has tended to stress the value of individualized

attention for research assistance, for good reason: Yi (2003) and others note the positive effects of point-of-need assistance, including the ability to adapt the instruction to a student's learning style. Additionally, the emphasis on appointments allows the librarian (as well as the student) to prepare for the session and consequently for both parties to use the assigned time as effectively as possible. Yi (2003) and Bergen and MacAdam (1985) briefly discuss the psychological and social appeal of one-on-one term paper assistance as a means of reducing anonymity and impersonality by establishing a relationship and providing greater psychological safety to students who may be experiencing library anxiety. In our case, the reduction of impersonality can also help alleviate what we identified as the journalism students' "history anxiety."

Others describe models involving reference and/or subject librarians (e.g. Cardwell et al., 2001). In Meyer, Forbes, and Bowers' (2010) model, subject librarians rotated assigned shifts in a designated consultation space, with students making appointments with relevant subject librarians or working with whichever librarian was scheduled for a particular timeslot. Subject specialist involvement is implied by Yi's (2003) discussion of the bi-level information literacy program at California State University San Marcos, which combined a focused general-education library instruction program with subject librarians providing one-shot instruction sessions in upper-level courses. Jastram and Zawistoski (2008) note that the consultation environment improves on the reference desk for anxious researchers such as those we support in this class, and "those who feel their questions are too nebulous for quick answers or who prefer the familiarity of working with a known and trusted librarian."

Christensen (1994) most directly addresses the subject liaison librarian's role in oneon-one research-paper clinics. Strongly influenced by his dual role as liaison librarian and
composition instructor, Christensen's model involved considerable hands-on involvement by
the subject librarian in the writing process: librarians read the research paper in progress and
provided writing critique. In contrast, we have come to defer questions about appropriate topic
selection, writing critique, and anything not directly research-related to the course instructors,
by mutual agreement with the instructors. Christensen's model is also highly time-intensive,
perhaps the most so of any reviewed. Christensen characterizes it as an "aggressive" model
(p. 202), and such a level of individual student engagement, while no doubt beneficial to the
students, would further exacerbate our difficulties with time and scheduling. Additionally,
Christensen's model may be better suited to freshman and other lower-level courses than to
upper-level research seminars or graduate seminars. There are other methods a subject librarian
can use to work with students writing upper-level research papers, including thoroughly
prepared research guides, instruction sessions tailored to the course topic, and incorporating

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discussion of evaluation of resources into instruction and related learning objects.

Regardless of the staffing plan used, the one-on-one model has some potential disadvantages. Debreczeny (1985) enumerates some of the disadvantages of the one-on-one clinic that we encountered: these sessions are often time consuming and demand for the service can overwhelm staff. Rothstein (1989) also encountered the problem of spending overwhelming amounts of time on one-on-one consultations: his research consultants spent six to ten hours of preparation time per consultation. Fortunately we spent only a fraction of this time per student. Our group lab model overcomes those problems. Otherwise, Debreczeny's (1989) model (based on Rothstein's [1989] clinic) focuses more on collaboration among subject librarians and keeping records of research done to facilitate later consultations.

Several more recent accounts have described efforts to move beyond the one-on-one consultation to managing multiple attendees: Avery et al. (2008) describe an "office hours" model, where library school students hold open hours in a designated library space, frequently addressing multiple attendees. Jacklin and Bordonaro (2008) also discuss their use of a drop-in clinic for assisting environmental studies students with a specific library-resources assignment. Both of these models diverge from more traditional discussions of term-paper clinics by expanding beyond an individual-consultation model to include multiple students, thus expanding, as we have, beyond one-on-one consultations.

Journalism 4040: History of News Media

Georgia State University (GSU) Library is set in an urban campus in downtown Atlanta, with approximately 30,000 students. The library uses a subject liaison librarian model for outreach to academic departments: each subject area on campus has a designated subject librarian who handles instruction, collection development, and research consultations (in person and online) for undergraduate, graduate, and faculty researchers in that area. With such a large student population, subject librarians often face time pressure to keep up with the demand for their services (instruction sessions and consultation requests) during busy times of the semester.

History of News Media ("Journalism 4040" or "JOUR 4040") is a senior-level undergraduate course required for all Georgia State University students in the journalism major (undergraduate journalism courses are taught by the Communication department). JOUR 4040 is also part of GSU's Critical Thinking through Writing (CTW) program, and as such requires extensive writing. The GSU Communication Department offers one to two

sections of History of News Media each semester, including the compressed summer semester. Two Communication faculty members have had ongoing responsibility for this course. We the authors, subject librarians for History (Anderson) and Communication (Puckett), jointly provide library instruction sessions and research support for this course.

JOUR 4040 is typically taught by two different instructors: Jeff Johnson (a faculty lecturer in the Communication department as well as a doctoral student in the History department) and Leonard Teel (a senior professor in the Communication department). Prior to Fall 2009, the Communication department was only one of several handled by one busy Humanities Librarian, so the JOUR 4040 class was supported by the previous History Librarian. When Puckett moved into the role of Communication Librarian in 2009, he, like the journalism undergraduates, found that the nature of the research involved in this class needed support from a more qualified historical research expert. We first began to collaborate on this course during the Summer 2010 session, shortly after Anderson arrived at GSU.

Collaboration between the Communication Librarian and the History Librarian is key in the support of this course. History Librarian Anderson is new to librarianship but has a doctoral degree in U.S. History, a background in university-level subject instruction, and considerable research experience, so she is able to focus intensively on how historical research is done. Communication Librarian Puckett was inexperienced with primary-source historical research, but brings experience working with journalism undergrads, and good ongoing working relationships with the communication faculty who teach this course.

Unlike all other courses in the undergraduate journalism major, this is essentially a history course requiring primary-source historical research. The main assignment for the course is a twenty-page research paper on a historical media-related topic. Students' papers must be on a pre-1900 historical topic in Teel's sections of the course, while Johnson's section allows either 19th- or 20th-century topics. The assignment requires students to use a combination of secondary sources (typically books and journal articles) and primary sources (mostly historic newspapers) as the basis for an original historical research paper.

The cross-disciplinary nature of JOUR 4040 is a major issue with this course: students are senior journalism majors who have been assigned a traditional history paper. They lack the scaffolding that history majors taking the parallel seminar in the History department have. History majors are required to take HIST 3000, a research methods course, prior to taking the required HIST 4990 research seminar course. With a few exceptions, most faculty teaching HIST 3000 sections schedule at least one instruction session taught by the History Librarian,

with several requesting multiple sessions per course. JOUR 4040 students lack the structured development of historical research skills implied by the 3000/4990 sequence required of history majors. In fact, this assignment is the first and only primary historical research that most GSU journalism majors will undertake.

Students in this class often feel stress over the intensive research requirements of the course. It is a required course calling for a type of research for which their major program has not prepared them, and their grade for the class is primarily dependent upon a single paper. Students typically have to use library resources with which they are not familiar—historical newspaper and magazine archives online and/or on microfilm—and they often need resources not available from GSU's library, requiring use of interlibrary loan services or trips to local archives. In particular, the unfamiliar tasks of identifying, locating, requesting, and physically using microfilm often intimidate students. Since the research skills required for this assignment are new to most journalism students, the class generates a great deal of library anxiety for its students. Anderson also coined the phrase "history anxiety" to refer to these students' state of mind: their inexperience with historical research and writing led to extensive consultations involving explanations of how history writing works.

This "history anxiety" also often leads students to choose excessively broad topics, as students assume that writing a twenty page paper requires selecting a very broad topic often better suited to a book-length treatment. Some initial topic choices have included "Mormons in Utah," "the California Gold Rush," and "the Mexican-American War," for example. Students frequently begin by selecting unfocused topics like "press coverage of" some major historical event. During our first semester working together, we encountered one student who wanted to write about newspapers' frequent discussion of the future; Anderson worked with this student to narrow this topic to a specific time period and newspaper type. Topics this broad can be very difficult to research. This is especially a challenge to both the students and librarians during the shorter summer sessions when the research time is compressed. Summer semesters are approximately seven weeks; fall and spring semesters are approximately fourteen weeks. To assist with this problem, we strongly encourage several research strategies like identifying relevant proper nouns (people, places, and named historic events) to aid in searching primary sources that lack subject headings. We also recommend that students begin the research process with secondary sources in order to identify pertinent primary-source citations and relevant periodical titles, an especially important strategy given the intimidating and often highly diffuse range of primary sources. These are common strategies used by history researchers that may not occur to journalism students.

Research Labs

Early in our involvement with this class, we found ourselves nearly overwhelmed by the number of requests for individual student consultations. This class, only one of twenty or more classes supported by each of us during a typical semester, generated a considerable number of consultation requests: during spring semester 2010, Puckett held 21 student consultations (by phone, email, and in person); we held 14 consultations between us in both summer and fall semesters in 2010. These were requests for one-on-one, in-person consultations, as well as a steady stream of email questions, some even before the librarians had visited class to teach the instruction session. Our encouragement for students to contact us for research assistance was perhaps too effective: students often did not seek help at the reference desk even for simple questions like locating known articles or placing interlibrary loan requests. Instead, they would contact the subject librarians for help with all aspects of the research process. This resulted in delays obtaining the needed resources if, for example, students emailed us on a Friday evening and waited for a Monday morning response instead of availing themselves of weekend reference desk or chat reference services.

Generally, for each section of JOUR 4040, we present a one-shot instruction session, the content of which we adjust and improve from semester to semester based on our experiences with previous sections. We have also developed an extensive online course guide (research.library.gsu. edu/jour4040), adding materials and tweaking the format each semester based on what we learn about students' information needs. Professor Teel had requested that we visit the class briefly during the first week of the course to introduce ourselves and explain our roles, in addition to the later instruction session. We did this during the Fall 2010 semester but ruled it out for later semesters, because we found that it generated more individual (and often premature) consultation requests than we could easily handle during the busy teaching season. While the demand for our expertise was encouraging, we found ourselves having to reply too often with variations on "we'll cover all this when we come speak to your class."

We began holding what we call "research labs" for the course during our first semester working together (Summer 2010). This term is possibly an original coinage, or possibly a phrase we unconsciously picked up from another source. If the latter, we have not yet been able to discover its origin in a library instruction context. Research labs are simply scheduled classroom sessions without an agenda: while the primary intent is to consult with the subject librarians, students are free to work on their own, discuss their work with peers, consult their professor, go into the stacks to retrieve items, or indeed not attend at all if they prefer to work independently.

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After a semester or two, we met with the two instructors teaching History of News Media to debrief, check in on how the course was going, and consider strategies going forward. We proposed continuing to develop the research labs, and the instructors were in favor of the idea. They remain enthusiastic about most ideas we propose to improve students' library experience during the class.

Methods

For each lab, we reserved a library classroom and publicized the labs by announcing them in our initial instruction sessions, listing the dates on the course research guide, and by reminder emails sent to the instructors by the Communication Librarian. We scheduled the session dates in consultation with the course instructors, timing them close enough to midsemester due dates that students felt motivated to focus on the project, but far enough ahead of the due date that students had time to follow up research leads generated during the lab and track down needed materials from other libraries if needed. The most successful sessions in terms of attendance and student participation were held during regular class times.

Each lab was largely unstructured, with the two librarians floating and responding to questions as needed. In the initial labs held during Summer 2010, the labs essentially amounted to individual consultations held in the classroom, though the presence of both librarians allowed for easy cross-communication about questions asked. As attendance increased, we continued to use this "floater" model, moving among the students who signaled a need for help. The tone of the sessions was informal, with students able to come and go, going into the stacks to find books or other resources and returning as needed. After several lab sessions, Puckett discovered that many students were intimidated by using microfilm resources, and began regularly incorporating a brief "field trip" downstairs for a hands-on demonstration of the film readers.

One benefit of multiple-student clinics is the ability to reach a larger number of students within a particular time slot. While we still do individual consultations with JOUR 4040 students, both in person and via email, the number of consultation requests has declined as attendance at the labs has increased. As more students attended, attendees also seemed to be discussing their work with their classmates, an unexpected benefit to the students. We had initially thought that one or both librarians might man the instructor computer at the front of class and demonstrate searches for the students to view, but this did not materialize in a significant way. Unlike the more structured classroom model described by Jacklin and

Bordonaro (2008), our lab sessions have been informal and fluid.

During the Summer 2010 session, one section of JOUR 4040 was taught by Professor Johnson. We held two lab sessions, scheduled for the hour prior to class. One difficulty we faced was the sheer distance from the library to their classroom, which was in a building at the other end of campus. This distance contributed to relatively sparse attendance (two students per lab). The low attendance meant that we were able to give intensive individual attention to the students who did attend. These students found the labs useful, and conveyed this to Johnson (personal communication, July 22, 2010), who as a result agreed to give up two class sessions in his Fall 2010 section, describing the labs as "a sound idea" and noting that the students who did attend "raved" about the experience.

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Two sections of JOUR 4040 were taught during the Fall 2010 semester, one each by Johnson and Teel. Though Teel has regularly made his students aware of the research lab dates, only a very small number of his students have attended our labs to date. As noted, Johnson gave up two class sessions during the semester for us to use as research lab sessions. These sessions were markedly better attended (with 12 and 15 students attending). Teel taught the only section of JOUR 4040 offered during the Spring 2011 session. We offered two research lab dates outside of the scheduled class time; only one student attended the first lab, and we canceled the second lab in response to the low level of interest. During the Fall 2011 session, both instructors taught sections of JOUR 4040, with Johnson again offering two class sessions and, in a new development, attending the labs himself. The labs were extremely well attended (22 and 17 students, respectively, with many students attending both labs). All students were from Johnson's class; though, again, we alerted Teel's students about lab dates, we had no attendees from that section. Johnson's course enrollment for the semester was 24 students, meaning that a very high percentage of students attended at least one of the research labs.

In fall 2011 the library began an effort to assess library instruction sessions taught to GSU's Critical Thinking through Writing (CTW) courses. Since History of News Media is a CTW course, we created a Google Form quiz intended as a simple assessment measure to help determine whether students had retained any of the learning objectives taught during the instruction session. We included one open-ended question asking what they had learned by attending a research lab or labs. We asked both instructors to send the quiz to their classes, but after receiving no student responses we asked students to take the quiz during the next research lab. Unfortunately this meant that we only received responses from Johnson's class, but we will make a point of including both sections during future semesters. Seventeen of the 22 students responded to this quiz.

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Analysis

We have debated between ourselves whether research labs are more accurately characterized as reference consultations or instructional sessions, without coming to any real conclusion. They seem to us to occupy a hybrid space between reference and instruction: not exactly instruction, since we are not delivering a lecture nor generally interacting with the group as a whole, and the sessions approximate an extended group reference consultation with the course instructor present. However, Yi (2003) has noted relationships between individual research consultations and the library's information literacy program; since our research labs have evolved from our course-specific instruction, it has been natural for us to see them as part of our instruction efforts. We do record them as instructional activity in our internal statistics reporting (especially as attendance has increased; the first sessions "felt" more like individual reference consultations since only one or two students attended).

Students noted that the lab sessions helped them learn new databases appropriate to the project, how to use WorldCat to locate needed newspapers on microfilm, and other research tactics. Many students commented that working with librarians in the research labs had taught them new techniques for locating primary source materials, which we consider one of the most challenging and necessary learning outcomes for this course. The lab format has also given us space and freedom to respond flexibly to needs that students did not yet have or know they had during the initial instruction session when their research was not yet under way, such as handson demonstrations with microfilm readers.

As noted, an early impetus for experimenting with the drop-in lab format was the heavy number of consultation requests we received in the first semester of our collaboration (Summer 2010); with two sections scheduled for Fall 2010, this was particularly a concern. The lab format has allowed us to provide students with individual, personalized, in-person assistance, while reducing our individual consultation loads. Students have responded enthusiastically to the labs, as evidenced by the increasing attendance; Johnson has repeatedly expressed his satisfaction with our instruction and this model as well.

Conclusions

We had hoped to measure the effectiveness of research labs by comparing the number of student consultation requests in the pre-lab sections of the course with the later sections

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that included research labs, or by comparing Johnson's sections (with labs) to Teel's (without). Ultimately we decided that this comparison would be impractical for a number of reasons: students do not always identify their instructor to us when requesting a consultation, so comparing the consultation rate for the two sections is not always possible; we have not always noted individual course numbers in our consultation tracking software, making it impossible for us to track past consultation data. Additionally, the data we are able to collect for each semester varies considerably depending on how many sections are offered per semester and which faculty members teach in a given semester: some semesters there are two sections taught by one instructor, other semesters each instructor teaches one section, and yet other semesters only one section is offered, and so on. The rate of consultation requests over time may also be affected by other factors such as (we hope) improving the content of our instruction sessions from working with the class over two years. We do believe that the research labs fulfill the function of an individual consultation for many students, and provide us with a way to manage large numbers of requests while still providing needed assistance.

The research lab structure, in combination with a more formal instruction session, has allowed us to respond more effectively and flexibly to the JOUR 4040 students' expressed needs. Additionally, the informal and flexible lab sessions have fostered cross-disciplinary collaboration; the presence of two subject librarians, one representing Communication and one representing History, has permitted us to address individual student needs within a shared space. Additionally, collaboration between the two librarians allowed for spontaneous cross-training in each other's area of expertise. More recently, the presence of a course instructor in the lab has provided an opportunity for even more focused service for the students attending. Indeed, buy-in from the instructor has proved to be a key factor in the success of these lab sessions, which were best attended when scheduled during class time.

Additionally, starting with the Fall 2011 semester, Johnson attended lab sessions and assisted with answering questions. The presence of the course instructor during the sessions has added even more value to the labs, as we are able to immediately refer non-research questions (about topic approval and assignment requirements, for example) to him. It has also heightened a mutual sense of partnership between Johnson and the two librarians, a partnership for which Johnson has frequently expressed his appreciation. Johnson has also repeatedly remarked on the value of these sessions for his students, even prior to attending them himself.

Our model, with two librarians floating among multiple students, has allowed us to give students individual attention while still managing multiple students' needs. We have also noticed that the group consultation format has allowed for discussions and, to an extent,

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peer instruction, among the students themselves as they assist each other while waiting for a librarian's attention. Jastram and Zawistoski (2008) have found that private research consultations with librarians "may protect patrons from feeling that their ignorance is on public display," helping to defuse research anxiety, and we frequently observe that having students share a time and place for focused research can have a similar effect: it demonstrates to them that they are not alone in their struggle with a difficult assignment.

Another key aspect of these sessions has been the role of the librarian as subject expert. While broader instruction is more appropriate for more general questions, many questions related to historical research are individual to and in some cases unique to the student's chosen topic. For example, "How do I find this newspaper?" is a commonly asked question, and one easily turned into a general teaching moment. Showing a student which database to search may not help a student who is struggling to find relevant primary sources for a particular argument, or who is struggling with the complexity of identifying an appropriate argument and appropriate primary sources. The distinction between primary and secondary sources became considerably more challenging when, as was the case in the Fall 2011 semester, Johnson for the first time allowed the students to choose late 20th century topics; Anderson helped a student parse "primary" and "secondary" sources as he struggled to make an original argument using newspaper accounts describing the impact of Woodward and Bernstein's investigative reporting as his primary sources. In such cases, individualized attention is necessary. The informality of our research labs and the presence of both the Communication and History Librarians means that we are able to address both these general and more subject-specific issues in one collegial and informal setting.

The research labs also provide us with valuable input for refining our more formal instruction sessions as we move forward: our lab discussions with students are a useful source of information about what to change (and what not to change) in our initial, more formal instruction session for these courses. The follow-up questions asked during the research labs, several weeks after the instruction session, have helped clarify to us what information students were not retaining well from our instruction: for example, the ability to use WorldCat to locate needed newspapers on microfilm at other libraries. We adjusted our teaching plan to emphasize this and other points more clearly in subsequent semesters.

This information, of course, can also be gained through individual consultations, but the increasingly large numbers of students attending the research labs are a valuable source of such information. As noted, we had originally thought that we would be doing more demonstrations using the instructor terminal and classroom screen, and while we have occasionally done this, we have tended to use the floating model more extensively. These labs have become student-centric, driven by the stated needs of the students who attend them, rather than librarian-centric and driven by what the librarians believe to be the students' needs. At the same time, the volume and kinds of questions that we respond to during these sessions help us to tailor our instruction to anticipate the needs of future students: the research labs have become an informal assessment channel for us as well as a valuable aid to students. Regularly scheduled research labs have also allowed us to manage the substantial demands on our time while still providing personalized assistance to students struggling with a demanding project requiring unfamiliar skills.

References

- Auster, E., Devakos, R., & Meikle, S. (1994). Individualized instruction for undergraduates: Term paper clinic staffed by MLS students. College & Research Libraries, 55(6), 550-561.
- Avery, S., Hahn, J., & Zilic, M. (2008). Beyond consultation: A new model for librarian's office hours. Public Services Quarterly, 4(3), 187–206.
- Bergen, K., & MacAdam, B. (1985). One-to-one: term paper assistance programs. Reference Quarterly, 24(3), 333–340.
- Cardwell, C., Furlong, K., & O'Keeffe, J. (2001). My librarian: Personalized research clinics and the academic library. Research Strategies, 18(2), 97-111. doi:dx.doi.org/10.1016/ S0734-3310(02)00072-1
- Christensen, P. G. (1994). Using English department library liaisons in a term paper clinic: Reviving the scholar/librarian model. Research Strategies, 12(4), 196–208.
- Debreczeny, G. (1985). Coping with numbers: Undergraduates and individualized term paper consultations. Research Strategies, 3(4), 156–163.
- Jacklin, M. L., & Bordonaro, K. (2008). Drop-in clinics for environmental science students. Partnership: The Canadian Journal of Library and Information Practice and Research, 3(2).
- Jastram, I., & Zawistoski, A. G. (2008). Personalizing the library via research consultations. In S. K. Steiner & M. L. Madden (Eds.), The Desk and beyond: Next generation reference services (pp. 14–24). Chicago: Association of College and Research Libraries.

- Meyer, E., Forbes, C., & Bowers, J. (2010). The research center: Creating an environment for interactive research consultations. Reference Services Review, 38(1), 57-70. doi:dx.doi. org/10.1108/00907321011020725
- Rothstein, S. (1989). Point of need/maximum service: An experiment in library instruction. Rothstein on reference, with some help from friends (pp. 253–284). New York: Haworth Press.
- Yi, H. (2003). Individual research consultation service: An important part of an information literacy program. Reference Services Review, 31(4), 342–350. doi:dx.doi. org/10.1108/00907320310505636