

The Intelligent Design of Writing Programs: Reliance on Belief or a Future of Evidence

Chris M. Anson

No WPA escapes that moment—and most face it repeatedly—when they must defend some deeply trusted practice or method, some carefully enacted theory or design, against criticism. It may come from a naysaying colleague, or a disbelieving dean. It may emerge from an op-ed in the local newspaper or the external review of the department housing the WPA's program. It can be diplomatically reserved or bitinglly acerbic. And it can be shrugged off as harmless and uninformed or allowed to burrow deeply into consciousness, growing into anger and troubled sleep. But in most cases, it begs to be answered.

Recently, a “study” of the composition program at my own institution and at its sister institution, the University of North Carolina at Chapel Hill, called into question many of the principles on which these fine programs are founded. There is nothing meritorious enough about the report, in scholarly grounding or investigative sophistication, to deserve national attention. But because it was harvested in my own back yard, it provided for me an opportunity to ask how writing program administrators and members of the composition community might respond to allegations—even unfounded or politicized ones—that current instructional approaches are wrongheaded and ineffective.

Using this local report as emblematic of situations in which writing programs must defend their practices against various kinds of external criticism, I want to make a case for reinvigorating the research agenda that helped to generate the field of composition studies and its related areas of inquiry. My point is this: if we continue to rely on *belief* in our pedagogies and administrative decisions, whether theorized or not, whether argued from logic or anecdote, experience or conviction, we do no better to support a case for those decisions than what most detractors do to support

cases against them. Instead, we need a more robust plan for building on the strong base of existing research into our assumptions about how students best learn to write. In the process, we may discover that some of our own beliefs fail to stand the test of inquiry, prompting further research into the foundations of success in student learning and development and further modifications of our dominant pedagogies. Ultimately, changing the public discourse about writing from belief to evidence, from felt sense to investigation and inquiry, may help to move us all beyond a culture of “unrelenting contention” (Tannen) and toward some common understandings based on what we can know, with some level of certainty, about what we do.

A FRONTAL ATTACK OF TWO PROGRAMS

On June 19, 2006 the John William Pope Center for Higher Education Policy, located in Raleigh, released a 58-page report titled *English 101: Prologue to Literacy or Postmodern Moonshine?* (Miller). The report critiques the teaching of composition nationwide by investigating the programs at the University of North Carolina at Chapel Hill and at North Carolina State University, which lie 25 miles apart and together enroll approximately 59,000 students. Author Nan Miller is a retired English professor from Meredith College, a small, private, women’s college located in Raleigh. She conducted her investigation by studying these universities’ first-year writing curricula online and briefly interviewing their directors of composition, both accomplished composition experts.

In spite of its girth, Miller’s report condenses itself into “six conspicuous fallacies” of the so-called “new composition programs” presumably represented by the two programs under scrutiny. Fallacy #1 is the idea that composition should prepare students to write in different discursive communities. This is, Miller argues, asking students to learn a language foreign to them before they learn the basics of clear writing. According to Miller, the new emphasis on academic writing in college also coincides with a decline in high school graduates’ writing abilities, a point that has no correlational support and seems to reverse the laws of cause and effect.

Fallacy #2 attacks the idea that teachers of writing should know something about composition theory, research, and pedagogy, which overly narrows the pool of qualified applicants. When teachers are not trained in “great writing,” this “suppress[es] talent, invention, and a passion for the written word” (13). Better criteria for instructors are “a love for great works, a knack for writing clear sentences, and a yen for having both rub off on a class of sometimes reluctant 18-year-olds” (14).

Fallacy #3 questions current belief in the ineffectiveness of direct grammar instruction. A hodgepodge of points follows, including attacks on the National Council of Teachers of English and the Conference on College Composition and Communication for their respect of students' home and community dialects; a reminder about the expectations of employers; and a kind of eradicationist statement about the relationship between the increasing diversity of our students and the preponderance of errors in their writing.

Fallacy #4 questions the use of peer groups in composition classrooms, relying on familiar myths about the inability of students to critique each other's work, along with arguments about grade inflation and the need to "restore authority" to the teacher.

Discrediting scholarship in rhetoric and composition, Fallacy #5 claims that the field deliberately obfuscates its own discussions in order to hide the truth about its goals of promoting "theorist ideology" instead of helping students to write better. Citing Berlin's work on social-epistemic rhetoric and Paulo Freire on liberatory pedagogy, Miller accuses the programs at NC State and UNC of promoting group-think and causing students to leave the composition class "thinking that writing is the joint effort of budding activists—not an arduous process done mostly in isolation" (18).

Miller's most impassioned concern—that composition has abandoned the study and appreciation of great literature—she saves for her final fallacy. "No tenet in the theorists' prescription for composition courses," she writes, "is more radical or perverse than this one" (22). Using the characteristic assortment of quotations from work in composition, including heavy references to Erika Lindemann (a scholar at the University of North Carolina at Chapel Hill who has argued against composition curricula that are based primarily on literary analysis and the writing of literary interpretations), she laments the loss of exposure to "great works" as the most successful way for students to learn to write, and advocates the reinstatement of teachers who "hold art sacred, who love great works for their timelessness and for their perfectly wrought passages" (23).

Miller's report ends with a series of recommendations, some of them reinventing pleas that have long issued from WPAs, such as keeping teaching loads reasonable and urging lots of teacher response. But they also include ridding the course of collaborative activities; using daily quizzes to test for reading; endowing instructors with "absolute authority"; requiring a systematic review of grammar along with skill-drill exercises; and reinstating a two-semester sequence in which the second course focuses on great works of literature.

After it became available, the report drew a moment of attention. The Pope Center issued a press release describing it, and Miller presented it at a

meeting of a closely allied conservative think tank, the John Locke Foundation. A mention of the report appeared in Durham's *Herald Sun*, and an interview with Miller was published in the online journal *EducationNews.org*. A five-minute phone interview with Miller was posted on stategovernmentradio.com, an Internet-based radio show that discusses state-level issues in North Carolina.

A week or two after its release, a brief flurry of postings about the report appeared on the Council of Writing Program Administrators' listserv (WPA-L). Most called attention to flaws in the document, which include Miller's naïveté about the history of composition studies; illogical reasoning from faulty premises; self-contradictions (such as writing a text whose attempts to adhere to the conventions of an academic, reportorial genre undermine its own emphasis on graceful, literary language); a number of unsupported claims; a highly selective representation of scholars and their positions (such as lauding Elbow's early work without mentioning his recent arguments that students should write first drafts in their own dialects, and leaving out the arguments of important proponents of academic writing such as David Bartholomae and Joe Harris); false assertions; quotations taken out of context; and, perhaps most problematic, the use of NC State's and UNC's programs as examples of post-modern, theory-laden, ineffective, and presumably leftist enterprises, when these programs are widely acknowledged to be among the "least political, least liberal areas of the curriculum" and stand as "national exemplars, filled with instructors who are exceptionally committed to their students" (Taylor; for information about the programs, see <http://english.unc.edu/comp/> and <http://social.chass.ncsu.edu/fwp/>). That the report so fundamentally misinterprets these programs is not surprising considering that Miller did not follow the provisions of careful, systematic inquiry, such as visiting classes; discussing with a fully representative cohort of teachers their goals and methods; researching (beyond unsupported anecdote) whether the programs improve students' writing; and talking with a range of students, alumni, or their employers to mine perceptions of their preparation.

The report's sponsor, the John William Pope Center for Higher Education Policy, is located in Raleigh and supported by the Pope Foundation, the endowment of a wealthy family of wholesalers. The Pope Center's stated mission, "to bring innovative thinking and critical analysis to the field of higher education, in North Carolina and across the nation," sounds appealing and progressive. But even a casual exploration of the Center's Web site (<http://www.popecenter.org/>) reveals cases of ideological bias that seem antithetical to critical analysis and innovative thinking, and to the kind of balanced deliberation that is the hallmark of higher education. The Center's

Web site, for example, offers a “Course of the Month” column designed to ridicule courses taught in North Carolina’s universities for “making a mockery of education” by such transgressions as “treating sex on campus as anthropological research” or offering “anti-globalization harangues” (“Course of the Month” n.p.).² Each column includes a cartoonish depiction of a tweed-jacketed professor in a bow tie standing next to a blackboard on which appear, in chalk, the words “Trendy Leftist Pap! SEX! Pop Culture! Movies! Identity Politics! And did I mention Sex?” (“Course of the Month” n.p.). Typical of the column is the following excerpt from the critique for April, 2006. The course, “Introduction to Diversity,” is pilloried because, to Pope Center columnist Jon Sanders, it seems to promote a liberal agenda (Sanders n.p.). Taught in East Carolina University’s education department, it is a “multidisciplinary introduction to concepts and issues of diversity (e.g., race, class, gender, religion) in American society and schools” (quoted in Sanders n.p.). It provides what most educators would view as critically important material and perspectives for future schoolteachers to learn, given the increasing heterogeneity and cultural complexity of our nation’s classrooms. Note especially the rhetoric of the highlighted sentence, which attacks on *political* grounds a method supported *pedagogically* by teachers and educational researchers of virtually all persuasions.

This month’s honoree is a course at East Carolina University, EDUC 3002: ‘Introduction to Diversity.’ The course itself is not unique among colleges and universities. *Even its hand-holding, privacy-invading, condescending requirement that students keep a “reaction/reflection journal”* isn’t unique. Its selection is based instead upon it being emblematic of the highly politicized, almost *sui generis* definition of “diversity” employed in academe. . . . [emphasis added] (Sanders n.p.)

Given this and many other cases of unfounded bias, the Pope Foundation’s sponsorship of Miller’s report weakens its credibility. In addition to its serious failures as an “investigation,” the report suffers from mixed and even conflicting goals: those of Miller, pleading for her own antiquated and discredited approaches (such as teaching writing through direct grammar instruction and the analysis of literature), and those of her sponsor, which she satisfies rhetorically by offering an “exposé” that, finally, is little more than politically motivated polemic.

My purpose is not to question Miller’s dedication to teaching, her love of literature, her many years of experience as an English professor, or her desire for students to leave our universities well educated. Nor is it to explore or contest the goals, operations, or local and national contributions

of the Pope Center, a complex, evolving organization whose work varies from misguided zealotry to more balanced projects that weigh various positions on important issues. Rather, I want to see the report as representative of occasions when our writing programs are challenged externally. How should writing educators respond to such challenges?

Although several WPAs “laughed off” the report and urged that others do the same, such a response does little to alter public (mis)conceptions of education, critique conclusions based on flawed and inadequate investigations, or explain why certain approaches should be defended. But laughing off the report may also be a predictable preference to alternative defensive strategies, none of which might be effective in defusing the report’s agenda or properly informing its author, sponsor, and readers. Consider, for example, a response rendered in and supported by *theory*—that writing is a social, not solitary, activity; or that the grammar of a language is not learned explicitly (Hartwell); or that exposure to one kind of discourse (such as literature) does little to help students to write other kinds (such as lab reports or feasibility proposals). The fact that the field “theorizes” is, in reports like the Pope Center’s, already under attack. (For Miller, presumably an endeavor as complex as teaching writing ought to be practiced entirely without theory, a proposition whose parallel in economics, political science, physics, astronomy, genetics, or virtually any other field would meet with charges of lunacy).

Consider appeals to logic or reason. Carolyn Miller, SAS Distinguished Professor at North Carolina State University and rhetorician *par excellence*, reduced the Pope Report to the following bizarre syllogism, which Nan Miller replicates in narrative form in the brief interview on governmentradio.com:

- => Employers and reports complain that students can’t write for the workplace.
- => This is because students are being taught this awful stuff, “academic writing.”
- => Therefore, they need to be taught great works of literary art.

Yet in requiring nonacademics to engage in higher levels of metacritique, such rhetorical analysis may fail to impress. Consider appeals to the status quo—“this is how writing is taught all over the United States”; but the status quo is itself being challenged. Consider charging the attackers with bias based on a political agenda; but as Todd Taylor put it in a post on WPA-L, “Politics is not the only thing here; it’s everything.”

In short, none of these approaches, which make good sense to our community, may change the views of detractors or the terms of the debate. This is because such approaches defend the structure and nature of writing programs, the preparation of writing instructors, and the practices that inform what goes on in the classroom with “cumulative conviction,” the distillation of what we know in the field from theory, commentary, discussions on listservs, conference presentations, idea sharing, recent tradition, and how it’s done elsewhere. All of these are, of course, vital to a healthy field of inquiry and practice. Nor is conviction in and of itself to be disparaged; belief in our methods goes hand in hand with energy, passion, innovation, and accomplishment. It’s certainly what drives Nan Miller to make such an emotional plea for the subject of her entire professional life, the centrality of literature to undergraduate education. And it may be what fuels the Pope Center’s attempts to undermine “student-centered” or “cooperative” learning as an abrogation of instructional responsibility and a weakening of the “authority” that taxpayers expect from lecture-and-test professors whose job is to fill the uncritical minds of the next generation of corporate workers with the right facts.

Just as the field relies on its belief in particular approaches, then, belief also drives its detractors: the belief that direct grammar instruction improves students’ writing ability; or that when students work in cooperative groups, they learn less than when they are lectured to; or that having students read works of great literature makes them, through some sort of mysterious osmosis, better writers in business and industry. None of these assertions is based on solid, impartial evidence showing why these approaches succeed over others. But responding in kind by invoking opposing beliefs creates an ideological stalemate, an 18th century-style conflict in which two armies line up on opposite ends of a field, drums rolling and fifes atwitter, and fire on each other until the side with the most soldiers left standing wins. The victor in such a toe-to-toe pedagogical battle may be the side that has the most power and influence. But victory and its subsequent effects usually have little to do with what generated the conflict in the first place: questions about how people most effectively learn and what we can do to best facilitate that learning.

BEYOND BELIEF: A LARGER CASE

Over 80 years ago, the “trial of the century” took place in a jammed courtroom of the small town of Dayton, Tennessee. To bring notoriety to a community experiencing a population exodus, high school biology teacher John Scopes, colluding with town officials, admitted to teaching evolution-

ary theory from a textbook and thereby deliberately gave rise to one of the most ideologically charged courtroom dramas in American history. The case against Scopes was based on the State of Tennessee's bill that disallowed teachers to provide anything other than a Biblical explanation for the origins of humankind:

Be it enacted by the General Assembly of the State of Tennessee,

That it shall be unlawful for any teacher in any of the Universities, Normals and all other public schools of the State which are supported in whole or in part by the public school funds of the State, to teach any theory that denies the story of the Divine Creation of Man as taught in the Bible, and to teach instead that man has descended from a lower order of animals.—Passed by the 64th General Assembly, March 21, 1925, Chapter No. 27, House Bill No. 185 (see <http://www.law.umkc.edu/faculty/projects/ftrials/scopes/tennstat.htm>)

In the context of the longstanding debate over the constitutional protection of secularism in public education, a growing body of scientific research had come face to face with centuries of dominant Judeo-Christian theology. In what was perhaps the most sensational moment of the trial, Williams Jennings Bryan, celebrated orator, politician, and defender of creationism, sitting in the witness box as a self-professed “authority on the Bible,” was cross-examined by the most famous defense attorney of the era, Clarence Darrow. As Douglas O. Linder describes it, Darrow began questioning Bryan quietly:

“You have given considerable study to the Bible, haven't you, Mr. Bryan?” Bryan replied, “Yes, I have. I have studied the Bible for about fifty years.” Thus began a series of questions designed to undermine a literalist interpretation of the Bible. Bryan was asked about a whale swallowing Jonah, Joshua making the sun stand still, Noah and the great flood, the temptation of Adam in the garden of Eden, and the creation according to Genesis. After initially contending that “everything in the Bible should be accepted as it is given there,” Bryan finally conceded that the words of the Bible should not always be taken literally. In response to Darrow's relentless questions as to whether the six days of creation, as described in Genesis, were twenty-four hour days, Bryan said “My impression is that they were periods.” (Linder n.p.)

Exasperated by Darrow's quick-witted examination, Bryan finally proclaimed, "I do not think about things I don't think about." Seizing the moment, Darrow asked, "Do you think about the things that you do think about?" To the derisive laughter of the spectators, Bryan replied "sometimes" (Linder n.p.).

In the end, Darrow strategically asked the jury to deliver a guilty verdict so that the case could be appealed to the Tennessee Supreme Court, where a year later it was dismissed not on hoped-for constitutional grounds but on the basis of a technicality, but still setting a precedent that dissuaded most states from taking anti-evolutionary stances. Yet although the conflict behind these events might seem to have been resolved in perpetuity, today we are regularly revisiting the Scopes Monkey Trial in courtrooms where the merits of intelligent design theory are weighed against the merits of evolutionary theory. This debate, however, is constructed in quite different terms. Instead of arguing on behalf of religious conviction and against scientific evidence, intelligent design advocates try, at least overtly, either to undermine scientific evidence from the perspective of science, or to posit additional scientific evidence that could support their views (see Orr).

Although many scientifically-minded people are persuaded that we have reached our current state of affairs by random and indifferent forces, they don't all find unattractive or implausible—at least *theoretically*—the possibility of an ordered and intellectually coherent universe, a universe by design. But it is unlikely that intelligent design theory will be accepted or upheld in the higher courts. Several high-profile court cases have already rejected it. For example, in *Tammy Kitzmiller, et al. v. Dover (Pennsylvania) Area School District, et al.*, a (conservative) federal judge ruled that intelligent design theory is "nothing less than the progeny of creationism" and "a religious alternative masquerading as a scientific theory," and cannot be taught in public schools (see Trowel; Dowling-Sendor). The ruling in *Selman v. Cobb County (Georgia) School District* overturned the local board of education's requirement that stickers be placed on 35,000 science books warning students that evolution "is a theory, not a fact" (see Ebert). Two key factors played a role in these cases: first, the advocates of intelligent design were unable to show with enough evidence that the theory is *not* based on religious belief or doctrine; second, the overwhelming scientific evidence supporting evolutionary theory has not been challenged enough to allow plausible alternatives, at least in the eyes of the courts. As one FAQ puts it, "[evolutionary theory] has been corroborated by hundreds of thousands of independent observations and has succeeded in predicting natural phenomena in every field of the biological sciences, from paleontology to molecular genetics. No persuasive evidence has been put forward in the

last 150 years to contradict the theory of evolution” (ACLU). The evidence for evolution is so overwhelming that over 70 professional scientific organizations have rejected intelligent design theory. And the consensus among researchers is so powerful that the National Center for Science Education rounded up a substantial number of highly qualified experts, including several Nobel laureates, to publicly support evolutionary theory and reveal their credentials. The dramatic twist behind the initiative is that the list contains only scientists named Stephen or variations thereof (Stephanie, Esteban, Stefan, etc.), who represent about 1% of their cohort. By the spring of 2009, the “Steve-o-meter” had welcomed the 1,080th so-named scientist to the list (see “Project Steve”).

Of course, it would be foolish, and contrary to open-minded inquiry, to permanently reject intelligent design theory, just as it would not serve the composition community well to reject entirely the possibility that peer groups fail to help students revise their writing and internalize rhetorical and other principles they can use in further work. Rather, intelligent design theory is not ready for parallel treatment in the schools because it is based on belief, not on a preponderance of evidence. Current practice—in the teaching of science or the teaching of writing—needs to be supported not by hunches but by the best that the research traditions of these two disciplinary areas can provide us, with the understanding that their very existence depends on an openness to challenge and a spirit of continual inquiry.

CALLING ALL STEPHS

As similar as the teaching of science and composition may be in principle, the pedagogy of successful writing programs is about a different kind of intelligent design. Unlike evolutionary theory, much teaching and administration of composition is not *overwhelmingly* supported by research, or supported by a *preponderance* of research. Of course, many hundreds of carefully conducted studies do lend credence to particular teaching methods, writing behaviors, theories of learning, and administrative practices. But some of these studies were conducted twenty, thirty, or even forty years ago, under different conditions, with different populations raised and schooled with different values and experiences, and before the advent of technology and digital media. Yet we often rely on such studies in the absence of strong, current research. To support our practices, we will never have hundreds of thousands of independent observations from dozens of fields, or the testimony of 1,080 expert composition researchers all named Stephanie or Steve; but as a scholarly community, we could be doing far more.

There is ample evidence that the field of composition has recently lessened its attention to research. Durst's comprehensive review of research on writing from 1984–2003 shows a "sharp decline in empirical studies of writing at the postsecondary level, in favor of more humanistically-grounded theoretical and critical work" (54). Richard Haswell's study, published in *Written Communication*, meticulously documents how over the past decade the NCTE and CCCC have systematically turned away from "RAD research," research that is replicable, aggregable, and data-supported. As Haswell describes it, RAD scholarship "is a best effort inquiry into the actualities of a situation, inquiry that is explicitly enough systematized in sampling, execution, and analysis to be replicated; exactly enough circumscribed to be extended; and factually enough supported to be verified" (201). In part, the development of greater sensitivity to context in post-1980's scholarship (the "social turn") and the popularity of postmodernism made less attractive the prospect of "testing" various methods or even assuming that a particular method could be generalized across contexts. Where once composition researchers often collaborated with educational researchers and statisticians, we now find more affinities with other areas in the humanities whose traditions of scholarship do not typically include empirical research on writing development, learning, teaching, and methodology. In his most recent decennial installment on the state of the profession, Richard Fulkerson explains that the pedagogical claims of current practice,

although sometimes based on ethnographic case studies, are never said to be generalizable but always local. Their epistemic status is that of sophisticated lore. "I saw this happen," or "I did this and it helped my students." . . . In point of fact, virtually no one in contemporary composition theory assumes any epistemology other than a vaguely interactionist constructivism. We have rejected quantification and any attempts to reach Truth about our business by scientific means, just as we long ago rejected "truth" as derivable by deduction from unquestioned first principles. For us, "truth" is rhetorical, dialectically constructed, and provisional. Even our most empirical journal, *Research in the Teaching of English*, publishes primarily ethnographic studies. (662)

In the context of exposés such as the Pope report, the dangers of this trend are obvious. "As when a body undermines its own immune system," writes Haswell, "when college composition as a whole treats the data-gathering, data-validating, and data-aggregating part of itself as alien, then the whole

may be doomed. Even now, the profession's immune system—*its ability to deflect outside criticism with solid and ever-strengthening data*—is on shaky pins” (219; emphasis added).

The publication of George Hillocks' meta-analysis *Research on Written Composition* represents a good example of such deflection. After its release in 1986, many compositionists relied on this impressive synthesis of existing empirical studies to counter naïve claims about the centrality of direct grammar instruction in the teaching of writing. As Hillocks puts it, “one of the strongest findings of this study . . . is that grammar study has little or no effect on the improvement of writing. The same is true for emphasis on mechanics and correctness in writing. In fact, some studies indicate that when correctness is heavily emphasized in marking papers, the quality of student writing diminishes significantly” (225). Even today, I routinely refer to this work when pleading the case against a return to extensive grammar instruction as “the teaching of writing,” and I invite the (rare) skeptic to show us otherwise, through his or her own fully informed, objective, and carefully designed research study that might counter the dozens of studies in Hillocks' meta-analysis. This challenge is often enough to turn the nescient critic's strenuous objections into a bit of concessional grumbling . . . but no one has ever picked up the gauntlet. Miller's response in the Pope report is also of interest: she quotes Hillocks' conclusion about grammar instruction, but unable to cite research contradicting his findings, launches into a non sequitur questioning popular theories of language variation (see pp. 14–15) and attacking the high schools for not doing their jobs through “drill and practice, drill and practice” (15). In the absence of contradictory research data from unbiased studies, such an argument collapses from its lack of credibility.

As impressive as Hillocks' meta-analysis is in squelching unprincipled attacks or educating uninformed critics, it exists in a tradition of composition research that urges continued inquiry. That direct grammar instruction has negligible effects on learning to write or improving writing ability is so foundational that it is not worth much continued exploration in the field, any more than continuing to ask whether living organisms actually do genetically adapt to environmental conditions over time. But countless questions remain about the role of grammatical knowledge in learning to write. For example, little research has thoroughly examined the relationship between conscious grammatical knowledge (“knowing *that*”) and its instantiation in writing (“knowing *how*”). Continued research is also needed to explore the effects (on subsequent knowledge and ability) of different modes of response to error in students' final papers; or how students process grammatical information (e.g., from textbooks) and whether that

information affects their composing; or what happens psycholinguistically when students encounter particular errors as readers and whether those repeated or cumulative experiences have any effect on their subsequent control of surface features in their writing (Anson). In addition, because a concern for grammar is rarely absent from composition instruction (especially on an individual level), we need a stronger base of research support for instructional approaches that most effectively help students to recognize and avoid particular errors or use them for conscious and strategic purposes. These and dozens of further questions offer countless opportunities to engage in research of different kinds, regardless of external pressure. Such research is motivated by a desire to develop a fuller picture of the phenomena and acquisition of written literacy in all its complexity.

In arguing for a reinvigoration of our research agenda, I am not suggesting that the field of composition, including its many sub-areas, has abandoned all interest in research. Scholars of writing continue to engage in research across a wide array of methodologies, contexts, populations, and communicative media (see Juzwik, et al). And in spite of extensive epistemological debates throughout the 1990's about the questionable role of positivism in composition research and the "notion of a single, fixed, determinable Truth" (Branscomb 470), there is generally more acceptance of mixing methodologies today and more calls to abandon "negative argumentation" against particular research traditions and methods (Barton). In a review of Lauer and Ascher's *Composition Research: Empirical Designs*, Hamilton-Weiler praises the balance of attention to different methods as a needed corrective; "nothing has done more to confuse the current debate among those involved in empirical composition research," she writes, "than the simplistic notion that naturalistic or ethnographic research is the polar opposite of experimental research" (190). But a re-expansion and renewed acceptance of all forms of research, especially quantitative, is still needed for us to pursue questions relevant to WPAs and their stewardship of successful writing programs, questions focusing especially on the nature of learning and the most supportable instructional methods and approaches.

Consider briefly one of the instructional methods conservative critics reveal such an odd paranoia about: the use of peer-group work in the classroom. Advocates of this staple writing strategy have students talk about each other's drafts to help them improve their final papers, internalize various rhetorical principles, and enhance their abilities to write and revise. Peer response enacts beliefs about how students become more effective communicators, and it matches the ways in which people write in most of the professional contexts Miller claims that students are ill-prepared to join. In spite of plentiful pedagogical resources on peer response,

it is also one of the areas in which there is a discrepancy between the limited amount of research published in mainstream composition journals and the more extensive inquiry elsewhere. As Haswell puts it, “systematic study of peer evaluation almost always brings to light unexpected news” (212), such as the interesting finding that ESL writers make more revisions than native speakers but none in response to critiques that are corrective in nature (Singer), or that, based on sophisticated eye-tracking research, students appear to focus on areas of peers’ papers that they don’t subsequently discuss in their responses (Paulson, Alexander, and Armstrong). Only a delusional person could read the excellent research of a scholar like Martin Nystrand—meticulous analyses of the relationship between students’ comments in small groups and the specific discursive and textual improvements they make in their revisions—as part of a crusade to support a liberal agenda and indoctrinate students into “group think.” And although it can be argued that all pedagogy derives from ideologies of learning, which are tied to broader beliefs about the world, it would be the stuff of conspiracy theory to claim that Nystrand’s and colleagues’ research is motivated by anything other than a search for excellence in education.

Yet as necessary as this work is to understanding peer response and revision, it is insufficient. We need dozens of further studies that show the conditions under which students learn most effectively in groups, that compare the results of such group work to those in classes where students work alone, and that show which forms of instructional intervention and classroom management yield the most effective results from students’ work with each other. Such research is unlikely to show that carefully structured group response is less effective than lectures about good style, or that students internalize more principles of writing by working alone than by talking about texts with each other. But whatever it does show—say, that peer response works effectively only with specific kinds of preparatory work and training, teacher intervention, and accountability—we should use to rethink and enhance our instructional methods.

TOWARD A FUTURE OF EVIDENCE

What directions, then, promise a more robust, evidence-based view of teaching writing and learning to write? How can we move out of what Durst characterizes as the current “rut” of research on effective teaching methods in writing (67)? Six possibilities come to mind.

1. *Foundational research and syntheses.* In composition, basic research involves the study of the nature, processes, and causes and effects of the development

of written literacy. At the college level, this typically means the improvement, or scaffolding, of students' existing abilities and knowledge. When enough such research has been conducted, it yields conclusions and assumptions that become the "givens" in the field. For example, studies of syntactic maturity beginning with Hunt (1970), of which there are dozens, show that as students move from early school years to adulthood, their writing does, in fact, "mature" on the basis of specific indices such as sentence or T-unit length, mean clause length, and subordination ratio. We might replicate these studies and find slight variations; or we might choose a non-mainstream population and find stronger variations, with important implications for richer and more sensitive pedagogies. But categorically, such studies are among those we can point to in saying "what we know" about writing and its typical acquisition.

Although all such findings are always open to contestation, it would be relatively uninteresting to question whether writing is a process, or whether students get better as writers by actually writing, or whether creating written texts requires the interaction of multiple kinds of discursive, rhetorical, and linguistic knowledge. Yet even these foundational assumptions in composition are sometimes challenged by non-experts (who might urge chalk-and-talk forms of instruction, for example, or a "bottom-up" curriculum that assumes students can't write whole texts until they master sentences and paragraphs). For this reason, a series of documents providing agreed-upon foundational assumptions in composition, along with their supporting research, could be especially valuable both as an educational tool for non-experts and as a heuristic activity to identify areas of common agreement from those that require continued research. For example, a widely circulated list of "Research Findings on Instructional Methods and Learning" (Diamond) synthesizes basic principles from the consensus of educational research. One principle states that "research does not support a positive correlation between the quality of faculty research and the quality of teaching." Another concludes that "students tend to routinely use study methods that are known not to work (such as rereading textbooks) and must be taught how to learn effectively." When strongly supported by multiple research studies, such conclusions can be especially helpful in thwarting criticisms based on belief alone or misguided attempts to alter broader aspects of a curriculum. More efforts to synthesize what we know in the field are needed, such as the information portal CompFAQs from Comp-Pile (available at <http://comppile.tamucc.edu/wiki/CompFAQs/Home>)—the extraordinary effort of Richard Haswell and Glenn Blalock to archive answers to common (and often repeated) questions in the field, in part by pointing to research studies. More summaries and syntheses are needed

such as Bazerman's *Handbook of Research on Writing* (2007), MacArthur, Graham, and Fitzgerald's *Handbook of Writing Research* (2006), and Smagorinsky's *Research on Composition: Multiple Perspectives on Two Decades of Change*, which is designed to build on and extend earlier work describing the "state of research" in the field, such as Braddock, et al. (1963) and Hillocks (1986). And although published in 1988, the Northwest Regional Educational Laboratory's School Improvement Research Series, which includes the topical synthesis "Teaching Composition: Research on Effective Practices" (Cotton), offers compact, easily consulted summaries of research online.

In asking what assumptions in writing instruction are foundational, we should also acknowledge that (and explain why) some questions are not amenable to generalizable research because of temporal and situational complexities. For example, the prospect of assessing the effects of a campus-wide two-course writing-intensive requirement on exiting seniors' writing abilities is fraught with problems: there is no way to know what else has contributed to students' development (e.g., other, non-WI courses that nevertheless provided contexts rich with writing activities; or students' own extracurricular involvement in writing). This means not only that we cannot be sure of any large-scale causal relationship between the WI courses and student growth, but also that we cannot assume that the findings from one WI program, embedded as it is in a specific curriculum, and influenced by myriad factors of faculty preparation and institutional culture, will be generalizable to another program. When highly localized results are "stable" within an institution (and can be replicated over time), they still may not tell us anything foundational, unless other institutions reach similar conclusions. But other kinds of research, framed in different ways, might show that the amount and quality of students' writing experiences in college play a central role in their intellectual engagement (Light) and the development of their personal interests and intellectual passions (Somers). When enough such evidence has accumulated, it can support initiatives (such as a well-managed writing-across-the-curriculum program) even in the absence of direct measures.

2. *Replications and extensions.* Connors and Lunsford's well known 1988 study of the errors that teachers most often identify, based on a stratified sample of over 3,000 graded papers, listed spelling first. In their recent replication of this study, Lunsford and Lunsford found (predictably) that computers have made spelling a far less often identified problem than it was twenty years ago but have also introduced many more cases of "wrongword" errors—when students unwittingly accept erroneous spell-check

suggestions. The genre of writing assignments has also shifted, resulting in a larger percentage of identified documentation errors (as narrative assignments have been replaced by research papers); and students' writing is statistically longer than in the original study (792-93). These and other data from two quantitative studies of writing samples separated by twenty years provide us with important observations about how college-level composition has changed over time and how certain aspects of teacher response to error evolve partly as the result of changes in conditions of composing.

In a follow-up to their original study (1993), Connors and Lunsford reexamined their sample in order to focus on what teachers wrote on student papers more generally, especially in the evaluative comments found at the end or the beginning of papers (206). The data showed, for example, that only 10% of instructor comments were positive and only 25% were rhetorical—that is, engaging with students about the nature of their writing more globally. Over twenty years later, Stern and Solomon replicated this study, improving its sampling design and extending its reach to include other curricular areas. With the exception of some small differences, their study “confirmed many of Connors and Lunsford’s findings, and perhaps even suggests that there is a bigger problem with the validity of how faculty provide feedback to their students. Something needs to change” (38). In this case, more global response behaviors have not evolved significantly over time.

Replications like these are a vital part of many research disciplines because they lend further support for original results, show how or whether results can be obtained with slightly different variables, or reveal changes in results over time or in different contexts. Yet even relatively loose replications like Lunsford and Lunsford’s (where some variables are not tightly controlled) are rare in composition studies. Many groundbreaking studies of invention, composing, revising, teacher response, assessment, particular instructional methods and interventions, relationships between reading and writing, anxiety and writer’s block, developmental stages and indices, audience awareness, and the construction of purpose and context beg to be repeated with new data samples and new populations. To the extent that such research shows similar results, it supports the growth of foundational principles; but such principles cannot rely on one or two studies conducted decades ago.

3. *Graduate education.* The next generation of composition scholars and researchers gets its sea legs in our graduate programs. Yet in spite of ongoing efforts to track and catalog graduate programs in composition, and new efforts to raise the national profile of graduate education in the field,

we know little about current trends in the study of research. A national inventory of opportunities and requirements for research and the study of research methods could, in this respect, be helpful. How common are requirements for courses in research methods today? Do requirements include courses in, or adequate coverage of, different kinds of methods, especially quantitative? How well prepared are the faculty in our graduate programs to teach research methods and guide students in their own original research? How balanced are we in representing research to graduate students—do we tacitly or consciously favor qualitative methods, interpretive studies, or textual exegesis over experimental and quasi-experimental designs, or case studies that blend qualitative and quantitative methods? Do we fully prepare future WPAs to produce and consume research important to the administration of writing programs? There has been no dearth of attention to research methods in the past, as the number of worthy books on the topic suggests (e.g., Beach and Bridwell; Lauer and Asher; Lindemann and Tate; McLelland and Donovan; Mosenthal, Tamor, and Walmsley; North). But more introductions to theory and pedagogy have appeared recently than new works synthesizing research or extending coverage of methodology (e.g., Hum et al; Roen et al.; Rose and Weiser). Clearly, we need to provide stronger training in quantitative and qualitative methods and show students how they can be incorporated into research-based theses and dissertations. Such training in various research methodologies not only prepares students to produce their own scholarship in writing, but also to read, interpret, and critique the studies of others. Without preparation in research designs, future WPAs and teachers of writing will be unable to respond critically to reports of research that will be used to decide how they will teach, what they will teach, and to what ends. As long as research represents a kind of “power,” we must heed the words of Ed White: “Use it or lose it.”

4. *Connections with our publics.* Some disciplines have perfected the art of translating sophisticated research into publicly consumable forms such as press releases, lively magazine articles, news reports, and popular books. As a field of inquiry, composition studies has long suffered from a kind of myopia, talking with itself about its concerns but not striving to communicate important ideas, perspectives, and findings to broader audiences. Recent initiatives such as the WPA’s Network for Media Action (see www.wpacouncil.org/nma) and the NCTE’s Press Center have raised awareness of this problem and provided support for its correction. But opening new channels for communicating will have little effect unless new research can pass through those channels to others. As Kelly Ritter has argued,

writing programs increasingly stand to be measured by criteria emanating from outside their walls—by external assessment mandates, state proficiency policies, and other such extra-institutional systems. Consequently, the WPA, as the public face of his or her program, stands to be either a passive instrument of that measurement or an active participant in its delivery. . . . [E]xtending the *public* role of the WPA to negotiations and even collaborations with these other power sources . . . may be of equal, or even greater, value as compared with the local, institutional work that the WPA already sees as her or his primary professional domain. (46–47)

First, important research findings need to be made available when they might be of interest or relevance to public concerns about writing. If the results of a major research study or several studies showed that students' ability to succeed as writers in their first year of college is directly related to the diversity of their high school writing experiences, such results might give cause to reconsider narrowly-defined writing tasks driven by large-scale national and state-mandated assessments such as the new SAT writing test. Publicizing such research in ways that call attention to the negative effects of narrowly-defined tests on curriculum and teacher incentives to engage students with innovative projects could bring broader public—rather than narrow academic—pressure on school boards and legislatures to find better methods for building accountability or measuring educational achievement. However, if such research shows that the presence of standardized writing tests has a positive effect on students' subsequent performance in college, existing assumptions about these relationships would need to be rethought. (At present, there appears to be no evidence that such tests at the state level improve student learning in high school; see Amrein and Berliner.)

5. *Increased scrutiny and critique.* Related to the public dissemination of the field's research is an urgent need to keep abreast of how the results of research are *used* to argue various positions. As Anderson and colleagues write in an essay on improving the perception of public education, "one significant force is how 'facts' are selected for reporting and presented. Usually, there is a preconceived purpose for their selection and release. Depending upon the purpose of the organization disseminating the information, certain details may be glossed over or go unmentioned. Often this leaves the public with only half the story, unaware that there is more information available."

Almost nothing is so disconcerting to literacy experts as biased and poorly designed original research or slanted representations of existing

research used for political purposes unrelated to the betterment of teaching and learning or as leverage for imposing certain instructional, administrative, and curricular requirements. In some cases, a person's research or words are distorted, misrepresented, or misquoted, or quoted out of context, in order to support positions or objectives that are not implied in or derived from the full scope of the work (the well-known cases perpetrated by James Dobson, founder of Focus on the Family, provide compelling examples; see <http://www.insidehighered.com/news/2006/12/19/gilligan>). In other cases, poorly designed research is used to bamboozle the public into believing false conclusions. In still other cases, advocacy groups "cherry pick" specific findings from bodies of conflicting research and represent them as the "truth" about an issue. For example, the relationship between class size and student achievement is hotly contested by those who favor or disfavor increased public funding for education. Using a study that correlated scores on the National Assessment of Educational Progress tests with class size in several grades, the Heritage Foundation concluded that "class size has little or no effect on academic achievement" (Johnson 2000). Meanwhile, the American Federation of Teachers asserts that research provides "compelling evidence that reducing class size, particularly for younger children, will have a positive effect on student achievement" (Murphy and Rosenberg, 3; see Biddle and Berliner for a full discussion of this issue). In such stalemates, critiquing the nature and design of the research itself is crucial. For example, the relationship between the results of NAEP tests and class size may be suspect: classroom instruction may focus on learning goals and outcomes that differ from what the tests measure, or students may perceive such tests as external to the curriculum and not part of how they are really being assessed. Knowing the existence of other research on class size allows us to *complicate* the issue and counter biased claims. For example, Fischer and Grant's meta-analysis concludes that the relationship of class size to educational achievement depends on the mode of instruction and the expected outcomes: "In classes that focused on delivery of information, class size did not matter, but in classes that emphasize critical thinking, problem-solving, and long-term attitude toward the subject, small classes are more successful." Admittedly, the meta-analysis focuses on higher education, while the Heritage Foundation study focuses on K-12 education. But critiquing the goals of such studies (finding ways to support lower taxes at the expense of a democratized educational system vs. studying the conditions in which students actually learn something) is essential to differentiating snake-oil solutions from smart, informed, impartial plans for progress.

6. *Improved research communities.* Educational research is only as useful as its contribution to the Burkean parlor of conversations about teaching and learning. Yet too often, research stands off to one side of that parlor, a quiet guest who by turns is shunned, feared, or consulted only when needed to help with some individual's urgent matter or some collective curiosity of the guests. Helpful resources already exist, such as the CCCC Research Network Forum; but more opportunities such as dedicated listservs, conference sessions, journal issues, blogs, and wikis are needed for sharing information about existing research, synthesizing clusters of studies, and raising new questions for further inquiry.

To encourage a stronger culture of research in composition, multiple levels of research need to be acknowledged and accepted. Not all research needs to take the form of major, sophisticated, large-scale studies. A long tradition, and much scholarship, supports reflective practice and investigations grounded in classrooms (such as action research, the scholarship of teaching and learning, and the like; see Myers). These and other forms of localized inquiry provide teachers, administrators, and scholars with a context for thinking in more research-oriented ways about practice. Existing research, potential research, and praxis can exist in cyclic relationship with each other. A teacher who begins reflecting on how writing prompts determine certain aspects of her students' writing might learn about early work that tested the impact of variations in the background information given in similar writing prompts (e.g., Hoetker and Brossell; Hoetker and Ash). In turn, this research could trigger several informal classroom investigations, which in turn might increase the teacher's awareness and critical instructional ability. Potentially, further questions can open doors to larger and more formal research studies. In this way, the consumption of research affects the nature and quality of instruction by encouraging sharper observation and deeper reflection.

None of these six areas of need suggests that we should abandon other kinds of scholarship, commentary, essays, theory, textual analysis, studies of culture and language, or even the kind of introspective and reflective writing that is common in the field of composition studies. But the field will not thrive in a sometimes hostile climate without a richer and more expansive agenda of research. As I have suggested, it is not just the *production* of research but its *use*, *scrutiny*, and *corrective influence* that are crucial to supporting good pedagogy and administration.

A sensible essay by Laurence Musgrove, titled "Worse Than Ever?" appeared recently in *Inside Higher Education*. In it, Musgrove muses about the persistence of beliefs that students don't write as well now as they did

in the past. Although Musgrove concedes that “it would be difficult to discover if students write worse now than students did decades ago,” he cites research studies showing that students make no more formal errors now than in 1917 (Connors and Lunsford) and that writers in professional settings (who represent previous generations of students) make almost as many errors as do first-year composition students (Sloan). Responding to Musgrove’s article, several bloggers simply reiterated the claims that Musgrove critiques and charged Musgrove with “buck-passing.” At this point, Doug Hesse was prompted to add his own thoughts about the role of research in such matters:

Musgrove’s article cites empirical studies by highly regarded scholars in the field. Yet several of the *Inside HE* respondents prefer to rely on uninformed and unexamined personal opinion. The parallel would be to reject empirical studies that, say, asbestos causes certain lung cancers simply because it doesn’t match one’s “sense” of things. Like every other academic field, composition studies relies on systematic, peer reviewed studies. These include, among other things, research on actual student writing. It’s not asking too much to have this research inform our beliefs and practice.

In many ways, Hesse’s argument concisely prefigures the future need of our field. Instead of fighting belief with belief, conviction with conviction, theory with theory, we must revive and reenergize the significant research agenda that helped to create the field of composition and its curricular manifestations in writing program administration. Our future is a future of engagement in the ongoing work of a field at whose core is a fuller understanding of how students acquire the ability to write and how we can best support that acquisition through principled, well-run writing programs. It is a future that continues to enact the many calls from the early years of composition to “regard writing as a basic academic discipline [and] consider it not only as an activity that people carry on in their lives that we teach them to perform but also as a subject to be studied, as an area of enquiry, a discipline . . .” (Klaus 339).

NOTES

1. This essay is a revised version of a keynote address of the same title delivered at the Council of Writing Program Administrators annual conference in Chattanooga, TN, July 14, 2006.

2. As of mid-2007, the Course-of-the-Month feature has been temporarily discontinued, leaving behind its archives and a promise to bring “occasional” critiques, as well as positive examples, back at a later time.

WORKS CITED

- American Civil Liberties Union. “Frequently Asked Questions About Intelligent Design.” 16 September, 2005. 2 July 2007 <<http://www.aclu.org/religion/schools/16371res20050916.html>>.
- Amrein, Audrey L., and David C. Berliner. “High-Stakes Testing, Uncertainty, and Student Learning.” *Education Policy Analysis Archives* 10.18 (2002). 14 January 2007 <<http://epaa.asu.edu/epaa/v10n18/>>.
- Anderson, Amy, Rick Evans, Rich Kozak, and Blair Peterson. “At Issue: Improving the Perception of Public Education.” *Horizon*, Feb. 27, 2006. 6 June 2007. <<http://horizon.unc.edu/projects/issues/papers/Anderson.html>>.
- Anson, Chris M. “Response and the Social Construction of Error.” *Assessing Writing* 7 (2000): 5–21.
- Barton, Ellen. “More Methodological Matters: Against Negative Argumentation.” *College Composition and Communication* 51.3 (2000): 399–416.
- Bazerman, Charles. *Handbook of Research on Writing: History, Society, School, Individual, Text*. Mahwah, NJ: Erlbaum, 2007.
- Beach, Richard, and Lillian S. Bridwell, eds. *New Directions in Composition Research*. New York: Guilford, 1985.
- Biddle, Bruce J., and David C. Berliner. “Small Class Size and its Effects.” *Educational Leadership* 59.5 (2002): 12–23.
- Braddock, Richard, Richard Lloyd-Jones, and Lowell Schoer. *Research in Written Composition*. Champaign, IL: National Council of Teachers of English, 1963.
- Branscomb, H. Eric. “Shadows of Doubt: Writing Research and the New Epistemologies.” *College English* 57.4 (1995): 469–80.
- Connors, Robert J., and Andrea A. Lunsford. “Frequency of Formal Errors in Current College Writing, or Ma and Pa Kettle Do Research.” *College Composition and Communication* 39.4 (1988): 395–409.
- . “Teachers’ Rhetorical Comments on Student Papers.” *College Composition and Communication* 44.2 (1993): 200–23.
- Cotton, Kathleen. “Teaching Composition: Research on Effective Practices. *School Improvement Research Series, Topics Synthesis #2*. Portland, OR: Northwest Regional Educational Laboratories, 1988. 2 June 2007 <<http://www.nwrel.org/scpd/sirs/2/topsyn2.html>>.
- “Course of the Month.” The John William Pope Center for Higher Education Policy. 25 June 2007. 1 April 2009 <http://www.popecenter.org/course_month/index.html>.
- Diamond, Robert M. *Designing and Assessing Courses and Curricula: A Practical Guide*. San Francisco: Jossey-Bass, 1998.
- Dowling-Sendor, Benjamin. “Drawing the Line Between Science and Religion.” *American School Board Journal* 193.3 (2006): 49–61.

- Durst, Russell. "Research in Writing, Postsecondary Education, 1984–2003." *L1-Educational Studies in Language and Literature* 6.2 (2006): 51–73.
- Ebert, Jessica. "Georgia Court Bans Biology Textbook Stickers." *Nature* 433 (20 January 2005): 182.
- Fischer, C. G., and G. E. Grant. "Intellectual Levels in College Classrooms." *Studies of College Teaching*. Ed. Carolyn L. Ellner and Carol P. Barnes. Lexington, MA: Heath, 1983. 47–60.
- Fulkerson, Richard. "Composition at the Turn of the Twenty-First Century." *College Composition and Communication* 56.4 (2005): 654–87.
- Hamilton-Wieler, Sharon. "Naturalistic or Experimental Designs? A Clarification of their Roles in Composition Research." *Rhetoric Review* 9.1 (1990): 190–92.
- Hartwell, Patrick. "Grammar, Grammars, and the Teaching of Grammar." *College English* 47.2 (1985): 105–27.
- Haswell, Richard. "NCTE/CCCC's Recent War on Scholarship." *Written Communication* 22.2 (2005): 198–223.
- Hillocks, George, Jr. *Research on Written Composition: New Directions for Teaching*. Urbana, IL: National Conference on Research in English/ERIC Clearinghouse on Reading and Communication Skills, 1986.
- Hoetker, James, and Barbara Hoetker Ash. "An Experiment with the Wording of Essay Topics." *College Composition and Communication* 35.4 (1984): 423–25.
- Hoetker, James, and Gordon Brossell. "A Procedure for Writing Content-Fair Essay Examination Topics for Large-Scale Writing Assessments." *College Composition and Communication* 37.3 (1986): 328–35.
- Hoetker, James, and Gordon Brossell. "The Effects of Systematic Variations in Essay Topics on the Writing Performance of College Freshmen." *College Composition and Communication* 40.4 (1989): 414–21.
- Hunt, Kellogg. *Syntactic Maturity in Schoolchildren and Adults*. Monographs of the Society for Research in Child Development 35.1 (1970).
- Johnson, Kirk A. "Do Small Classes Influence Academic Achievement? What the National Assessment of Educational Progress Shows." *Heritage Foundation Policy Archives*, 9 June 2000. 5 June 2007 <<http://www.heritage.org/Research/Education/CDA00-07.cfm>>.
- Juzwik, Mary M.; Svjetlana Curcic; Kimberly Wolbers; Kathleen D. Moxley; Lisa M. Dimling; and Rebecca K. Shankland. "Writing Into the 21st Century: An Overview of Research on Writing, 1999–2004." *Written Communication* 23 (2006): 451–76.
- Klaus, Carl. "Public Opinion and Professional Belief." *College Composition and Communication* 27.4 (1976): 335–40.
- Lauer, Janice M., and William J. Asher. *Composition Research: Empirical Designs*. New York: Oxford UP, 1988.
- Light, Richard J. *The Harvard Assessment Seminars, Second Report*. Cambridge: Harvard UP, 1992.
- Lindemann, Erika, and Gary Tate, eds. *An Introduction to Composition Studies*. New York: Oxford UP, 1991.

- Linder, Douglas O. "State v. John Scopes ('The Monkey Trial')." Based on a speech delivered on the occasion of the 75th anniversary of the opening of the Scopes trial, Kansas City, MO, 10 July 2000. 15 June 2007 <<http://www.law.umkc.edu/faculty/projects/ftrials/scopes/evolut.htm>>.
- Lunsford, Andrea A., and Karen J. Lunsford. "'Mistakes Are a Fact of Life': A National Comparative Study." *College Composition and Communication* 59.4 (2008): 781-806.
- MacArthur, Charles A., Steve Graham, and Jill Fitzgerald, eds. *Handbook of Writing Research*. New York: Guilford, 2006.
- McLelland, Ben W., and Timothy R. Donovan, eds. *Perspectives on Research and Scholarship in Composition*. New York: Modern Language Association, 1985.
- Miller, Nan. *English 101: Prologue to Literacy or Postmodern Moonshine?* Inquiry Paper No. 24. John William Pope Center for Higher Education Policy, 19 June 2006. 1 July 2007 <http://www.popecenter.org/inquiry_papers/article.html?id=1702>.
- Mosenthal, Peter; Lynne Tamor; and Sean A. Walmsley, eds. *Research on Writing: Principles and Methods*. New York: Longman, 1983.
- Murphy, Dan, and Bella Rosenberg. "Recent Research Shows Major Benefits of Small Class Size." *Educational Issues Policy Brief*, 3 (June 1998). Washington, DC: American Federation of Teachers. <<http://www.aft.org/pubs-reports/downloads/teachers/Policy3.pdf>>.
- Musgrove, Lawrence. "Worse Than Ever?" *Inside Higher Ed.*, 11 July 2006. 3 July 2007 <<http://www.insidehighered.com/views/2006/07/11/musgrove>>.
- Myers, Miles. *The Teacher-Researcher: How to Study Writing in the Classroom*. Washington, D.C.: ERIC Clearinghouse on Reading and Communication Skills, 1985. ERIC Document Reproduction Service, ED 261 394.
- North, Stephen M. *The Making of Knowledge in Composition: Portrait of an Emerging Field*. Upper Montclair, NJ: Heinemann/Boynton-Cook, 1987.
- Nystrand, Martin. "Dialogic Discourse Analysis of Revision in Response Groups." *Discourse Studies in Composition*. Ed. Ellen Barton and Gail Stygall. Cresskill, NJ: Hampton, 2002. 377-92.
- Nystrand, Martin, and Deborah Brandt. "Response to Writing as a Context for Learning to Write." *Writing and Response: Theory, Practice, and Research*. Ed. Chris M. Anson. Urbana, IL: National Council of Teachers of English, 1989. 103-13.
- Orr, H. Allen. "Devolution: Why Intelligent Design Isn't." *The New Yorker*, 30 May 2005. <http://www.newyorker.com/archive/2005/05/30/050530fa_fact?currentPage=1>.
- Paulson, Eric J., Jonathan Alexander, and Sonya Armstrong. "Peer Review Re-Viewed: Investigating the Juxtaposition of Composition Students' Eye Movements and Peer-Review Processes." *Research in the Teaching of English* 41.3 (2007): 304-35.
- "Project Steve." Oakland, CA: National Center for Science Education. 17 October 2008. 1 April 2009 <<http://www.ncseweb.org>>.

- Ritter, Kelly. "Extra-Institutional Agency and the Public Value of the WPA." *WPA: Writing Program Administration* 29.3 (2006): 45–64.
- Roen, Duane, Veronica Pantoja, Lauren Yena, Susan K. Miller, and Eric Waggoner, eds. *Strategies for Teaching First-Year Composition*. Urbana, IL: National Council of Teachers of English, 2002.
- Rose, Shirley K, and Irwin Weiser, eds. *The Writing Program Administrator as Theorist: Making Knowledge Work*. Portsmouth, NH: Boynton/Cook-Heinemann, 2002.
- Sanders, Jon. "American Universities—Where 'Diversity' Is Like Peanut M&Ms." "Course of the Month" column. The John William Pope Center for Higher Education Policy. 13 April 2006. 1 April 2009 <http://www.popecenter.org/course_month/article.html?id=1688>.
- Singer, Steven A. *Revising Strategies of ESL and Native English Speaking Students Writing in a Collaborative Computer Network Environment: A Multiple Case Study*. East Lansing, MI: National Center for Research on Teacher Learning, 1996. ERIC Document Reproduction Service, ED 461 279.
- Smagorinsky, Peter, ed. *Research on Composition: Multiple Perspectives on Two Decades of Change*. New York: Teacher's College Press, 2006.
- Sommers, Nancy. *The Harvard Study of Undergraduate Writing*. Cambridge: Harvard University. 28 June 2007. <<http://www.fas.harvard.edu/~expos/index.cgi?section=study>>.
- Stern, Lesa A., and Amanda Solomon. "Effective Faculty Feedback: The Road Less Traveled." *Assessing Writing* 11 (2006): 22–41.
- Tannen, Deborah. *The Argument Culture: Stopping America's War of Words*. New York: Ballantine, 1999.
- Taylor, Todd. Quoted in Jamie Schuman, "Pope Report Rips Into Writing at UNC, NCSU." *Herald-Sun*, 19 June 2006.
- Trowell, Kevin. "Divided by Design: Kitzmiller v. Dover Area School District, Intelligent Design, and Civic Education." *Georgetown Law Journal* 95.3. 2 July 2007 <http://www.law.georgetown.edu/news/releases/documents/trowell_note_FINAL-1.pdf>.
- Vandenberg, Peter, Sue Hum, and Jennifer Clary-Lemon, eds. *Relations, Locations, Positions: Composition Theory for Writing Teachers*. Urbana, IL: National Council of Teachers of English, 2006.
- White, Edward. "Use it or Lose It: Power and the WPA." *WPA: Writing Program Administration* 15.1–2 (1991): 3–12.

