Messy Contexts: 
The Required Research Methods Course as a Scene of Rhetorical Practice

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Required Research Courses and Technologies—What a Mess!

In the spring of 2005, I conducted a pilot survey examining the required methods course in graduate programs in Composition, Rhetoric, and Technical Communication (TC) in which 68 professors from across the United States answered questions about their experience with this course. The responses were evenly divided between MA and PhD granting institutions, ranging from straight Composition to Composition and Technical Communication programs. Ninety percent of the respondents offered a research methods overview course, and 75% of those who participated noted that this course was required. Less then twenty percent of the respondents offered any other research courses in their programs; for the majority of graduate students in Composition or TC, the overview course in research methods was the only course focusing on methods that these students would take. Most participants (85%) noted that the primary goal for the course was to provide graduate students with a knowledge of and familiarity with the research methods used in our field. A slightly lower percentage of the respondents, 75%, noted that another goal for the course included experience reading and assessing formal research in our field. Other notable goals included an opportunity to create a literature review (57%) and an opportunity to gain experience in the conduct of research within the confines of a course (54%).

The required research methods course, it would seem, must be "vast and contain multitudes." It should prepare students to know and choose methods wisely; to design, conduct, and report on research; to read and assess existing research critically; to conduct a
literature review that will precede and inform any research completed/to be completed. The graduate student who has completed such a course should feel comfortable in the library, in the field, and anywhere in between; she should also feel confident, in any context, determining a research problem/question, selecting and employing various methods, analyzing data gathered, and writing up the results.

Obviously, I'm over-generalizing, but to make a point: With a few notable exceptions, the required research methods overview course is often the only opportunity, outside a thesis or dissertation, that a graduate student has to learn, criticize, or apply research methods. Because of the increasingly complex subject matters and sites we deal with in our research, students need to learn—early in their graduate careers—how to situate themselves in relationship to the sites (often technological) that they study, as well as how to select methods, how to apply them, and how to analyze the data they gather—something it appears only slightly over half of our required research methods classes are doing, preferring instead to concentrate on learning about methods and learning how to critique them.

Because this collection focuses on the conduct research in the age of technology, we must wonder whether the old ways of viewing, teaching, and learning research methods are sufficient. Has our research situation changed significantly, and with it, the research methods necessary to study digital writing? How about instruction in research methods: Should it change along with the digital contexts we now study? What should be the core of the one required research methods course that MA and PhD students take? It is my feeling that not enough attention is paid to the actual practice of conducting empirical research, especially in the required course, that when attention is paid, it is often done so in a formulaic, container-like fashion. In this chapter, I will argue that these typically linear, rigid methods aren't appropriate for conducting research in the newly technologized sites of research in which writing is being done/studied now. The required methods class should be the location of learning not just about research methods, or how to critique them, but how to apply them rhetorically in increasingly
complex and intricate situations. I end by suggesting that we adopt a new metaphor for the 
conduct of research, both in the overview course and outside, which might better prepare us to 
conduct and critique research in the digital age.

Research conducted today—particularly research involving complex subjects (and 
subjectivities) dealing with technology—demands a more thorough, comprehensive, and yet 
localized understanding and application of research methods. Technological contexts are not 
easily categorized—that is, they involve different materialities, different subjectivities, different 
situations. So, too, the methods we use should be less static, less rigid, and more malleable.

John Law, in his book *After Method: Mess in Social Science Research*, articulates the 
complexity of research sites: "events and processes are not simply complex in the sense that 
they are technically difficult to grasp (though this is certainly often the case). Rather, they are 
also complex because they necessarily exceed our capacity to know them" (6, author's 
emphasis). We can easily see how technology compounds the complexity of a situation 
involving writing, an already complex phenomenon. Early research involving technology and 
writing first recognized this complexity; initially, computers were seen as a boon to writers, 
allowing them to revise as they composed on the fly and collaborate with those next to them in a 
lab or classroom setting (see, for instance, Selfe and Wahlstrom; Halpern and Ligget; Schwartz; 
Bridwell, Nancarrow, and Ross; Rodrigues and Rodrigues); later, as chat programs allowed for 
on-the-fly collaboration and the Internet brought even more people together, early scholars 
heralded an era of egalitarian discourse (Cooper and Selfe). Soon, however, scholars began to 
question the egalitarian nature of technologized discourse, looking at race, gender, power, and 
other materialities in computers and writing (see, for instance, Kolko; Monroe; Rickly; Wolfe; 
Sullivan; Hawisher and Selfe). We are beginning to acknowledge that the realities of learning, 
teaching, administering, keeping up, and even simply using the technology in writing scenarios 
has grown increasingly complex.
For example, consider a relatively “simple” online MOO discussion that occurs on a regular basis in the online MA and PhD Technical Communication and Rhetoric courses at Texas Tech University; several studies have examined MOO discussions\(^2\), so this is a site that has been researched frequently. Yet the interactions, the technology, the material conditions, the subjectivities are all intricately interacting, and constantly in flux. In the TTU MOO discussion, the instructor often “leads” the discussion via an agenda, perhaps one that has been webbed, shown via a "projector" in the right hand screen, or pasted into the discussion itself. The students don’t know that she is also operating from MS Word notes written well in advance as she cuts and pastes questions, thoughts, and points she wants to make into the discussion. She seems prepared, quick, and efficient, yet she is constantly questioning herself: How directive can/should she be? What does this act do to the “timing” of the class discussion? How will she handle tangents that inevitably arise?

Consider also: the instructor doesn’t know that, during the discussion, one of the ten students (who is also a working technical writer) is also multi-tasking, working on a job-related deadline—one that relates to the discussion, so the student sprinkles references to it as he participates on the MOO. The student is seen by the instructor as intelligently able to apply the theoretical concepts under discussion to his real world situation, but in fact, he is missing most of what is being discussed because of this work. The discussion is saved and posted later that evening; yet is reading a transcript the same as participating? I could continue with this scenario for the rest of this chapter, but the point is that even during this familiar, regularly scheduled, seemingly transparent scholarly graduate discussion, the complexities are such that we could never hope to know exactly what is going on: it exceeds our capacity to know, in the same way that traditional face-to-face (f2f) oral discussions have done for decades—only more so.

The traditional classroom can be complex as well, as anyone who has observed teachers will know. Robert Brooke’s "underlife" is alive and well in almost every classroom context. How do we begin to capture this complexity as we research these sites? What lenses
or approaches are best? Are traditional research methods sufficient to capture the complexity when studying writing/writing scenarios? What happens when we add technology to the mix—are traditional methods (or our understanding and/or application of them) enough, or do we need new ones? Before we can answer these questions, we need to revisit how methods are taught and understood in most research methods courses.

**Static Methods**

In my pilot survey, I asked the participants which books have been used in the required research methods course. I supplied a list of nine common titles, and I also listed "coursepack" and "other." Over 60% of instructors surveyed required a coursepack, which dwarfed any other coherent, commonly used text. The three most common texts (ranging from 32-35% use) were, in descending order, Kirsch and Sullivan’s 1992 collection *Methods and Methodology in Composition Research*; Lauer and Asher's 1988 text *Composition Research: Empirical Designs*; and MacNealy’s 1999 text *Strategies for Empirical Research in Writing*. Texts listed as "other" ranged from social science or educational research methods texts, to texts on conducting library research.

The first thing one might notice about the most commonly used texts is that none of them were published in this century, and only one within the last ten years. That's not to say that these texts have outlived their usefulness—far from it—but certainly the contexts we're studying have changed, in some cases significantly (for instance, the MOO discussion I describe above wasn't a choice—even a reality—when the first two texts were published). Only two of the books listed (both in my list and in the "other" category as noted by participants) are specifically directed at Composition/Rhetoric/TC and have a publication date of 2000 or more recently: Johanek's *Composing Research: A Contextualist Paradigm for Rhetoric and Composition* (published in 2000) and Gurak and Lay's *Research in Technical Communication* (published in 2002). What allows for these top three texts to remain so popular, particularly the
ones published in the late '80's/early 90's? The first answer might simply be that the instructors teaching the research methods course now first became acquainted with the texts as graduate students in a similar class. The books are known, they are familiar, and they are proven entities—after all, the former grad student is now a professor teaching her own graduate students.

Another answer might be that the books are simply the best ones for the required research class, given the audience and subject matter. The earlier publications may well still be the best overview for a broader, Comp/Rhet/TC audience. The survey bears this hypothesis out somewhat. I asked participants to rank how useful these books had been on a scale from 1-3 (with one being most useful, three being least useful), and all three of the most commonly-used books were seen as at least somewhat helpful (with scores ranging from 2.0 to 2.2). The only artifacts to score better were the coursepack (1.5) and the "other" book (selected by the instructor), which was usually not related to comp/rhet/TC (1.6).

Are the methods as presented in these texts sufficient grounding for researching in a digital age? Sullivan and Porter ("On Theory") note that the predominant view in publication is one "...that sees methodology as a static and conventional set of strategies (even when 'socially constructed') for observing practices and thereby generating 'knowledge' about practice" (220). Fleckenstein, Spinuzzi, Rickly and Papper also criticize the way methods are perceived in writing studies, noting that the metaphor for their representation is "...predicated on a container image, one that locks research activities into hierarchical, step-by-step, disciplinary actions and erases the situatedness of empirical knowledge. In so doing, it creates out of writing—the object of study—a phenomenon that is similarly hierarchical and decontextualized" (2). Metaphors are vital to our ability to understand complex phenomena, yet they don't always portray things accurately, something we need to remember—yet they almost always lead to some form of understanding or meaning. Baake discusses how metaphors help create meaning in scientific discourse. Some metaphors, he maintains, not only prove to make understanding ineffective,
but actually limit understanding. Yet metaphors are vital in science, because without them, not all of the various associations would be "heard" by other scientists. Metaphors "…generate harmonics that transport meaning across terms. These force the scientists to either modify or reject the original theory so as to accommodate the harmonics" (218). These metaphorical associations, or harmonics, allow for theory to develop. Dissonance, or associations that are held differently, can be part of the harmonics—yet if the dissonance becomes paramount, the metaphor breaks down and meaning becomes more and more incoherent. Let's look for a moment at the metaphor of research in composition/rhetoric/TC.

The research process can be understood metaphorically as well. Often portrayed as a series of steps, research is conducted according to rules, into which specifics can be inserted: epistemology, methodology, research question, research design, and methods. Similarly, each of the particular components has an accepted procedure or definition, often located in a particular discipline (Ethnography as methodology comes from Cultural Anthropology, for example, and students who engage in Ethnographic research must study texts from Anthropology to learn to conduct Ethnography in an appropriate fashion). Each component must be addressed logically and linearly so that the research might be seen as rigorous. Generally, graduate students are told to identify a problem; from this problem, to generate a research question. The research question should suggest methods/methodology as most appropriate to address/answer the question. The various methods will dictate tools or techniques. And guiding all of this is the researcher's undergirding epistemology. The process sounds simple enough: linear, logical, and neat.

Or so it would appear.

These "containers" might be a bit more permeable than we first recognized, and each individual component a bit more fluid. Let us begin with Sandra Harding’s distinction between method, methodology, and epistemology. A method is a specific tool or array of tools for collecting and analyzing data—a “technique for (or way of proceeding in) gathering of evidence"
A methodology is “a theory and analysis of how research does or should proceed” (3). And an epistemology is a theory of knowledge that answers questions about “who can be a ‘knower’…, what tests beliefs must pass in order to be legitimated knowledge…, what kinds of things can be knowledge…, and so forth” (3). These distinctions are important as we look at individual research situation and note how they are applied—but it is equally important to acknowledge that, even defined as distinctly as Harding has distinguished these terms, they nonetheless do NOT allow for neat, orderly, logical containment. Consider, for instance, Ethnography. Earlier, I cited it as a methodology, or a theory/belief about the way that research should proceed (using Harding's distinction) which originated from Cultural Anthropology as researchers devised a systematic, rigorous means of studying indigenous cultures.

Ethnography as a methodology can employ a variety of methods, or techniques for gathering data, such as participant observation, interviews, surveys, and so forth. Yet it can also be a paradigm, a way of knowing—social construction theory is based, in part, on the paradigm of understanding cultures through their social interaction, including communication. Contextual Inquiry, a methodology used in the workplace, employs "ethnographic techniques" or a "focused ethnography" to determine how or why a breakdown occurs in a particular situation, shifting it from methodology to method. How can Ethnography be paradigm/epistemology, methodology, and method?

Fleckenstein et al. refer to these fluid options as "slippage: elements shifting up and down the hierarchy, up and down through the boxes" (9). Law refers to them as "method assemblages":

More specifically, method assemblage becomes the crafting or bundling of relations or hinterland into three parts: (a) whatever is in-here or present; (b) whatever is absent but is also manifest in its absence; and (c) whatever is absent but is Other because, while it is necessary to presence, it is not or cannot be made manifest. (84)
Law believes that paradigms, the most theoretical and complex part of the hierarchical research schema (what Harding would refer to as epistemology), are embedded in craft or skill, the most concrete level. These method assemblages are then "entangled rather than constructed" (42) and each component contains parts of itself, allowing us to see research not as an ordered, neat, linear procedure, but one that is integrated, messy, and non-hierarchical. In a sense, they are like atoms moving and creating energy on a table top that looks and feels solid. All sensory information would dictate that the table is not moving, not producing energy; yet atomic research has been able to break out of that container-like, metaphorlic thinking to see the table in light of the smallest parts that constitute it.

Like the image of the atomic energy given off by atoms moving at a microscopic level on a seemingly static, solid table, so our methods and our research projects are in constant movement when we apply them to localized contexts. Many of us learned methods as containers; I would like to see us re-envision these methods no longer in terms of static containers, but within ever-evolving contexts in which rhetorical applications of method are necessary.

Dynamic Technologies

Just as metaphors surrounding research can be problematic or enlightening, so, too, the metaphors that influence our understanding of technology can determine what we see. To understand the complexity inherent in technological contexts, we might first acknowledge how we perceive technological sites, looking at them from a variety of perspectives: material, intellectual, historical, social, political, and so forth. Our relationship with/to these sites must be articulated as well. Andrew Feenberg, for example, sees humans and their technologies as existing in a variety of relationships ranging from instrumentalism (systems and techniques as mere tools) to technological determinism (technology having a life of its own). Within an instrumental world view, we retain human agency, but miss opportunities to design, re-design,
etc. technology when technology is seen as static, finished in relation to society. Within a technological determinist world view, we lose agency, as system evolution is pre-determined. What Feenberg argues for is "deep democratization" of systems, or a balance between the neutral instrumentalist and the agency-filled determinist: a user-centered stance toward the ideological charged world of technology. A user-centered stance, however, can be difficult to articulate, in part because technology and users are constantly changing, evolving, shifting. Identifying and communicating our relationship with complex, mutable technologies takes practice, yet it is a necessary component of the ways we study these contexts that have, do, and will continue to impact our teaching, our learning, our writing, and our knowing. As a starting place, then, acknowledging our perceptions, our relationships, and our understanding of these technological contexts helps use to be aware of the multi-faceted nature of the site we are to about to examine. By doing so, we engage what Baake calls "harmonics" of understanding, which help us then select and apply the best methods for understanding the situation.

Technology does not exist in a vacuum, but in fact mirrors and even helps construct the reality around it; neither, then, should the methods we choose to study it. Law maintains "...methods, their rules, and even more methods' practices, not only describe but also help to produce the reality that they understand" (5). As researchers, we must be perpetually aware that we are constructing a reality as we articulate our understanding of technological contexts, as well as select and apply methods, analyze data, and represent results. In describing the aims of critical research practices, Patricia Sullivan and James Porter (Opening Spaces) see methodology as "heuristic", and note that "research ought to situate itself ethically and politically, especially vis-à-vis participants and aims" (109). The authors note that research practices in which method becomes primary often miss important contextual aspects. "Methodology," according to Sullivan and Porter, "that is portrayed as a set of immutable principles, rather than as heuristic guidelines, masks the impact of the situation—of the practice—on the study in ways that could unconsciously reinscribe theory’s dominance over
Drawing on a range of postmodern and feminist theories and approaches, they advocate methodology as critical practice, or *praxis*, in which the notion of an "objective" researcher is challenged, methodological strategies are situated and flexible, adapting practices to meet the needs of particular situations, and in which the researcher is self-reflexive and critical. Sullivan and Porter see *praxis* as "a kind of thinking that does not start with theoretical knowledge or abstract models, which are then applied to situations, but that begins with immersion in local situations, and then uses epistemic theory as heuristic rather than as explanatory or determining" (26). Both procedural knowledge and situated action, *praxis* suggests an investment in and understanding of local, contextualized situations. One of the few to acknowledge technological change and how it might impact research practices, the authors note that methodology as *praxis* must be "sensitive to the rhetorical situatedness of participants and technologies and that recognize themselves as a form of political and ethical action" (ix). However, in their desire to have us examine critically our contexts and practices, Sullivan and Porter themselves momentarily forget to note the shifting nature of technology and our relation to it when they declare "once oppression is identified, there can be only one ethical stance toward it: Oppose it" (122). If oppression is situated, then a particular computer interface might be seen as "oppressive" by some, and it may be liberating for others—and without acknowledging a static hierarchy of good/bad, we must be wary of labeling our contexts in that manner. Law concurs, contending that we will need to "unmake many of our methodological habits, including: the desire for certainty; the expectation that we can usually arrive at more or less stable conclusions about the way things really are; the belief that as [researchers] we have special insights that allow us to see further than others into certain parts of social reality; and the expectations of generality that are wrapped up in what is often called 'universalism'" (9).

Laura Gurak and Christine Silker also acknowledge the problematic nature of studying the complicated scenarios involving technology, noting that "traditional research questions such as the selection of an appropriate method, the need to obtain permission from subjects, and
issues of private versus public information become blurred in the cyberspace research site” (230-1). The context we choose to study has a profound influence on our research practices: our selection, application, analysis, and representation of methods, and our choice of methodology. And technology complicates these contexts. But are traditionally-conceptualized research questions and methods (i.e., as portrayed hierarchically and linearly) sufficient to capture the intricacies of online/technology-related contexts? Traditional academic methods of inquiry, Law maintains, don't capture the "mess, the confusion, the relative disorder" of the contexts we study, something we should try to do if we are to fairly represent these contexts. However, the acknowledgment of "mess" puts the researcher in a bind: if we do try to capture the mess, our research may appear “messy” and thus it is seen as poorly done. How can we apply the methods we know to understand some of the realities we might be missing in the messy contexts we study? Law's answer is deceptively simple:

If the world is complex and messy, then at least some of the time we’re going to have to give up on simplicities….if we want to think about the messes of reality at all then we're going to have to teach ourselves to think, to practice, to relate, and to know in new ways. We will need to teach ourselves to know some of the realities of the world using methods unusual to or unknown in social science. (2)

While I agree in part with Law's assertion, I would suggest that it is not only "teaching ourselves" new or unusual/re-articulated methods that will help us see, know, and represent the mess; in addition, we must revise or re-see how these methods might be adaptively applied in specific contexts, particularly technological contexts. Adapting things to specific contexts falls squarely in the realm of rhetoric, so I’d like to argue that we need to see them rhetorically. I will begin my discussion of rhetoric and research—that is, by arguing for a rhetorical application of research—by once more examining Sullivan and Porter's call for a rhetorical methodology, and then situating practice in rhetorical context.
Rhetorical Research Revisited

If technology has changed one thing, it’s the site of research, or our vision of what counts as a coherent site upon which research can be done. Previously, these sites were physical spaces (labs, classrooms, companies, texts); now, the site of research can be as simple as a community of mutual interest spread out over the globe. Most of our methodologies/methods were designed to observe and explain the former kind of site; can they be adapted successfully to the latter, or do we need a new sense of methodology? In Opening Spaces, Sullivan and Porter posit a "'rhetorical methodology' based on viewing computer writing as a situated practice" (9). They describe their position as rhetorical, involving local/contingent knowledge grounded in local, situated practices, and they liken the methodology used to study these contexts to rhetorical invention (10). Rhetoric, for them, encompasses "three elements: ideology (assumptions about what human relations should be and about how people should use symbol systems); practice (how people actually do constitute their relations through regularized symbolic or discursive activity); and method (tactics, procedures, heuristics, or tools that people use for inquiry)" (10). Like those researchers advocating action research (see, for example, Stringer, 1999), Sullivan and Porter see methodology as "an intervening social action and a participation in human events" (13). While the sentiments are admirable, they tend to limit how pervasively this "critical methodology" can be practiced; as noted earlier, contexts, situations, and participants change, and while ethics and social action should ultimately should be part of our self-reflexive examination of a research situation, social action isn't always—nor should it be—the final goal of research.

I would like to begin with their idea, though, of linking research and rhetoric. These authors were among the first to associate rhetoric with research in an admirable fashion, and I would like to recast—to update, if you will—their position. First, I will situate the terminology used in this recasting in Harding's definitions, though any attempt to define terms brings to mind the limiting "container" metaphor. As noted previously, a methodology—a case study, for
instance, a methodology which comes to us from cognitive science and is in that discipline practiced as a theory of how research should proceed–can also be applied as means of gathering evidence within another methodology, used as a method, or a means of gathering evidence as a part of a larger methodology such as Ethnography, for instance, or a Contextual Inquiry. According to Harding’s definition, then, a case study can be both a method (a tool used in a larger ethnographic examination or a contextual inquiry) and a methodology (a theory and analysis of how research should proceed, such as it is used in cognitive science).

The slippage doesn’t end there. The way any of these manifestations of case study is applied and analyzed will depend upon the researcher’s epistemological stance. For instance, if the researcher defines her epistemology as social construction, in which meaning is socially created, her research will look and feel very different from someone who aligns herself with Identity Theory, in which each person (and her subsequent behavior) is influenced by the collection of identities associated with the various roles this person occupies. Law’s concept of method assemblages makes increasing sense in increasingly complex scenarios. By locating the argument for rhetorical research in a permeable, situated definition, we are able to access the flexibility needed to study chaotic, changing environments. We can deal with slippage.

Rhetoric is also a slippery term, especially when we relate it to methods or methodologies. In On Rhetoric, Aristotle defines rhetoric as techne, or "a body of knowledge used for a particular end." Techne deals with concrete ideas and circumstances (as opposed to dialectic, which deals with logical order and deals with general/philosophical questions), thus it lends itself to contextual study. The goals of rhetoric are to advance the cause of justice and truth, and to persuade. Aristotle maintained that "persuasion is clearly a sort of demonstration, since we are most fully persuaded when we consider a thing to have been demonstrated" (book 1, chapter 1). If rhetoric is a demonstration that persuades us, we can begin to see how research might be seen as rhetorically persuasive, given how research is assessed: Is the question appropriate, given the problem? If so, that question was persuasive. Does the method
applied actually answer the question? If so, that method was persuasive. Are we convinced that the method was applied appropriately, with rigor, given the context, the question, the purpose, and constraints? If so, application was persuasive. Is the way of proceeding—the methodology—appropriate for the question, context, and methods? If so, that methodology was persuasive. Is the analysis thorough, accurate, and epistemologically consistent? If so, it was persuasive. Is the representation of the research accurate, effective, well-wrought, and appropriate? If so, it was persuasive. Therefore, if we are persuaded that all aspects of the research have been conducted, analyzed, and presented effectively for the specific question, context, and audience, the research is rhetorically sound.

Carl Herndl analyzes the rhetorical nature of the ethnography that Stephen Doheny-Farina published, noting the amount of "rhetorical work" that goes into "legitimizing" the representation "through socially maintained conventions." He notes that other studies in other contexts "might organize their descriptions around different topoi but they will be no less embedded in the discourse of their research community" (326). The representation of research has always been somewhat formulaic (consider, for instance, the IMRAD formula—Introduction, Methods, Results, And Discussion—for publishing in the sciences/social sciences). An author/researcher has some choices, depending on where she would like to publish her data, but she must be aware of the rhetorical situation surrounding publication. If the analysis and representation of a study must be portrayed according to the conventions of a particular discourse community—a specific rhetorical situation—when and how should the selection of methods and their application be affected? To answer that question, we need to re-adjust our view, seeing the rhetorical situation as encompassing the conduct of research as well as the analysis and representation.

A larger perspective might be to treat rhetoric as "the faculty of observing in any given case the available means of persuasion" as Aristotle ultimately defined it in his On Rhetoric (book 1, chapter 1). Both rhetoric and dialectic as categorized as organum, or tools, which have
no subject matter of their own, yet can be applied to other subjects. If we look back to Harding's definition of method, we note that "tool" can be seen as "method" or part of a method. And if we are able to apply these "tools" to other subjects, it makes sense that some slippage may occur—thus what once was a "mere" tool may actually slip into art or techne, creating a body of productive knowledge which can be used for a particular end: to understand something better, to answer a question, and so forth. Methods, methodologies, and epistemologies are all forms of techne that deal with particular, concrete situations and circumstances. Techne is ultimately contextual, and may be re-conceived in any context so that the situation may be persuasive, just as methods, methodologies, and epistemologies may shift according to context.

"It is clear, further, that [rhetoric's] function is not simply to succeed in persuading," Aristotle notes, "but rather to discover the means of coming as near such success as the circumstances of each particular case allow" (book 1, chapter 1). So, too, is it with research. A researcher must be intimately familiar with the site, or context, of research, with persuasion as a goal inherent in that familiarity. Given a problematic situation, a researcher must determine a question (or series of questions), then consider the best possible way to answer that question. Data collection must be thought through, designed carefully (considering the context and participants) and then systematically and appropriately applied. Data that has been collected must be analyzed, then examined in light of the original question(s). Finally, findings must be presented in a manner that the researcher's community will find legitimate. Ultimately, then, the goal of research is to persuade an audience that the initial question has been answered sufficiently—and thus research associated with a particular context becomes the available means, the tool employed to create "a body of knowledge for a particular end." And while I have articulated a process above as somewhat linear and inflexible, I argue that knowing the context as a means of persuasion requires the researcher to consider not just a step-by-step process, but the entire rhetorical situation, context and persuasion: the method assemblage.
I would like to note that research that is located and conducted rhetorically doesn't equate to "sloppy" research; rather, it is an attempt to acknowledge and account for the individual, changing complexities of research sites—particularly research sites that involve technology. And research that is conducted rhetorically can have structure, rigor, and validity. Most traditional methods have standard operating procedures that are associated with the discipline and/or methodological tradition they come from. For instance, quasi-experimental methodology dictates that a site of study must identify controls, independent, and dependent variables; the groups must be as uniform as possible; and so forth. In traditional Ethnographic research, the researcher must spend time identifying her background, her experiences, her belief system, and so forth as a means of negotiating researcher bias. These SOPs are valuable—they offer us the opportunity for "rigor," reliability, and validity. While uniform application of these methods can theoretically lend itself toward replicability, in most technological sites, the situation is so localized and complex that replication in the strictest sense is impossible because of inability to control variables. Acknowledging the changing, complex nature of these contexts means applying methods appropriate for the context and question, rather than for the methodological tradition. The rigor associated with these methods becomes rhetorical and contextual; that is, it draws on activities that are related to the application of the method, to the verification of results, or the overlay of data/perspective. Rather than rely on methodological rigor in the application, analysis, and representation of research, the rhetorical nature of the research can provide new forms of rigor, which make the research more persuasive. Following is a list of eight procedures drawn primarily from qualitative methods that John Creswell advocates for use in qualitative research to verify results and add rigor. He encourages researchers to include at least two of these as a means of rigor:

**Prolonged engagement and persistent observation:** Building trust with participants, learning culture, and checking for misinformation with participants.

**Triangulation:** Using multiple methods, sources, investigators, or perspectives.

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Peer Review or Debriefing: Allowing for an external check on the research process.

Negative Case Analysis: Refining a hypothesis as inquiry advances in light of disconfirming evidence.

Clarifying Researcher Bias: Allowing the reader to understand the researcher's position, as well as any biases or assumptions that might impact the inquiry.

Member Checks: Soliciting informants' views of the credibility of findings, interpretation, and representation.

Rich, Thick Description: Describing in detail the participants, setting, actions, etc. so that readers can make decisions regarding transferability.

External Audits: Allowing an external consultant—an auditor—to examine both the process and product of the account to assess accuracy. (201-3)

I am advocating a localized, situated, rhetorical approach towards conducting research. Porter and Sullivan ("On Theory") argue for a similar approach, one that sees methodology not as "something we apply or select so much as something we design out of particular situations and then argue for in our studies" (221, original emphasis). The discipline of Technical Communication—and, more broadly, the computers and writing community—has begun to do this. As every legitimate discipline should, it has begun to establish discipline-specific research methodologies that are rhetorically situated—that is, that are appropriate for the rhetorical situation under scrutiny. Drawing from fields that operate in a similar manner, it has looked to Human-Computer Interaction (HCI) studies (those concerned with design, evaluation and implementation of interactive computing systems for human use), Human Factors (a focus dating back to the industrial revolution; the hardware version of HCI), software engineering (design, creation, usability testing, implementation, assessment, and so forth), and Scandinavian collaborative design approaches (arising from a socialist philosophy, this approach includes participants as designers of systems, software, etc.), and other associated
fields. But instead of merely co-opting methods from these fields, Technical Communication
has adapted them into standard user-centered design field methods: Contextual Inquiry, in
which participant observation, interview, artifact analysis, and talk-aloud protocol can be used to
identify problems and/or study problems in a particular context; Participatory Design, in which
the users and designers work together to design or redesign an artifact; and Usability Testing,
which is the close observation of real users using real artifacts so that the usability of the artifact
can be determined. These three methods have become staples in the field, both in the
workplace and in more scholarly applications³. They have roots in Ethnography, Educational
methodologies like Participatory Action Research (PAR), Feminist research, and what Robert
Johnson has deemed “user-centered” design philosophies. As a group, they are locally situated,
usually designed to identify and/or solve a specific contextual problem (such designing a usable
interface for a software application, or finding out where a normalized corporate process breaks
down), and the “subjects” of the research are often co-investigators. Unlike the other discipline-
specific methodologies which have been employed by those studying writing in the past, these
more specific, local, and often collaborative methodologies are a positive step toward making all
research local, contextual, and meaningful when applied in a rhetorical manner.

These field methods allow for a focused, problem-solving, rhetorically-situated, user-
centered approach to research. They are not conducive for long-term study of a culture, and
replication is not a normal goal; instead, they are localized, contextualized inquiries that allow
for a greater understanding of a task, a situation, a technology, a design, a system, and so forth.
While not generalizable in the traditional sense, the results of such studies are often used
generally to address problems in a specific locale, system, process, community, and so on. In
other words, they are appropriate for the context studied, which makes them especially
beneficial to technical communicators—yet I would argue that they have value elsewhere, too, if
only as models of rhetorically adapted and applied research methods.
Conclusions: Where do we Begin?

Because research—particularly research involving technology—is situated, messy, unpredictable, and chaotic, we need to adapt existing methods to the specific (rhetorical) situation and idea being studied. This doesn't mean, however, that we simply apply methods "willy nilly"; we must know about research methods; we must understand the relationship between method, methodology, and epistemology; and we must learn to think rhetorically about the audience, purpose, exigency, constraints, and context surrounding the site of our research. From this we must articulate "fit" or appropriateness, the specifics in application, and how the research is rigorous. Finally, we must be able to portray our analysis and results in a representation sanctioned by a particular discourse community.

Yet how can researchers learn to do this? The answer, I believe, lies in how and where we prepare students to conduct research: in our required methods overview courses, in what we require in our courses, in how we prepare students professionally, and our textbooks. In an article overviewing the state of research in Technical Communication, Ann Blakeslee and Rachel Spilka cite that the participants in the 2000 Milwaukee Symposium\(^4\) "bemoaned the inconsistency of what we cover and of what students learn in our research courses" (81). Spilka continued this lament at the 2005 Council for Programs in Technical and Scientific Communication (CPTSC) conference in her keynote address, noting that few schools require more than one research methods course, and that course is often "inconsistent". She cited as proof that graduate students were ill-prepared to propose/conduct research her analysis of the last three years worth of ATTW and STC grant applications. Almost none of these, noted Spilka, were persuasive in their representations of methodology. While our programs are all different—Composition/Rhetoric students won't be expected to have exactly the same skills as Technical Communication/Rhetoric students—we nonetheless should be able to identify basic research skills and knowledge each graduate student should have. Given that most programs in rhetoric require at least one survey course, below I've delineated what might be taught so that
students can read and conduct research rhetorically. I hope such an overview list might inspire others into a dialogue, eventually leading to models of courses that achieve/begin to achieve agreed upon goals.

1. Early in their graduate studies, students should be **grounded in the methods that are used in their discipline**, as well as disciplines tangential to theirs. They should have a thorough understanding of the methods, the traditional application of these methods, and how to match method to question/question to method. A research methods book aimed toward disciplinary knowledge, such as Lauer and Asher’s *Composition Research: Empirical Designs* or MacNealy’s *Strategies for Empirical Research in Writing* might be appropriate vehicles—but so, too, I would argue, would be Creswell’s *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*.

2. Students should be taught to **read research critically**, problematizing methods, procedures, and findings. Critical analysis of reading research should be integrated into a variety of classes so the one overview course isn’t overburdened. Too often, I feel, this is one of the primary goals of the required research methods class (given the focus on "coursepacks" in the required research methods courses), and as a result, I think it warrants too much time and energy, time and energy that would be better spent learning to apply the methods they’ve become familiar with in a heuristic, contextual manner. Through learning to apply these methods well, students are more likely to learn how to read critically the representations of others.

3. Students should be **given the opportunity—preferably within the "safe" context of a class—to conduct actual research studies** that will mirror the larger studies they hope to do for dissertation and publication. The actual conduct of research should be, I believe, one of the primary goals of the required
research methods class—yet my preliminary research indicates only about half those teaching research methods now actually give students such an opportunity.

4. **Support for conducting research** should be offered frequently, throughout a graduate student's career, in the same way that support for using technology is offered: in the form of workshops, one-on-one help, and so forth. Like technology, conducting research should become comfortable and "known". Once a comfort level is reached in even one area, it can translate to other areas. While the required research methods course isn't the only place such support sessions can occur, it is likely the research methods teacher who will be conducting this type of support opportunity.

5. Through familiarity with traditional research methods, as well as conducting/critiquing research, students should be challenged to look critically at their own sites for research, problematizing the methods they've learned, and articulating the complexities of the specific, rhetorical situation. This type of identifying and communicating doesn't come easily to everyone, and must be practices. The required research methods course is a natural place for students to learn to do this type of articulation.

6. Finally, students should be able to try their hand at adapting research methods for their particular rhetorical situation, preferably again within a safe context, indicating why they have adapted the methods they have, and how they have implemented rigor in their research. A series of "micro-studies" that take more than two weeks might be the means by which students try to adapt research methods to time and space and subject and problem constraints. It is likely that students will fail at these micro-studies by choosing a problem that is too broad/unfocused, a method not appropriate, and so forth—but often it is through
failure that we learn best, especially when the failure becomes a "teachable moment" in the context of a class.

Students should also learn how to fill out an IRB/human subjects form, as well as what kinds of situations require consent, institutional approval, and so forth, and while this type of activity is often part of my research methods classes, it can be problematic—for while students shouldn't technically conduct research until the forms come back as "approved," approval often takes the bulk of the semester. I know that teachers of this course often feel under-prepared to guide students in even a "micro" research study, and thus they choose instead to fall back on reading about and critiquing existing research. We must learn to learn ourselves, to embrace uncertainty, if we want to grow as teachers (and as a discipline). As teachers of the required methods course, we still have the capacity to think critically and rhetorically, and our students will benefit from this experience, along with their own classroom-based forays into research. The teacher's responsibility will be to see that research is conducted ethically, critically, and rhetorically; the student's responsibility will be to engage critically in the *praxis* of conducting research.

But not every program has a required research methods class. For those of us who are expected to conduct research without the benefit of more training, it might behoove us to consider research and technology as similar in terms of how we become proficient in them. We learn to use technology in a variety of ways: through attending workshops, through reading, through discussing it with others, through online references, and finally, through trial and error/practice. Eventually, our understanding of technology and our familiarity with it allows us to integrate various appropriate technologies into our every day work. Similarly, we should think about research practices as something that we hope to integrate seamlessly and appropriately into our work. We cannot expect to do so without familiarity, practice, reflection, and feedback. Digital contexts provide us with a wealth of opportunities to conduct meaningful, exciting research; however, they also can prove to be overwhelming in their messiness. Our methods
and our understanding of them needs to be able to capture the complex nature of this "mess" in order to provide helpful, positive information that will help us to understand situations, solve problems, and revise our practices. "My aim," Law writes, "is thus to broaden method, to subvert it, but also to remake it" (9). This should be our aim as well: to understand methods, subvert them, and to remake them by applying them rhetorically.
REFERENCES


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1 This survey was intended as a pilot for a more focused survey. I sent the survey url to the following email lists: techrhet, attw, wpa, and the consortium of graduate programs in rhetoric and composition. I asked people on the list who had taught the research methods overview to respond, and/or to pass the url to those in their departments who
Rickly

had taught the research methods overview class. Sixty-eight people responded to the survey, which was "live" from November, 2004 until March, 2005.


4 The goal of the 2000 Milwaukee Symposium, held at the University of Wisconsin-Milwaukee, was to identify problems of the field of Technical Communication and desirable/necessary directions for the future.