



# Teaching at the Desk: Toward a Reference Pedagogy

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James K. Elmborg

**abstract:** This article proposes that we use constructivist learning theory—primarily composition theory—to develop a pedagogy for the reference desk. This approach implies that reference is a form of teaching, and that to maximize their educational effectiveness, academic librarians need to approach reference transactions as academic conferences where teaching and learning take place.

Unlike reference librarians in other kinds of institutions, academic librarians increasingly recognize that their primary role is to participate in the teaching missions of their institutions. This message is emphasized at national and regional conferences and is part of our transition into “information-age” organizations. Mary Reichel’s theme as the Association of College and Research Libraries’ president in 2001–2002 is *ACRL: the Learning Community for Excellence in Academic Libraries*. In explaining this choice, Reichel notes that, “Learning is the heart of our efforts with students to educate them in information literacy and critical thinking abilities.” She describes the importance of these concepts in “this era of amazingly rapid technological changes.”<sup>1</sup> ACRL’s conference theme for 2003 is *Learning to Make a Difference*. Indeed, with the growing campus-wide interest in Information Literacy, connecting the library to student learning is becoming increasingly central to academic librarianship. While it is relatively clear how librarians might develop instructional programs that emphasize teaching and learning for traditional classrooms, it is not so clear where this transition toward teaching leaves reference service. I want to argue in this essay that the reference desk can be a powerful teaching station—more powerful, perhaps, than the classroom. If we want to realize this potential, we will need a new framework for understanding reference work—a pedagogy for the reference desk.

Rather than invent such a pedagogy, it is useful to note that many of our colleagues in the academy have been working on the same challenges. Barbara Fister remarked upon the similar histories shared by library instruction and English composition in her 1992 ACRL presentation. She states, “There is much in common between bibliographic

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instruction and composition; the surprise is that there isn't more dialogue between the two fields." She concludes, "Given such a similar history and position in the academy, it is surprising how little we have joined forces."<sup>2</sup> She notes a number of similar conditions shared by library instruction and composition: our focus on process rather than content, our empathy for the student position, our interdisciplinary nature—all of which make us approach teaching holistically. She argues that librarians should create a dialogue with composition programs so that we might improve our instruction and gain the political advantages such collaboration would provide. I have argued elsewhere for a collaboration with writing programs, suggesting that such a partnership would enrich our teaching and provide much needed coherence in our relationship with the curriculum.<sup>3</sup> Most recently, Celia Rabinowitz has argued in the same vein, that "librarians and composition studies faculty have the potential to form powerful teams. Instead of researching on parallel tracks, we need to construct shared research agendas and to share our results, in print and at conferences."<sup>4</sup> It is a curious fact that very little of this kind of research across boundaries has taken place. This essay is, in part, a test of this approach. I want to propose that the pedagogy most appropriate to the reference desk can be derived directly from composition studies.

## Theory and Background

Teaching has long been considered one of the major goals of reference service. For librarians with faculty status, the teaching required for the pursuit of tenure has been broadly interpreted to include reference work. There has been very little discussion within the profession, however, about how to be an effective teacher at the reference desk, about how one teaches *well* as a reference librarian. Much of the recent literature dealing with reference has suggested that academic librarians begin to see reference

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through the lens of educational psychology. Barbara Doyle-Wilch and Marian I. Miller suggest that we use "schemata theory" to encourage meaningful learning in academic libraries. The authors use a model from cognitive psychology to suggest that, "as humans move from experience to experience, they organize what they have learned from these situ-

ations and build upon this personal knowledge."<sup>5</sup> These authors suggest that reference librarians should connect their reference work to the intellectual schemata that students bring with them to the reference desk. Randall Hensley describes the importance of understanding our students' intellectual processes, suggesting that librarians pay attention to learning styles as a way of creating "learning environments" that suit students. Hensley identifies four primary learning styles derived from the Myers-Briggs styles inventory. These are: "thinker," "feeler," "sensor," and "intuitior." He suggests that librarians should vary their reference styles in response to different patrons and should seek clues throughout transactions to identify and serve their learning styles.<sup>6</sup> Finally, Janette Moody and Elizabeth Carter have proposed that we consider the refer-



ence interview a "Cognitive Interview." They suggest that, "The interpersonal nature of a reference interview that requires the exchange of information . . . calls for an understanding of how humans store and process information."<sup>7</sup> They advise librarians to focus on the processes that trigger memory by designing questions that build from the cognitive contexts of the patrons themselves. The authors imply that when questions are library-centered (Have you looked in Government Documents?) patrons lack the cognitive context to answer. When the questions pertain to the mental processes of the patrons (What have you looked at so far?), then the likelihood of the patron remembering key details is thereby increased.

All five of these writers share a common set of assumptions derived from cognitive psychology. They suggest that to understand the ways humans use information, we need to focus on the internal intellectual processes of our patrons rather than on the organizational, conceptual structures of the library. In speaking of "learning styles," or "schemata" or the "cognitive interview," these authors emphasize the job of reference as working within and helping to develop the framework of understanding already begun by the patron. By approaching reference in this way, librarians acknowledge the importance of patrons' intellectual processes and allow those processes to govern the direction of the reference interview. All five of these writers reflect the shift throughout academia toward "student-centered pedagogies," (also known as constructivist pedagogies), which have emerged from the work of various educational theorists (most notably, Piaget, Vygotsky, and Dewey). The central emphasis in their theories is on the learning processes of the student, not on the subject matter to be taught. In fact, perhaps the essential defining trait of these theorists is an insistence that knowledge is "constructed" by individuals rather than passed on fully-formed from teachers to students.

Catherine Twomey Fosnot argues that, while "constructivism is not a theory of teaching, it suggests taking a radically different approach to instruction from that used in most schools. Teachers who base their practice on constructivism reject the notion that meaning can be passed on to learners via symbols or transmission, that learners can incorporate exact copies of teachers' understanding for their own use, that whole concepts can be broken into discrete subskills, and that concepts can be taught out of context."<sup>8</sup> Moody and Carter, Doyle-Wilch and Miller, and to a lesser extent Hensley, all work out of "cognitive constructivism." Cognitive constructivists emphasize the mental models of the learner and they seek structures and processes within the mind that help us understand how to increase its effectiveness. Both "schemata theory" and the "cognitive interview" work by isolating the intellectual processes of the patron and seeking structures that can lead us toward successful reference practices. In theory, this approach makes good sense. In practice, very few librarians feel comfortable making the kind of sophisticated diagnoses required in a cognitive interview. We rarely know enough about our patrons to know their learning styles or cognitive schemata.

Closely related to cognitive constructivism but different in practice is "social constructivism," a vision of learning that emphasizes the social nature of knowledge formation. To social constructivists, knowledge is developed in communities that have codes known by "insiders." While cognitive constructivism focuses on the mental constructs of the learner's mind, social constructivism emphasizes the social negotiation of meaning in specific discourse communities and treats the student as a relative novice

within a community. Social constructivism has emerged as the dominant learning theory within academic writing programs. Writing programs provide students with their first introduction to college research, and they account for a huge percentage of the traffic at most academic reference desks. They often serve as the primary partner for freshman-level information literacy programming, as well.

Social constructivism allows writing teachers to be mentors and guides. As professionals who understand the discourse of academia, writing teachers and librarians can teach writing and research conventions as part of the process of learning to be a student, something students learn as they become members of a specialized society (such

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as an academic major) within higher education. Libraries and writing programs share an assumption that research and writing are not so much an area of content as a dialogic process to be negotiated, either poorly or well. Learning to write a college essay is very similar to learning to do research in the li-

brary. Both are based on publicly known and socially agreed upon assumptions about how college students should do their intellectual work. Our job is to help students understand these assumptions. The implications of adopting a social constructivist model at the reference desk are profound, both in terms of collaboration with writing programs and as a way of seeing reference as its own particular kind of teaching opportunity.

### **From Theory to Practice**

Muriel Harris' study of the writing conference, *Teaching One-to-One*, provides an interesting and useful model for librarians who want to explore new possibilities for reference. Harris' book deals with the one-to-one teaching done in the writing conference. Her book is particularly relevant as a model for teaching at the reference desk because of the many parallels between teaching one-to-one in a conference and teaching one-to-one at the reference desk. Most importantly, both kinds of teaching depend on engagement with an ongoing process—either the writing process or the research process. In addition, the writing conference (like reference) is “authentic” in that the student has a specific project underway and has specific questions regarding how to proceed. Harris describes writing as a process of “discovery.” She argues that teaching by “telling students to formulate a main idea, develop an outline, and then write a paper has generally been discarded as having little to do with reality.” Instead, most writers “acknowledge the chaos of composing,” as Harris describes it. The job of the writing teacher, and, I would argue, the reference librarian, “is to encourage . . . exploration, to help students move through the process of discovery by talking with them, asking questions, and generally keeping up the momentum of exploration.”<sup>9</sup> Harris proposes that writing teachers re-create their roles based on this new understanding of “authentic” writing. Reference librarians need to re-create their roles, as well, based on what really happens in the messy process of research.



## Controlling the Reference Encounter

Emily Kissane and Daniel J. Mollner correctly note that current reference practices tend to take the research process out of the control of the student. They note that when librarians interview patrons and provide them a list of useful sources, they “deny students full control of their searches and the full measure of insight their questions could give them were they to have gone through that stage themselves or in partnership with the librarian.”<sup>10</sup> Indeed, if the student is to engage in an authentic process of discovery, then being excluded from the search at this key moment is especially unacceptable. In order to practice student-centered pedagogies of any type, it is important to understand that control and direction must come from the individual learner, not from outside sources like the teacher or the librarian. Harris suggests that the “primary goal of a writing conference, like any other instructional method, is to make the student a skilled, knowledgeable practitioner of the field . . . to make the student independent.”<sup>11</sup> Jerome Bruner has noted that if we do not attempt to create self-sufficient learners, “the result of instruction is to create a form of mastery that is contingent upon the perpetual presence of a teacher.”<sup>12</sup>

Perhaps the hardest part of learning to teach is learning to ask questions rather than supply answers. As librarians, we are taught that our job is to answer questions. We must unlearn that definition of our job in order to teach at the reference desk. Instead, we must see our job as helping students to answer their own questions. We must resist taking control of the research questions of our students. In “Teacher Dominance in the Writing Conference,” Carolyn Walker argues that “teacher dominance—often in the form of too much teacher talk—can have ill effects on students.” Walker contends that one of the strongest impediments to successful teaching in conferences is the “deleterious effect of teacher dominance in the writing conference.”<sup>13</sup> Lucy Calkins, well-known writing theorist, describes the problem this way, “If I ask questions and make suggestions so that a student’s text ends up matching what I had in mind, what have I accomplished?” She concludes, “If we can keep one thing in mind . . . it is that we are teaching the writer and not the writing. . . . If the piece of writing gets better but the writer has learned nothing that will help him or her another day on another piece, then the conference was a waste of everybody’s time. It may have even done more harm than good, for such conferences teach students not to trust their own reactions.”<sup>14</sup> As librarians, whenever we answer a student’s question without teaching the student how we answered it or why we answered it as we did, we are essentially taking the question away from the student, thereby creating a dependency in that student that undermines rather than strengthens the learning process.

Donald Graves, another respected writing theorist, describes the writing conference in terms that translate well to the reference desk. In workshops for writing teachers, Graves is often asked what questions to ask in conference with a student working on a paper. He answers this way:

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"I suppose there can be magic in the right question, but questions cannot be transferred from child to child. Questions depend on reading where each child is in his draft, in the context of his development as a writer, and in what he has already said in conference. After I have asked a child one question, every subsequent question depends on what the child has already said. Good questions provide surprises for both child and teacher. The child finds himself speaking about information he hardly knew he possessed. The teacher may have had only an inkling that the child knew the information. Questions are effective because they are timely: the child speaks and the teacher listens, and then is able to ask the type of question that helps the child to maintain control of the piece he is working on."<sup>15</sup>

While Graves' comments describe his work with younger writers, the same principles apply to all writers. We also might debate whether Graves' position here is dramatically different from the types of questioning that librarians conduct in reference interviews. To quibble will be to miss the central purpose of his talk with the student. Throughout the conference, Graves strives to create a dynamic, student-centered conversation. His overriding goal is to keep control of the question with the learner so that the successes (and weaknesses) of the final project accurately reflect the work of the student.

Graves gives us a series of helpful strategies for asking questions during the learning process. These suggestions should not provide a script for the reference librarian, but should, instead, be considered examples of the ways a constructivist educator approaches the learning process with the student. As Calkins notes, "When our questions grow out of our emerging understanding of the writer, they are alive and fresh and powerful. When the same questions grow only out of a chapter on good questions to ask in writing conferences, they quickly become canned and mechanical."<sup>16</sup> Graves posits five types of questions that are useful in helping learners. At the risk of belaboring the point, I must emphasize that these questions are not scripted and can not be scripted. They are useful for their function, for the way they can help students move intellectually through the challenge of thinking through a problem.

1. "Opening questions" are informal and designed to get things started. They should not, however, be dismissed as frivolous. They allow us to make connections with students and gauge their confidence and competence. They can be as simple as, "tell me what you're writing about."
2. "Following questions" are useful for allowing students to lead the way in a discussion. Often students think they are "stuck" in the research process. Once they can begin a dialogue, it becomes clear to them where their research is headed. "Following questions" encourage students to talk through what they know and to find language to express it.
3. "Basic structure questions" are questions designed to focus a topic, examine its relationship to other similar topics, or to see it as part of a whole. These kinds of questions encourage students to see the contexts and relationships that inform their topics.
4. "Process questions" are designed to make students aware of their method. "What have you done so far?" and "What will you do next?" are process questions of a simple sort. They help both the researcher and the librarian determine where to start work today.
5. Questions that cause a temporary loss of control are used judiciously to shake up a complacent researcher, one who is, perhaps, over-confident in his or her research.



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This question should not be posed meanly or maliciously. It should be a genuine effort to ask a hard question of a student who can benefit from the challenge.<sup>17</sup>

In all these questions, the key is to be aware of the student's research process and to use questions to help the student take control of the project. All of these types of questions can be asked just as effectively at the reference desk. An important signal that should tell us whether control is being transferred lies in the student's ability to talk about the process. Harris notes: "Another form of help that teachers and tutors can provide is offering students the opportunity to talk about writing—to articulate problems and to explain what they are doing. This ability to talk about writing is important to students' progress as writers. Without it, they are too often unable to proceed, unable to represent to themselves the problems to be solved. . . . The teachers' task here is to not only help identify actual deficiencies in papers but also to help students acquire a vocabulary that permits them to talk about their writing."<sup>18</sup> Indeed, if we accept the central notion that knowledge and meaning get negotiated in social contexts among members of a discourse community, then our responsibility within that community is to participate in discourse, to engage our students with meaningful talk about their research, to help them develop a language of inquiry that will allow them to articulate to themselves how to proceed with present and future research challenges.

### Teachable Moments

The phrase "teachable moment" has become a cliché in academia, but clichés capture important truths. Roughly defined, a teachable moment is one in which the student arrives at a position where he or she is open to teaching. One of the implicit problems with our traditional educational models is that they proceed on the assumption that dispensing a steady dose of knowledge daily will eventually educate a student. If we see education as a "self-regulatory process of struggling with the conflict between existing personal models of the world

and discrepant new insights," then we also recognize that, somewhere in that process, "discrepant new insights" will become incompatible with the student's "existing personal model of the world."<sup>19</sup> The student must then evaluate the discrepancies and "construct" a new or revised model. That event is im-

portant to constructivist theory. The student then begins an earnest search for new directions, and is, therefore, "teachable." The moment need not be dramatic or emotional. In academic contexts, it is more often entirely abstract and intellectual. When a student comes to the reference desk with a genuine question, the librarian has the opportunity to participate in that moment and help the student re-construct a new, viable "model of the world." This is the "teachable moment," and every librarian should be educated to recognize and engage that moment when it comes.

One way of identifying teachable moments is to be aware of the student's "Zone of Proximal Development." First proposed by Lev Vygotsky, the concept is actually a part

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of the overall learning process. The Zone of Proximal Development is “the distance between the child’s actual developmental level as determined by independent problem solving and the child’s level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers.”<sup>20</sup> This theory suggests that, while two students might have very similar performance levels, one might be capable of much more than the other with just a little help. That help becomes a bridge to eventual independence. In other words, one student may be on the verge of a breakthrough to a much more sophisticated level of understanding, while the other has no such growth spurt on the horizon. This concept exists across learning groups and fields of expertise. It is the role of the teacher to identify where the student is in his or her development, to identify what concepts are in the Zone of Proximal Development, and then to provide guidance and collaboration in ways the student can internalize. To do this effectively, the librarian needs to make some very sophisticated decisions very quickly. Exactly what is the level of expertise of this learner? What kinds of potentialities are represented in his or her questioning? How can we best approach the problem in a way that will be accessible to the next available stage in this learner’s development? As Vygotsky notes, “if a child is having difficulty with a problem in arithmetic and the teacher solves it on the blackboard, the child may grasp the solution in an instant. But if the teacher were to solve the problem in higher mathematics, the child would not be able to understand the solution no matter how many times she imitated it.”<sup>21</sup>

Reference librarians too often answer questions by responding at their own level of expertise. The answers may be technically correct, but they seem like “higher mathematics” to students. In the constructivist view of the learning process, there is no universally “best” solution to a problem: the best solution is one that is accessible to the student’s Zone of Proximal Development. Our longstanding definition of the reference interview encourages us to hold the learner at a level of dependency in the Proximal Zone. The librarian determines the needs of the user through the interview and performs the actual search as a service. The student is excluded from the many judgments and decisions the librarian makes in determining what is relevant and useful.

This process emphasizes the librarian’s expertise but is very unhealthy for the learner, who needs to participate in every decision in order to learn to be independent. Unfortunately, many librarians today still consider their knowledge the source of their professional power. Consider the following statement by Marcella Genz, describing her fears about the future of the profession: “When the most important element of the work is to teach the public to serve itself, then any knowledge base that reference librarianship might have is naturally diluted. When the authority of a profession depends on knowledge and competence and that knowledge and competence can easily be imparted to anyone, then authority is expropriated.”<sup>22</sup> Such a statement is disturbing to anyone who cares about the role of the librarian as educator, but honesty compels us to acknowledge that many librarians seem to hold this attitude. It is a natural outgrowth of the reference interview as our guiding professional model. In fact, unless we impart our knowledge and competence to our students, we will never be seen as teachers. In educational institutions, the way to be seen as a professional is to teach.





## Conclusion

If reference is to remain a significant library service, as I believe it absolutely must, reference librarians need to continue to work on ways to become full partners in the educational enterprise. Applying constructivist models to work at the academic reference desk would be a good start. Especially, we need to describe in the scholarly literature what really happens in the messy process of research, rather than what we think “should” happen. Reliance on idealized definitions of reference and research continues to be a particular obstacle to this task. We also need to develop a vocabulary for discussing the reference desk as a teaching activity. I have posited the language of writing instructors as a model. This form of talk has distinct advantages. Writing programs often serve as the primary liaisons for library instructional programs. Having a shared language allows writing teachers and librarians to converse across institutional boundaries without cumbersome translation of terminology. Whether we use that model, or another, it is imperative that we develop theoretical underpinnings for the work being done at the reference desk.

Ironically, the reference desk is perhaps the most natural constructivist teaching environment in our schools. As a staging area from which to launch into the multi-voiced, multi-genred array of resources that can be used to create knowledge, the library has no equal. When viewed this way, the reference desk can be seen as the most dynamic teaching position in the academy. Librarians can make subtle shifts in practice that can take advantage of the strengths

of this environment. For some librarians, the subtle shifts will entail significant professional re-orientation. Librarians need to become coaches and collaborators at the reference desk, people willing to teach students to “talk the talk” of research. We need to avoid

making judgments about “good questions” and “bad questions” and understand that all questions (if they are genuine) represent natural stages in a learner’s life. Above all, we need to oppose vigorously the notion that power and professionalism depend on maintaining special skills that librarians withhold from patrons or students. If we can make these changes, the reference desk is poised to become the most powerful teaching position in the academy.

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*The author is an assistant professor in the School of Library and Information Science at the University of Iowa; he may be contacted via e-mail at: james-elmborg@uiowa.edu.*

## Notes

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