



Liminal Spaces and Research Identity

The Construction of Introductory Composition
Students as Researchers

James P. Purdy and Joyce R. Walker

The Web is not only a place where readers read; it is a place where student writers can, and if they can they will, do research.

—Charles Moran, “Technology and the Teaching of Writing”

Introduction: Student Research Identities in a Digital Age

Teaching students to conduct scholarly research is an important component of many writing-intensive courses at the university level, including both lower- and upper-division writing courses in general education programs and writing-intensive courses in specific disciplines. Research instruction for introductory students, in particular, is usually the responsibility of first-year composition teachers. Introductory composition courses often include a research component in which the mental and physical activities of doing research are discussed and practiced. As English studies teacher-scholars, we want to promote a better understanding of the research identities we help students cultivate in these classes. We are calling *research identity* that confluence of skills, knowledge, attitudes, and practices that combine when an individual engages in research activities. Such identities can be crucial for how students approach both further work in the academy (as undergraduates and beyond) and as civic participants in the world.

Composition handbooks, library websites, and other online resources

construct research identities for students that highlight their unfamiliarity with the scholarly research practices that they will be expected to employ as a college student. Our analysis of these instructional texts for this study reveals that the new research identities constructed for students through these texts are often based on a linear, print-based model of research, in which a “good” student researcher is one who is efficient and follows only prescribed pathways—pathways that frequently denigrate or deny the experiences of using nonacademic and online research spaces that students bring to academic writing tasks. Being a “good” academic researcher, according to these texts, requires students to leave behind their existing identities as online researchers. The texts we analyzed imply that for students to succeed as college researchers, they need, in a sense, to abandon their current practices and admit that they do not know how to do research.

This shift matters in terms of students’ direct learning processes. The construction of a powerful, directed research identity is necessary for students to engage in learning about and making knowledge in both academic and nonacademic environments. We contend that students’ ability to continue the process, already begun when they reach the university, of building adaptive, flexible researcher identities can be significantly damaged if our instructions, methods, and tools ignore, disregard, or even suppress the knowledge on which their existing identities are based.

This article answers Susan Miller’s (1991: 51) call for focus on “the constructed marginal identity of [composition’s] always ‘new’ students” by examining some of the tools that contribute to this problem and explaining ways in which the lens of liminality illuminates the consequences of how we frame students as researchers. By considering the implications of research-writing pedagogy for introductory composition students, it also, though less directly, responds to Mariolina Rizzi Salvatori and Patricia Donahue’s (2010: 27) call to return the student to the “conceptual center” of composition studies. It argues that prevailing approaches to research instruction in introductory composition courses, as represented in print and digital instructional materials, reflect outdated theoretical views and may damage students’ researcher identity. Teaching research as a closed, linear, universal process prevents students from leaving the liminal space.

The Need to View First-Year Composition Classes as Liminal Spaces

We believe that it is possible to base instructional texts in composition on an entirely different set of suppositions. To do so, we call for abandoning a straightforward assumption of skill acquisition and instead highlighting

the nature of introductory composition classes as liminal spaces that mark a boundary between the inside and the outside of the academy. *Liminality*, coming from the Latin word for “threshold,” is what anthropologist Arnold Van Gennep (1960: 10–11) presents as the transitional step in rites of passage (between separation and incorporation). He asserts that “to cross the threshold,” that is, to literally or figuratively pass through a liminal space, “is to unite oneself with a new world” (20). Introductory composition classes serve as such a threshold into the “new world” of the academy.

For Janet Murray (1997) this transition to a new world entails movement from fantasy to reality, from private to public. In her discussion of narrative in online spaces, she defines *liminal* as “the threshold between the world we think of as external and real and the thoughts in our mind that we take for fantasies.” For her, the liminal state is one of immersion, when a narrative “induces a deep state of absorption” (292). The composition classroom, of course, is a very real and public space, but it is likewise a space where students are asked to immerse themselves in a (for most of them) new academic culture and regard as fantastical their prior (and private) experiences with research. That Murray presents the computer itself as a liminal object (99) further supports why students’ online research activities are sometimes viewed with suspicion: they are not quite real, at least in the context of the first-year composition classroom.

Our focus on liminality may seem similar to David Bartholomae’s (1985) discussion of students’ attempts to enter academic discourse communities. In his renowned essay “Inventing the University,” he describes students’ transition this way: “[Students’] initial progress will be marked by their abilities to take on the role of privilege, by their abilities to establish authority” (162). Rather than view this transition as one of gaining privilege, however, we are interested in highlighting the ways that attitudes about students position them as undergoing a “change of being” through the ritual of academic research-writing instruction, rather than as simply adapting to or successfully incorporating the features of academic discourse into their writing and research practices. From this perspective, classroom spaces (whether online or face-to-face) are locations where beings (i.e., students) are in the process of changing from one status to another, with all of the attendant ambiguity and complexity such change entails. This perspective allows us to situate the teaching methods and texts in introductory courses as attempts to control and direct this change in status and recognize how the use of such materials has a significant influence on the representations of “self-as-researcher” that students are allowed (or encouraged) to develop.

The proliferation of digital resources for finding, compiling, and contributing information has increased the uneasiness that teachers, librarians, administrators, and other academic professionals feel about the liminal status of students in these introductory courses. This uneasiness reveals itself in expressions of alarm that students do not, or cannot, consult the “right” online research sources and thereby will use inappropriate materials, as well as in the strict adherence to a static, product-oriented approach to searching for sources (see, e.g., Miller and Tegler 1986; Gillette and Videon 1998; Burton and Chadwick 2000; Grimes and Boening 2001; Herring 2001; Graham and Metaxas 2003; Lederman 2004; Wang and Artero 2005; Hargittai et al. 2010). Meanwhile, students themselves, at least those in the United States with consistent access to networked computer technologies, often come into this liminal space with a range of research strategies already in place. Far from being empty vessels, many of these students are brimming over with knowledge about how to find things (e.g., articles, people, information, products) through the use of various online resources. Students often know how to do digital searching—better than we as instructors do. As Charles Moran (2001: 213) makes clear in an epigraph for this article, students *are* researchers in online spaces (and even were a decade ago when Moran’s piece was published).¹ We therefore contend that academic research practices need to be *connected* to students’ existing practices rather than set up as wholly separate from (and better than) them.

As a result of their prior experiences, individual students may not be fully aware of their representation as liminal beings whose knowledge and practices must be transformed. But in introductory classes the need for this transition is represented forcefully. Instructional texts provide a focus for the institution’s desire to control and direct students’ movement into the established practices of research that academics (and academic disciplines) use to construct students’ knowledge making, their learning spaces, and themselves. These textbooks also seek to police what (un- or undertrained) composition instructors might do and say in introductory courses. In particular, they aim to regulate how teachers present academic research, constructing as neat and tidy what academics do. This use of textbooks is not new. Robert Connors (1997: 69–79, 85, 110) and Debra Hawhee (1999: 510–15) explain how composition handbook authors created these textbooks to dictate what instructors would teach. Instructors did not need—and, in fact, were not trusted—to develop their own lesson plans or grading criteria; these were outlined in the books. Though beyond the scope of our project, this move to control composition teachers as well as students with instructional materials is another

example of how the introductory composition classroom serves as a liminal space, in this case with new instructors, who, not incidentally, frequently are graduate students and adjunct instructors, both groups that exist at the crossroads of multiple identities.

Viewing research skills instruction from the perspective of liminality is important because research practices are key activities through which disciplines construct, organize, and define themselves. Often disciplinary research activities are taught through the use of templates, rules, trends, and general guidelines, while the underlying ways these practices shape and define the discipline remain only tacitly understood. As David Russell (2002: 16) notes in his discussion of the evolution of writing in the academic disciplines, “Because apprentices in a discipline very gradually learn its written conventions as an active and integral part of their socialization in a community, the process of learning to write seems transparent.” If we understand disciplinary courses as spaces in which this kind of tacitly expressed construction of a research identity is also actively occurring, then introductory writing courses can be understood as liminal spaces in which the specific work of disciplinary construction is not yet in process but where the student is clearly positioned within the physical and social spaces of the academy — and therefore as a participant in its goals and identity constructions. And if these introductory courses are, in fact, a kind of anteroom that precedes the establishment of disciplinarity and yet identifies the student as belonging in some way to academic culture, then the instructional tools (e.g., books, CDs, websites) used to teach research skills in these courses carry important messages designed to situate the student-as-researcher and control the student’s developing identity-as-researcher.

Instructional Materials for Teaching Research Practices

For this study, we performed content analysis on instructional materials of several types: composition handbooks, library websites, and online research resources. The content analysis focused on each text’s discussion of the research process, including such topics as research-writing practices, source evaluation, online research, search efficiency, and practice linearity and recursivity. The appendix shows the template we used for the content analysis of each text and provides an abbreviated example from one text. We completed this template with notes and specific examples from each text we studied.

The print handbooks studied were selected because they are relatively recent editions of some of the most used texts in composition instruction and

represent multiple major publishers of instructional materials for university composition: Bedford/St. Martin's, McGraw Hill, Prentice Hall, and Wadsworth. Our discussion of print textbooks in this article focuses on three texts that illustrate the larger trends we saw: *The Brief Wadsworth Handbook* (Kirsznner and Mandell 2007), *A Writer's Resource: A Handbook for Writing and Research* (Maimon, Peritz, and Yancey 2007), and *Research Strategies for a Digital Age* (Tensen 2010). We also studied a range of digital texts, including online companions to or versions of print textbooks, popular library websites, and other online research materials. This article focuses on two such texts that represent the larger trends we saw: Cornell University Library's "The Seven Steps of the Research Process" (Engle 2009) and the "Internet Detective" (Place et al. 2006).

We realize that instructional texts in composition are sometimes held up unfairly for critique. Publisher guidelines, mass marketing, and economic demands often shape these texts in ways somewhat beyond their authors' control. Our intention is not to scapegoat textbooks or to create "straw men" to blame for problems of pedagogy but rather to study the texts that continue to be a primary vehicle for research-writing instruction for introductory college students. While some first-year composition programs (e.g., Illinois State University; University of Illinois, Urbana-Champaign) are experimenting with textbook alternatives, many, if not most, still require (or strongly suggest) default textbooks—at least for adjuncts and graduate students, who teach most first-year composition sections. We think that this fact, along with the continued presence of textbook representatives on college campuses and at conferences, as well as the high volume of textbooks that college bookstores sell, supports textbooks' significant role in first-year composition instruction. While instructors can choose not to use these textbooks, even if they are required, we doubt that the industry would have such influence and receive such attention if its texts were simply purchased and never used. The work of Connors (1997), Hawhee (1999), A. Abby Knoblauch (2011), and Libby Miles (2000), among others, substantiates that textbooks are—and have historically been—an influential feature of first-year composition instruction.

Though our objects of analysis do not represent an exhaustive collection of instructional materials and will likely be in new editions by the time this text is published, we feel confident that they represent popular approaches and, as such, continue to merit our attention as texts that shape students' researcher identities. The composition handbook genre perhaps lends itself to some extent to a linear, prescriptive approach to research. As Mike Rose (1983: 210) argues, "Anything complex is best explained in print

by reducing its complexity.” But even online sources we studied rely on simplified lists, so the print medium is at least not totally responsible for this approach to research instruction.

While what we note below are problems with these texts’ discussions of research processes, we wish to emphasize that these texts do offer helpful information to students. As Rose (1981: 67) characterizes the composition texts in his textbook study, they often make “good sense” and, at least outwardly, draw on research from composition studies. Despite their benefits, however, these texts offer research instruction that is both troubling and inaccurate. Especially concerning is that these texts accurately represent current beliefs among many academic practitioners about effective and efficient strategies for doing and teaching research and conform to a widespread belief in the importance of research strategies that limit or narrow student behaviors to fit more comfortably within the boundaries of traditional academic knowledge-making practices. These boundaries may be ill-defined and more tacit than explicit, but they play a large part in constructing academic identity, as well as the products of academic activity.

As representatives of this boundary making, instructional materials are valuable starting points in our effort to trace the ill-matched connection between the research practices of students as they enter liminal educational spaces and the much more narrowly constructed practices allowed to the established researcher. Ultimately, because textbooks can strongly shape the teaching practices of composition instructors, especially those new to the field, a better understanding of how these texts work to shape identity is necessary; without it, we may be unable to assist students significantly in building the kind of robust research identities they will need in a complex, information-rich world.

Some composition texts present research processes and student researchers in ways that remedy problems found in the instructional materials we examined. For example, Doug Downs’s CD-ROM *i-cite* (2006) offers students’ nonacademic and online research practices as bridges to, instead of polluting influences on, scholarly research (see Purdy 2007), and Bonnie Stone Sunstein and Elizabeth Chiseri-Strater’s *Fieldworking* (2006) positions students as ethnographic researchers capable of meaningful investigation. Based on the study we report in this article, though, this expanded notion of research instruction is the exception and is not (yet) widespread.

In the last decade, a growing body of scholarship in composition studies has emerged that argues for viewing, treating, and teaching undergraduate students as researchers (e.g., Kinkead 2007, 2003; Shipka 2005), most

notably Laurie Grobman and Joyce Kinkead's *Undergraduate Research in English Studies* (2010). Publication venues for undergraduate research, such as *Young Scholars in Writing* and the *Journal of Undergraduate Multimedia Projects (JUMP)*, also have arisen to allow undergraduates to publish. Such texts, we believe, substantiate our claim as they draw attention to the need to change how we as a discipline think about undergraduate students as researchers. They offer insightful arguments and provide evidence for framing undergraduates as capable primary researchers instead of merely research paper writers, an approach we support. These texts, though, do not purport to teach students research. Their primary goal is to change how scholars think about students — not to instruct students themselves — so they do not (directly) solve the problem we identify.

Efforts to Contain Outside Source Pollution

Discussions of research in the instructional materials we studied reflect a desire to maintain the purity of academic research by limiting (or ideally eliminating) potentially polluting outside influences. These influences are taken to be those practices and sources students bring with them from their work in nonacademic online spaces. The “solutions” these sources offer are to require students to ignore what they already know from previous experiences in nonacademic and online spaces and to insist that students begin research work with the library. We address each of these solutions below.

While some textbooks do acknowledge that students have existing researcher identities and therefore some sense of what it means to do research, these same texts often explicitly advocate that students reject previous practices. When students conduct academic research, in other words, the skills and strategies they bring with them need to be retooled or abandoned for fear that they will pollute their academic work. Elaine P. Maimon, Janice H. Peritz, and Kathleen Blake Yancey² (2007: 207), for example, start *The Writer's Resource* chapter on research by telling their student audience, “You do research all the time.”³ Despite this acknowledgment of students as researchers, which, notably, was removed in the 2010 edition, they present the site of much of this research, the Internet, as immediately suspect: “The Internet now provides rapid, direct access to an abundance of information unimaginable to earlier generations of students. The results of Internet searches, however, can sometimes provide an overwhelming flood of sources, many of them of questionable legitimacy” (207). Students are cautioned against continuing to rely on this space.

The “Internet Detective” (Place et al. 2006) more forcefully presents

the idea that students cannot count on “regular” research skills for college-level work: “You may have used the Internet to help with school work or personal research but you can’t necessarily rely on the same web sites and skills to get you through higher or further education.” Indeed, the home page of the site admonishes students, “Sure, you use the Internet all the time, but you need to wise up to the web when you use it for your university or college work.” The intimation here is that students cannot be “wise” to the ways of the World Wide Web without replacing their existing practices — even practices used for previous school work.

Bonnie L. Tensen (2010) further reinforces this view. In her introduction to *Research Strategies for a Digital Age*, she admits that student researchers are very proficient at certain kinds of searching on the web but then goes on to explain that this proficiency does not make them good academic researchers: “Although no one can dispute that the WWW has greatly increased our access to information, it also creates a special set of problems for students who do not (or cannot) distinguish between the credible sources available via the electronic library and the morass of unregulated information on the World Wide Web” (v–vi). Tensen positions researchers as needing specific sets of skills: “Basic research strategies and library skills,” evaluation skills (i.e., the ability to identify credible sources), and incorporation and documentation skills (vi). We do not disagree that the skill sets Tensen identifies are important to research activities or that students need help assessing source credibility. We do disagree, however, that these skill sets must be wholly separate from the skill sets students use in nonacademic research. Web sources can indeed be of “questionable legitimacy,” as Maimon, Peritz, and Yancey assert (2007: 207), but what we find particularly troubling in these sources is that students are to leave behind rather than build on what they already know about navigating digital research spaces.

This concern over outside influences may be connected to the zealotry with which the library is advocated as the necessary and primary seat of knowledge dissemination. Materials we studied contend that if students do not know how to use the library and do not start there, they are not good researchers. That is, effective use of library resources is a precondition to being a successful academic researcher. Tensen (2010) illustrates this thinking: “If you want to do your best work on an academic research project, you *must* resist the allure and deceptive ease of the Web. It’s worth repeating: For virtually every research project you will undertake in college, the best place to *begin* your search is your school library” (22, emphasis in original). This mandate reinforces a fundamental belief of many in academia: the larger

masses rely on academics, and the academic library, to create, control, and deliver knowledge. Academic libraries certainly serve this important function—and do so well—but cautions like Tensen’s are seemingly based on the underlying anxiety that the academic library may become less necessary or less relevant if reliable knowledge is accessible in other nonacademic forums. Such views fail to embrace the notion that, as Madeleine Sorapure, Pamela Inglesby, and George Yatchisin (1998: 414–15) argue, “there are potentially valuable Web sites available to student researchers that should not be dismissed just because they are dissimilar to sources found in the library.”

Positioning the library as the required starting place for academic work is both impractical and inaccurate: students are already looking to more easily accessible online resources first. All five of the researchers we observed and interviewed for a previous study (Purdy and Walker 2007) usually use Google or another public search tool rather than the library to begin their searches for scholarly tasks. A survey conducted in spring 2009 of 523 first-year composition students at a midwestern university (Purdy forthcoming) further reinforces the popularity of public search engines. While most students (230) responded that they begin academic research with library databases (which would please Tensen [2010] and other authors), many (190) replied that they start with Google. Presenting the library as the only correct option, then, disenfranchises a sizable proportion of students. And if only for its immediacy alone, the web is often the best place to quickly see the range of rhetorical action regarding a topic. Because the goal of beginning a research project is to find an interesting topic and a context for it (a figurative—or literal—place where the topic is under discussion), the web can be a productive starting place. The library, as a specialized location where it is frequently hard to search across disciplines, is not always the best place to begin.

As a result of its privileging of the library, Tensen’s book, although it was updated for 2010, ignores other possible places of invention. For example, it does not mention Google Scholar, a digital resource that targets scholarly texts. This absence is telling: Tensen’s text ignores potential ways to connect with the online spaces in which students are often more comfortable (and how such spaces can and do connect with libraries). For us, requiring students to start at the library alienates them from the processes with which they are familiar and comfortable and makes them see themselves not as academic researchers but as students forced to conduct academic research. It also potentially confuses them. Situating the web as a separate, suspect place can misdirect students from useful library resources. After all, academic libraries now have extensive digital resources and article databases on the web.

We want to be clear that the academic library is a valuable resource students should use when conducting academic research. Students often avoid the library to their detriment. But establishing it as the unquestioned, necessary starting place disregards what students are already doing and what we know to be true about invention. In her discussion of ways to help students understand and evaluate new web genres, Michelle Sidler (2002) helpfully reinforces that students who know how to conduct research in libraries can better understand how to find and evaluate sources for online research. Sidler is clear, though, that students will need to move *beyond* understanding online spaces in terms of a print library: “Students will soon find that the Web houses a more diverse range of texts, necessitating metaphors and maps different from those of a traditional library” (69). Mandating that students begin at the library may not allow them to formulate these different metaphors and maps.

Outdated Approaches to Teaching Research Strategies

The aforementioned moves that instructional materials make reflect a desire to contain potential contamination. The next several moves apply models of writing popular in the 1970s and early 1980s to discussions of research. As represented by the texts we studied, instructional materials have developed (or maintained) an approach to understanding how research happens that is eerily reminiscent of aspects of “stage” models and early cognitive approaches to writing. The stage model of writing as a linear progression of steps was disputed by cognitive theorists, among others (e.g., Flower and Hayes 1981; Sommers 1980).⁴ The universality of these steps (i.e., their application as generic strategies across all writing activity) and their status as separate, bounded processes of writing were further challenged by social constructionists (e.g., Bizzell 1982).⁵ Applying such approaches to research, then, resurrects outdated theoretical approaches and keeps us from seeing the complexities of research behaviors and the various kinds of search knowledge that are critical to developing research skills. It fails to capitalize on what we as a field have learned about meaning making.

In almost every example of instructional materials we examined, students are directed to follow a series of linear steps to become good academic researchers. Instructional materials present research as a step-by-step controlled process, much like early stage models of writing. What Rose (1981: 68) argued of freshman composition texts’ discussion of writing — they rely on stage models that are inaccurate and misleading — continues to characterize these texts’ discussions of research. For instance, *The Brief Wadsworth*

Handbook (Kirszner and Mandell 2007) presents “The Research Process” as a “systematic process” with eleven linear, sequential steps offered in the form of a checklist: “Move from an Assignment to a Topic. Do Exploratory Research and Formulate a Research Question. Assemble a Working Bibliography. Develop a Tentative Thesis. Do Focused Research. Take Notes. Fine-tune Your Thesis. Outline Your Paper. Draft Your Paper. Revise Your Paper. Prepare Your Final Draft” (109). Each step is treated in a distinct section of the text, following the order outlined in the checklist.

Similarly, the Olin Library Reference and Research Services website from Cornell University Library (Engle 2009) also isolates specific steps, in this case seven, for students to follow; figure 1 shows the first three: “Identify and Develop Your Topic. Find Background Information. Use Catalogs to Find Books and Media.” The additional steps are “Use Indexes to Find Periodical Articles. Find Internet Resources. Evaluate What You Find. Cite What You Find Using a Standard Format.” These steps are certainly useful. Our concern is not that texts instruct students to engage in these activities. However, the idea that researchers move through them once in this order oversimplifies and misrepresents research writing, giving students a sanitized and inaccurate model to which to try to match their practices. Several handbooks recognize that there are choices and options in research processes: *The Blair Handbook* (Fulwiler and Hayakawa 2007: 321) describes research as “an active and unpredictable process”; *Hodges’ Harbrace Handbook* (Glenn and Gray 2007: 496, 500, 502, 506, 515) uses conditional phrasing such as “you may” and “you can” when discussing research; and *A Writer’s Reference* (Hacker 2007: 324) recognizes that “no single search strategy works for every topic.” However, through their structure and advice, these texts reinforce a correct, orderly process through which students must progress. Once students complete a step, they can check it off and move on to the next step.

Through the presentation of checklists and linear paths to follow in order, these texts offer a “one-size-fits-all” model that presents research steps as always applicable. This approach reflects early cognitive models by offering these research steps as universal. Both *The Brief Wadsworth Handbook* and the Cornell University Library website, for instance, present their checklists as “The Research Process” (Kirszner and Mandell 2007: 109; Engle 2009: n.p., emphasis added). The Cornell site in particular trumpets the universality of its advice. It designates its checklist as “The Seven Steps” for “The Research Process” (Engle 2009: n.p., emphasis added), underscoring a singularity and widespread correctness of these steps.

STEP 1: IDENTIFY AND DEVELOP YOUR TOPIC

SUMMARY: State your topic as a question. For example, if you are interested in finding out about use of alcoholic beverages by college students, you might pose the question, "What effect does use of alcoholic beverages have on the health of college students?" Identify the main concepts or keywords in your question.

More details on how to identify and develop your topic.

STEP 2: FIND BACKGROUND INFORMATION

SUMMARY: Look up your keywords in the indexes to subject encyclopedias. Read articles in these encyclopedias to set the context for your research. Note any relevant items in the bibliographies at the end of the encyclopedia articles. Additional background information may be found in your lecture notes, textbooks, and reserve readings.

More suggestions on how to find background information.

[Return to the top](#)

STEP 3: USE CATALOGS TO FIND BOOKS AND MEDIA

SUMMARY: Use guided keyword searching to find materials by topic or subject. Print or write down the citation (author, title, etc.) and the location information (call number and library). Note the circulation status. When you pull the book from the shelf, scan the bibliography for additional sources. Watch for book-length bibliographies and annual reviews on your subject; they list citations to hundreds of books and articles in one subject area. Check the standard subject subheading "--BIBLIOGRAPHIES," or titles beginning with Annual Review of... in the Cornell Library Classic Catalog.

More detailed instructions for using catalogs to find books.

Figure 1. The first three steps of "The Seven Steps of the Research Process," 2009. Michael Engle/Cornell University Library, Olin Library Reference, Research and Learning Services, Olin and Uris Libraries, Ithaca, NY, www.olinuris.library.cornell.edu/ref/research/skill.html. Reproduced by permission

The desire to offer a clear, certain, stable process is understandable. As Patricia Bizzell (1982: 235–36) argues of “inner-directed” cognitive theories of writing, certainty is appealing both as a way to bring prestige to the field of composition studies and as a way to provide definitive answers to struggling students (and, we would add, potentially to undertrained part-time and graduate student composition instructors). But, as Bizzell concludes, proclaiming writing processes as universal is ultimately inaccurate and stifling. The same is true for research processes. Offering steps can be a helpful way to begin, but presenting them as unquestionably applicable prevents the adaptability that is crucial to successful research.

This focus on discrete skills and steps for engaging in research departs from prevailing approaches to writing. Our pedagogies for teaching writing in introductory courses (and beyond) reflect the evolution of a complex perspective toward the spaces, technologies, and activities involved in learning about composing. We have moved away from perspectives that

situate learning to write as merely acquiring a skill (or set of skills) that can be taught through rigid, step-by-step processes, and we no longer claim that a specific set of writing skills will necessarily translate effectively between different kinds of writing tasks. However, the teaching of research practices in many of these same introductory classes is often situated as a straightforward process where students receive information from an instructor or a text and then practice a set of activities in which that information is used.

The learning outcomes for these classes claim that these information-and-practice activities will result in knowledge that can be applied generally to different kinds of research situations. For example, the WPA (Writing Program Administrators) Outcomes Statement for First-Year Composition (Council of Writing Program Administrators 1999: 61–62) includes the following statement about research practices: “Students should . . . Understand a writing assignment as *a series of tasks*, including finding, evaluating, analyzing, and synthesizing appropriate primary and secondary sources” (emphasis added). This statement remains in the updated 2008 version posted on the WPA website (Council of Writing Program Administrators 2008). We agree that these activities should be part of research instruction in first-year composition classes, but we worry about presenting them as a linear series of tasks.

The approach to research instruction in the materials we studied further mirrors an early cognitive approach in presenting these universal steps as discrete and distinct. The chapter in *Research Strategies for a Digital Age* on finding a topic (Tensen 2010: 3–18), for instance, presents topic discovery as something students do in their head prior to working with sources. Although Tensen mentions visiting websites or online encyclopedias, the invention component of research writing is situated much like prewriting was in earlier models of the writing process — as something one does before one can really begin — rather than presenting topic selection as an ongoing process.⁶ Students are instructed to brainstorm ideas *before* they do research and *before* they write their papers. The implications are that these processes can be easily distinguished and separated and that students finish deciding on their topic idea before doing research and need not revise or adapt this topic based upon what they find.

The extent to which research really works this way is debatable. Topic decisions can change based upon information encountered *during* the research process. There is surely value in having students brainstorm early in their processes to get direction for a research project, but limiting brainstorming to this first step prevents responsiveness to source material. For many experienced researchers, brainstorming is ongoing, and an under-

standing of this ongoing process is a necessary element of becoming an expert researcher. When students see research as more than a set of linear, distinct steps, for example, they can understand why not using all of their sources in an annotated bibliography is okay and not the mark of failure. They can realize the efficacy of evolving ideas that then lead them to find new sources. The instructional materials we studied fail to represent the complexity of research processes in ways that may ultimately damage students' ability to understand either the activities of research or themselves as engaged in a continuously revised and evolving process of research.

Cognitive models of writing, of course, came to reinforce the recursivity of writing processes (e.g., Flower and Hayes 1981); many representations of research processes, however, have yet to do so — at least in more than a superficial way. The Cornell University Library website's "Seven Steps" (Engle 2009), for example, explicitly places finding books *prior to* finding articles. It further explains, "The following seven steps outline a simple and effective strategy for finding information for a research paper and documenting the sources you find. Depending on your topic and your familiarity with the library, you may need to rearrange or recycle these steps. Adapt this outline to your needs." Based on this explanation, these steps can be recursive; however, adaptation of the "process" is seen not as a choice that an author might make in evolving his or her thinking of an idea but as a necessity of different topics or familiarity with resources. This adaptation of steps is something that happens at the beginning of the research process, not during it. The order of steps does not change as the process evolves; it can only change at the beginning.

The problems we outline above lead to a range of educational resources (textbooks, websites, and activities for training researchers) that are not particularly effective. The field of composition studies has already concluded that a universal, linear, step-based model does not and cannot accurately represent or account for a complex activity like writing. Research is likewise a complex activity. Thus, similar models of research are also inadequate. They not only leave out the possibility of including practices that students might bring to research endeavors but also fail to reflect how academic research actually happens.

Identity Construction and Research Skills Instruction

Our analysis reveals that the idea of introductory university students as "knowledge makers" and active practitioners of research activities is markedly absent from almost all the websites and textbooks we investigated. We

believe this lack is part of a larger practice in which higher education attempts to create a boundary between itself and the “outside world.” Higher education claims that it engages in a different kind of knowledge making that is more rigorous, or at least more rooted in critical use of sources and source materials. For example, Maurice Kogan (2000: 209), in his discussion of the relationships among academics, academic institutions, and larger social settings, offers this description of the forces that shape academic development: “For development to be strong, it must be firmly rooted in the intellectual self-confidence of the disciplines and subject areas to which academics belong. That is the context in which a sense of academic identity flourishes. In a confident academic system, new knowledge is generated through accepted processes of discovery and testing and through following the logic of the issues being tackled.”

Although a great deal of research has centered on the borderlines that mark different disciplines (Bazerman 1988; Becher and Trowler 2001; Välimaa 1998), this overarching identification with knowledge-making practices is a basic assumption that governs both the construction of higher educational institutional identities and the ways such institutions are managed and marketed to outsiders, as David Dill notes in his article “The Management of Academic Culture” (1982: 303–20). Indeed, as John Trimbur (1989) argues,

one of the functions of the professions and the modern university has been to specialize and to remove knowledge from public discourse and decision-making, to reduce it to a matter of expertise and technique. . . . [W]e must acknowledge that . . . the prevailing configuration of knowledge and its institutions *prevents* the formation of consensus by shrinking the public sphere and excluding the majority of the population from the conversation. (611, emphasis in original)

Students are certainly one of the populations excluded from conversations that result in the academic making of knowledge, and although it is through the introductory composition course that students are seen as entering this institutional space, they are nevertheless identified as arriving in this space with a lack of ability to participate from a position of equality—or even at all. Kogan’s (2000: 210) view of the place of students in the academic community clearly illustrates this perception:

At least one former colleague and some, if a minority, of those interviewed in a recent evaluative project would maintain that “There is no difference between faculty and students. All are learners.” Well, we all hope that we will enable students to

acquire knowledge and intellectual skills that we should have. We may well learn from students' life experiences. But do not we have a different starting point in our acquired knowledge and capacity to handle it and are our obligations not quite different?

Students, in other words, must necessarily lack “expertise and technique” (Trimbur 1989: 611) so that academia can impart it to them. They can have “life experiences,” but we as academics have “knowledge and intellectual skills” (Kogan 2000: 210). Academics' obligations include the creation of knowledge, while students' obligations involve the adoption of specific skills and practices that may, in the future, be used to create knowledge. Before they can begin this work, they must adopt a new understanding of research that is more “scholarly”; however, introductory texts often define knowledge making as an activity that is engaged in by scholars, published through peer-reviewed journals and university presses, and documented by students through a process of research. The concept of knowledge making as an act engaged in by professionals through practices such as creating experiments, conducting ethnographies, or visiting archives is deemphasized, and the idea of students as engaged in such knowledge-making is even further deemphasized. It is only later, when students enter their disciplines, that they may begin to use these activities of research to produce new knowledge.

It is partly this construction of introductory students as non-knowledge makers that characterizes their ambiguous position within the liminal space of introductory writing classes. In his landmark discussion of liminality, Victor Turner (1969) identifies the “*initiant*” as both defined by and existing in opposition to the structure of the dominant social order. Individuals experiencing this ambiguous state are then “often regarded as dangerous, inauspicious, or polluting to persons, objects, events, and relationships that have not been ritually incorporated into the liminal context” (109). For the purposes of the social order, then, the existing identity of the *initiant* must be destroyed in order to make room for the new identity. However, the *initiant*'s lack of status can also serve, as Mark Dressman (1997: 309) contends, to “hold a mirror up to the social order,” and *initiants* can have the potential to “appropriate resources and make a space for themselves within society on their own terms.” Although Dressman stresses the fluidity and egalitarianism that can exist for *initiants* within the liminal space (even in highly structured academic settings), in actuality, for students who occupy liminal spaces where identity is seen as under construction, the relation of the liminal space to the space of the community is one of not only opposition

but also active contestation. For example, Vincent A. Anfara (1998: 3) notes that a position of liminality in high school settings can be perceived as either a location where students try on adult identities or a space where authority figures attempt to control the transition from childhood to adulthood in ways that emphasize students' lack of power, freedom, or even ability to make the choices that will be required of them in the adult world.

While attitudes toward students in introductory research writing classes are not necessarily explicitly negative, they can certainly be anxiety ridden as students are seen as polluting agents. In her study of the stigmatization that can be attached to individuals suffering from chronic pain, Jean Jackson (2005: 332–33) describes the kind of negative positioning that can occur when liminal beings are seen as transgressing categorical divisions. In her study, she argues that the chronically ill occupy such a position, which results in a negative perception of these patients on the part of health care professionals. While Jackson's study focuses on chronic pain patients, not composition students, her discussion of the perception of the liminal status of these patients (and particularly the perception of them as transgressors of accepted boundaries) is at least metaphorically applicable to the status of introductory university students. A striking similarity can be established between Jackson's discussion of the ways that chronic pain sufferers can be seen to threaten normal medical routines and the ways that students are marked in some library and information science contexts as a disruptive element—bringing on the “googlization” of the academy (Lederman 2004; Norris 2006; Miller and Pellen 2009; Vaidhyanathan 2009). In this way, students are seen as both polluted and polluting because they represent knowledge and activities that travel between defined places (the academy and the world). This border crossing ties directly into the threat that students represent to the “normal” research patterns and routines for making knowledge that help academics (and academic institutions) maintain a unique status based on their production of knowledge in certain time-tested and intrinsically valuable ways.

The Damaging Effects of Disrupted Identities on Research Practices

Positioning students as “unskilled” or “illiterate” researchers not only reflects outdated theoretical views and is inaccurate but also may actually damage students' ability to create a “healthy” academic identity. When positioned as wholly ignorant, students are invited neither to critique the processes they are engaging in nor to situate their own practices within the model they are taught. Further, research pedagogy that narrows and misrepresents the

complexity and specificity of research tasks in particular situations adds to the alienation that students may begin to feel regarding the research activities they understand as “academic.”

A pedagogy that positions students as novice learners of a generalized process of step-based research fails to acknowledge the fact that the research situations they will most often encounter require flexible, adaptive skills that address processes of effective research in specific situations. This conflict is much like the writing instruction activities that David Russell and Arturo Yañez (2003: 351) discuss in their study of students’ alienation from disciplinary activity systems in a general education history course. Russell and Yañez describe a pattern of “strategic ambiguity,” which allows the concept of writing within a disciplinary activity system to be linked to concepts of generalized writing “quality” without a full examination of the contradiction between this generalized model of good writing and the specific strategies, perspectives, and constraints that are needed to operate within a more discipline-focused writing situation (342–43). Students caught within the “psychological double-bind” of an understanding of generalized writing that does not match, in reality, the instructor’s expectations for the necessary discipline-focused approaches and skills experience both frustration and a sense of alienation from the activities of writing in that setting. We are arguing that the teaching of “generalized research skills” falls into much the same kind of ambiguity, with a corresponding frustration and alienation for students, as they encounter the conflict of pedagogies that fail to adequately address flexibility and adaptation, while at the same time claiming to teach a skill that will be useful across many disciplinary boundaries and beyond the academy. Thus, students not only are asked to abandon existing research skills but also are then taught a generalized model of “academic research” that deemphasizes the need to create adaptive strategies.

In making this assertion, we want to stress that guidance from professors and librarians can be crucial to students’ ability to engage in the practices of critique and self-orientation. We are not calling for less intervention or instruction. What we find, however, is that students are not given the opportunity to evaluate the academically oriented practices they are instructed to follow. They are just to accept these practices and reject their old ones. When given this stark choice, students are likely either to cling to what is familiar (refusing to incorporate academic databases or search practices into their repertoire) or to create a boundary where personal research practices and academically oriented practices do not mix. Therefore, they miss the opportunity to learn to interrogate the appropriateness of these practices for

different rhetorical situations — precisely the kind of instruction that teacher-scholars in English studies can provide.⁷

Seeing introductory composition students as liminal beings allows us to articulate the effects of a reified research process for a student's researcher identity. For a being in a liminal state, the decisions made, by self and community, are generally intended to create a transition in which the being leaves one state and enters another. By controlling the liminal research space through the teaching of research practices that are narrowly based only on certain kinds of resources and their use, and by teaching the research process as a set of linear steps, teacher-scholars shape research practices in ways that cannot help but create dysfunction. Students cannot effectively transition out of the liminal state because they are not encouraged to integrate existing skills or to critique and assess both existing and new skills as part of specific research situations.

The result of this dysfunction is that students do not form a researcher identity fashioned in the image of the academic. Instead, either they completely ignore these bits of academic knowledge and return to their existing, nonacademic practices, or they retain existing practices but separate them from the new bits of uncontextualized knowledge about academic research practices. In either case, knowledge and practices are disrupted, and important tools for finding information and making sense of the world are made inaccessible to the researcher. Meanwhile, important knowledge the student has about the complex, conflicting, exciting, dangerous, and useful spaces that exist in the digital world beyond the library is cordoned off, ostensibly useful only for finding cheap airline tickets or locating an old high school friend through Facebook. As students move through their academic careers, they may then develop disassociated personal and academic research identities. Some researchers (e.g., Anderson and MacCurdy 2000) have argued that when a gap or tear in identity formation occurs (because of a traumatic event, physical or geographical dislocation, or movement into an unfamiliar social or intellectual situation), the lack of familiar elements for use in building identity can cause individuals both to suffer immediate distress and to ultimately develop identities that are not particularly effective because they are divorced from the individual's knowledge base. When applied to students who see the choice as maintaining a sense of self or embracing a new identity that erases useful, already acquired knowledge, they may cordon off school-based research practices, separating them from existing practices in order to maintain a more coherent sense of self.

This disruption has several long-lasting negative effects on student

practices and on their evolving research identities. First, divorcing academic and nonacademic identities means that often students do not make use of academic research vocabularies because they have not incorporated these vocabularies and concepts through negotiation with and comparison to their existing practices. They may therefore be less able to have effective conversations with librarians, instructors, or writing center consultants about their research projects or to learn how to manipulate and manage information available through library portals (which are nearly always presented in ways that are very different from general-purpose search engines such as Google or Google Scholar).

Students may also not learn to apply “academic” skills to other forums. They may be less likely to interrogate their individualized research practices because they have been separated from school-based practices (and often denigrated as less rigorous). This separation means that while they may have learned that Internet sources are often unreliable (and unacceptable for school projects), they may also be less likely to adapt and evolve a set of individualized-but-scholarly criteria for evaluating such sources during the myriad interactions they have with digital resources outside of the academy, often on a daily basis. A survey of 523 undergraduate students taking first-year composition classes at a midsized midwestern university supports the prevalence of this extracurricular research: 413, or nearly 80 percent, responded that they do nonacademic research. One student even admitted to using Google “about twenty times a day” to do research (see Purdy forthcoming). Indeed, the separation between individual and academic ways of knowing may cause some students to actively resist the concept of scholarly research, defining those practices not as an interesting (or accessible) toolkit for critically evaluating and using information but as a narrow range of databases that often confuse and even isolate bits of information in unproductive ways.

This disruption not only shapes how student researchers find information but also influences what they remember about how to do research. The narrowly presented range of research skills advocated by the instructional materials we reviewed do not provide students with the information they need to understand *why* academics use resources in the ways they do or why certain practices might have particular value in different academic disciplines. As a result, skills and practices cannot be understood in the larger academic context. For example, a student may take away a piece of knowledge about using the *Proquest* or *Wilson Select* database, but all he or she may remember about the process is that it is the “right” way to find

“scholarly” information. He or she will not learn to ask questions about such things as how to find other sites where information might be found, how to apply this knowledge to thinking about other library databases, or how to adapt the use of keywords or search strings across different kinds of databases or search engines. Purdy’s forthcoming study of undergraduate students’ research practices supports this point. Students in the study privileged the scholarly label in making choices about resources to use for research. In search-modeling activities and research assignments, they acted under the assumption that resources labeled as scholarly necessarily return scholarly sources (i.e., library databases are the right place to go for research because they have been designated as scholarly), and in research practice questionnaires, they offered quality (i.e., scholarliness) as the second most frequent reason for their favorite research resource. Finding value in the scholarly is certainly important, but a student’s sense of “scholarliness” and how to construct it through research is sadly narrowed, even crippled, when all he or she remembers is that certain locations, rather than certain activities, are scholarly.

Presenting academic knowledge making in these narrow ways may also make students less likely to be creative or innovative in their academic projects. Not only may they come to believe that academic projects can be created only through linear, step-based processes and through the use of certain kinds of acceptable resources, but also they may develop the stunningly inaccurate notion that academic knowledge is actually made primarily in these ways and through these processes. If true, this belief creates an entirely new transitional space at some point in students’ academic futures for which they will be unprepared: when they move into their major disciplines without a sense of the ways that disciplines actually make knowledge through messy, complicated, thoughtful interactions with research materials and a whole range of activities that move well beyond the library and the resources that can be found there.⁸

Sanitizing the research process, moreover, leads to narrow definitions of plagiarism. As Carol Peterson Haviland and Joan A. Mullin (2009) argue, “the simple definitions of plagiarism found on most university Web sites” — and, we would add, in instructional texts that include discussions of research like those we studied —

offer little teaching about citation as knowledge-building. This is confirmed by the participants we interviewed who, while uniformly defining plagiarism in the

negative—as direct copying without citation—described acknowledgement as integral to the literate practices by which they *build on and extend* their work within disciplines and inter-disciplines. . . . [Therefore, s]tudents often view the issues of ownership and plagiarism as a school activity rather than as a disciplinary activity, shrugging off the issues as simply rules to guess at or an individual faculty member's idiosyncrasy. (157, 166, emphasis in original)

Black-and-white definitions of plagiarism that arise from linear, step-based models of research downplay the complexity of source use and integration for scholarly work. They not only misrepresent what it means to incorporate sources and produce “original” work in particular disciplines but also hold students to different standards than faculty (e.g., faculty papers are not tested for originality by a plagiarism detection service prior to submission to a journal for review and institutional plagiarism policies often rely on templates and borrowed content). We might contend, then, that challenges surrounding plagiarism arise partly from problems in representations of research processes.⁹

Finally, we worry that these narrow practices may ultimately inhibit students' ability to use digital resources as citizens in their interactions with the world within and beyond the academy. As W. Michele Simmons and Jeffrey T. Grabill (2007: 419) emphasize, civic action requires citizens to be able to use “complex information technologies to access, assemble, and analyze information in order to produce the professional and technical performances expected in contemporary civic forums.” That is, they do not need to learn one specific process for engaging with and assembling information but rather need to cultivate the ability to see themselves as capable researchers in a variety of rhetorical situations. Simmons and Grabill further assert that citizens sometimes struggle to engage productively in these activities (423), which we believe may reflect the approach to research taken by instructional texts like those we examined. To be participatory citizens, students will need to be able to apply the kind of work they do in online spaces to other forums. If these activities are discredited, students may be less likely to find value in or critically interrogate them and therefore may be ill-prepared to effectively participate in civic activity. Students' existing ways of approaching information are often well adapted to working with the diverse kinds of information available through digital environments. In other words, students bring necessary skills that cannot be abandoned if they intend to continue working with and making use of digital resources.

Conclusion: Changing How We See Students as Researchers

Through their reliance on instructional materials like those we studied, many academic professionals, who are passionate about their role as guides who help students through the change in status to future knowledge producers, may also play an active role as barriers or filters who constrict the possible pathways leading away from the liminal experience and control the polluting influences that may have migrated from the students' former role as "nonacademic" beings. Instructional texts' strong cautions against the Internet and mandates to use only library-mandated and approved sources represent a practical and understandable desire not only to provide students with "good" information, or even to inculcate in them a sense of the ways that the academy produces knowledge, but also to control and eliminate the polluting influences of informational sources that do not conform to, and in some cases explicitly devalue, the academy as a source of legitimate knowledge. This desire to establish a clear, nonporous boundary between the academic and the nonacademic, however, is counterproductive for students. Such an approach represents an either/or mentality where a researcher must choose between using the library or using the Internet and where a "good" researcher always chooses the former. This approach therefore misses opportunities both to connect with students' existing practices and to recognize the ways in which digital sites might connect with library resources. We need to find ways to help students produce robust identities that make use of all available tools, from both academic and nonacademic research experiences, and we need to do this while still giving students training in the skills and tools that are specific to the academy, including the underlying assumptions about knowledge making that these tools both express and create.

Some future projects can help us as English studies teacher-scholars make better choices about how we present academic research to students and create better, more flexible teaching materials. One of these projects is to conduct more research into students' existing research practices. Much like recent studies that closely examine the types of writing knowledge that students bring to their work (and, consequently, their understanding of) writing in university settings (e.g., Rounsaville, Goldberg, and Bawarshi 2008; Writing in Digital Environments Research Center 2010), further study of the behaviors students bring to their research practices and understanding of researching can help us to see both what students already know and use and how they articulate that knowledge (or not) as part of their adaptation to academic research. We need to understand more explicitly what students are doing, how they describe and define their academic and nonacademic

research activities, the kinds of interfaces and search tools they use, and their perceptions of the web and the ways they remember and locate information there. Understanding how these practices work to shape a research identity will help us to match academic research pedagogies to these existing practices and to describe academic practices in ways that can be adapted, compared, and contrasted to existing practices. This information, in turn, can help us facilitate students' efforts to produce and maintain robust, flexible research identities that can make use of and analyze a diverse range of practices and resources for creating innovative approaches to knowledge making.

Additionally, this research into students' existing search skills must be closely linked to our pedagogical strategies for teaching. Like research that seeks to provide information about students' academic writing practices (e.g., Bazerman and Prior 2005; Prior et al. 2007), research into student research practices can also be used as a heuristic for planning classroom activities and instructional materials, as well as for reshaping our overall perspective toward students as they move through the liminal spaces between high school and college and between the academy and the world. For example, we must develop pedagogies that ask students to carefully map and examine their search behaviors as they engage in the adaptation of their skills to different kinds of research situations, and we must find ways to help students articulate the methods and strategies they use for evaluating the efficacy of their search practices. Combining this kind of exploration and analysis with the introduction of new tools for academic research may help students to create more cohesive research identities and a better understanding of research as an ongoing adaptive practice. In her discussion of the use of digital archives in an American studies course, Megan Norcia (2007) provides an example of such a pedagogy: students take advantage of digital tools to do primary research in archives, serving as part of collaborative research teams. From the outset, students are positioned as primary researchers. Applying such an approach to introductory composition will bring students, at the beginning of their academic experience, into the fluid and complex practices through which individuals and disciplines shape and create academic knowledge. They need to be allowed—and encouraged—to be primary rather than only secondary researchers.

Ultimately, engaging students in the rich array of academic practices is our goal as researchers and teachers. We understand that academic professionals want introductory composition courses primarily to reinforce the idea that academic research practices are important—that they help to shape the ways we build knowledge and the ways we find and make use of information.

This goal can be achieved, however, without forcing students to abandon the useful knowledge and skills that form their existing research identities. Students need to be able to make their own investigations into these practices and to understand the complexities and contradictions in the ways that academic research practices create knowledge. We need to assist students in this learning by sharing with them examples of academic research processes as messy, tentative, and even contested.

Appendix: Content Analysis Template Used for Study of Composition Instructional Materials, with Abbreviated Examples from an Analysis of Kirszner and Mandell (2007)

Process(es) of research	Research identity	Good vs. bad sources	Efficiency	Linear process	Prescriptive vs. descriptive
Addresses a couple stages of research: exploratory, focused	Suggests use of a journal/"research notebook," which presents research as a personal process — though its primary function is to provide a way to record date your entries and to check off and date work completed" (111)	<ul style="list-style-type: none"> Identifies Google as a source that can be appropriate to use for exploratory research (112, 150–51) Presents the duty of a researcher as to "quickly evaluate each source's potential usefulness" (117) Devotes an entire chapter to the Internet as a research source (147–58) and a section to "Evaluating Internet Sites" (156–58) Provides a section on "Choosing the Right Search Engine" (152–54) 	<ul style="list-style-type: none"> Emphasizes that research should be efficient: "Your research will be most efficient if you follow a systematic process such as the one outlined below" (109) Indicates that researchers need to "quickly evaluate each source's potential usefulness" (117) and that "learning to manage this source information efficiently will save you a lot of time" (121) 	<p>Presents "The Research Process" as linear — a "systematic process" with steps (e.g., "Do Exploratory Research and Formulate a Research Question" [109]) but presents initial research as "exploratory," as aiding in the formulation of a research question (112)</p>	<ul style="list-style-type: none"> Includes an example of a student's research process Walks readers through a process they are encouraged to follow (see 109): develop a tentative thesis, do focused research, take notes, fine-tune your thesis, outline your paper, etc. Sentences often offer commands (sometimes implicit): "check to be sure you," "be sure to supply transitions," "Be careful to copy;" "you might want to" (124), "Be sure to integrate source material smoothly;" (126)

Notes

1. We have learned from previous research (Purdy and Walker 2007) that students often have a rich set of research practices and, indeed, have complex research identities. For instance, they can use online resources in nonprescribed ways to find sought information, searching first for texts at the commercial site Amazon.com to figure out what Library of Congress subject headings to use in a library catalog search. While they may lack the skills to critically assess and apply what they find—that is where we come in—they sometimes excel at navigating complex digital information landscapes.
2. Elsewhere, of course, Yancey (2004) eloquently addresses the changing nature of composing and research-based writing given new technologies, so she recognizes the complexity of research processes, as do some of the other authors. Our point is not that these scholars publish flawed scholarship. It is that this eloquence has not yet fully worked its way into instructional texts.
3. This view is echoed in numerous textbooks we analyzed. For instance, *The Blair Handbook* (Fulwiler and Hayakawa 2007: 282) presents research as something students do often in their nonacademic lives (e.g., by comparison shopping online and searching Amazon.com) and *Hodges' Harbrace Handbook* (Glenn and Gray 2007: 495) affirms that students do research every day—"ordinary research . . . as you decide what to buy, how to fix something, how to perform a function on your computer, which books to read, or where to spend your vacation." This acknowledgment of students as researchers reflects a positive shift in paying attention to students' nonacademic work. That such work, however, is ultimately constructed as polluting academic work reinforces a desire to keep academia bounded and pure—untouched by contaminating outside influences.
4. Library and information science (LIS) professionals likewise challenged the effectiveness of linear models to explain information-seeking behavior (e.g., Weiler 2005). That composition and LIS scholars have disputed linear, stage models raises questions about their use in teaching research, because research projects entail both writing and information seeking.
5. Some postprocess theorists have also criticized process theory for reifying universal processes of writing (e.g., see Breuch 2005; Olson 1999).
6. Linda Flower and John R. Hayes's (1981: 367, 375) concern with stage models of writing applies to our concern with stage models of research: "Both common sense and research tell us that writers are constantly planning (pre-writing) and revising (re-writing) as they compose (write), not in clean-cut stages. . . . A given process may be called upon at any time."
7. The identity disruption experienced by student researchers in introductory courses may not necessarily damage their self-esteem. Reitzes and Burke 1980; Gecas 1982; Knox, Lindsay, and Kolb 1992; Gee 2001; and others have shown that students' self-concept, self-esteem, and even their satisfaction with their learning institution are based on a range of complicated factors. This research into self-concept, self-esteem, and the complex practices of identity formation, moreover, indicates that the disruption of research identity that may result from current research textbooks and introductory course instructors would be unlikely to have enough salience to have a significant impact on a sense of overall identity for students. However, we are

concerned that the narrowing practices advocated by current educational practices may nevertheless have far-reaching effects for students, for academic institutions, and for all of us as citizens of a digital world as they affect students' abilities to conduct research in and outside of the academy and their comfort with the tasks associated with this work.

8. As Michael Carter (2007: 407) asserts, research papers, which are commonly assigned as the culmination of the research unit in first-year composition, have "complex disciplinary goal structures": "As a rule, the goal is not simply to write a research paper for the sake of learning to manage research, but to use the process of doing and writing research to shape a disciplinary way of knowing." When we present research processes as divorced from such disciplinary "way[s] of knowing," we fail to prepare students to be knowledge makers.
9. Kelly Ritter's (2006: 26) work further addresses how plagiarism can result when students are not afforded the chance to adopt robust roles as researchers and therefore cannot leave the liminal stage introductory composition currently constructs for them: "Student patronage of paper mills is reinforced in the college writing community by students' disengagement from academic definitions of authorship; their overreliance on consumerist notions of ownership, especially in Internet commerce; and, importantly, students' lack of confidence in their own writing and research skills." Robust research skills are critical to student notions of ownership. The more they understand themselves as the owners and shapers of their research, the less likely they are to think of the writing that flows from their research in the kind of cookie-cutter ways that promote plagiarism.

Works Cited

- Anderson, Charles M., and Marian MacCurdy. 2000. *Writing and Healing: Toward an Informed Practice*. Urbana, IL: National Council of Teachers of English.
- Anfara, Vincent A. 1998. "Urban Schools and Liminality." *National FORUM Journals* 8E.3, www.nationalforum.com/Electronic%20Journal%20Volumes/Anafara,%20Jr.%20Vincent%20A%20Urban%20Schools%20and%20Liminality.pdf.
- Bartholomae, David. 1985. "Inventing the University." In *When a Writer Can't Write: Studies in Writer's Block and Other Composing Process Problems*, ed. Mike Rose, 134–65. New York: Guilford Press.
- Bazerman, Charles. 1988. *Shaping Written Knowledge: The Genre and Activity of the Experimental Article in Science*. Madison: University of Wisconsin Press.
- Bazerman, Charles, and Paul Prior. 2005. "Participating in Emergent Socio-Literate Worlds: Genre, Disciplinarity, Interdisciplinarity." In *Multidisciplinary Perspectives on Literacy Research*, 2nd ed., ed. Richard Beach, Judith Green, Michael Kamil, and Timothy Shanahan, 133–78. Cresskill, NJ: Hampton Press.
- Becher, Tony, and Paul R. Trowler. 2001. *Academic Tribes and Territories: Intellectual Enquiry and the Culture of Disciplines*, 2nd ed. Buckingham/Philadelphia: Society for Research into Higher Education/Open University Press.

- Bizzell, Patricia. 1982. "Cognition, Convention, and Certainty: What We Need to Know about Writing." *Pre/Text* 3: 213–43.
- Breuch, Lee-Ann M. Kastman. 2005. "Post-process 'Pedagogy': A Philosophical Exercise." *JAC* 22.1: 119–59.
- Burton, Vicki Tolar, and Scott A. Chadwick. 2000. "Investigating the Practices of Student Researchers: Patterns of Use and Criteria for Use of Internet and Library Sources." *Computers and Composition* 17.3: 309–28.
- Carter, Michael. 2007. "Ways of Knowing, Doing, and Writing in the Disciplines." *College Composition and Communication* 58.3: 385–418.
- Connors, Robert J. 1997. *Composition-Rhetoric: Backgrounds, Theory, and Pedagogy*. Pittsburgh, PA: University of Pittsburgh Press.
- Council of Writing Program Administrators. 1999. "WPA Outcomes Statement for First-Year Composition." *WPA: Writing Program Administration* 23.1/2: 59–66.
- . 2008. "WPA Outcomes Statement for First-Year Composition," www.wpacouncil.org/positions/outcomes.html.
- Dill, David D. 1982. "The Management of Academic Culture: Notes on the Management of Meaning." *Higher Education* 11.3: 303–20.
- Downs, Doug. 2006. *i-cite: Visualizing Sources* [CD-ROM]. Boston: Bedford/St. Martin's.
- Dressman, Mark. 1997. "Congruence, Resistance, Liminality: Reading and Ideology in Three School Libraries." *Curriculum Inquiry* 27.3: 267–315.
- Engle, Michael. 2009. "The Seven Steps of the Research Process." Olin Library Reference Research and Learning Services, Olin and Uris Libraries, Ithaca, NY: Cornell University Library, www.library.cornell.edu/olinuris/ref/research/skill1.htm.
- Flower, Linda, and John R. Hayes. 1981. "A Cognitive Process Theory of Writing." *College Composition and Communication* 32.4: 365–87.
- Fulwiler, Toby, and Alan P. Hayakawa. 2007. *The Blair Handbook*, 5th ed. Upper Saddle River, NJ: Pearson Prentice Hall.
- Gecas, Viktor. 1982. "The Self-Concept." *Annual Review of Sociology* 8: 1–33.
- Gee, James Paul. 2001. "Identity as an Analytical Lens for Research in Education." *Review of Research in Education* 25: 99–125.
- Gillette, Mary Ann, and Carol Videon. 1998. "Seeking Quality on the Internet: A Case Study of Composition Students' Works Cited." *Teaching English in the Two-Year College* 26.2: 189–94.
- Glenn, Cheryl, and Loretta Gray. 2007. *Hodges' Harbrace Handbook*, 16th ed. Boston: Thomson Wadsworth.
- Graham, Leah, and Panagiotis Takis Metaxas. 2003. "'Of Course It's True; I Saw It on the Internet!' Critical Thinking in the Internet Era." *Communications of the ACM* 46.1: 71–75.
- Grimes, Deborah J., and Carl H. Boening. 2001. "Worries with the Web: A Look at Student Use of Web Resources." *College and Research Libraries* 62.1: 11–23.
- Grobman, Laurie, and Joyce Kinkead. 2010. *Undergraduate Research in English Studies*. Urbana, IL: National Council of Teachers of English.
- Hacker, Diana. 2007. *A Writer's Reference*, 6th ed. Boston: Bedford/St. Martin's.
- Hargittai, Eszter, Lindsay Fullerton, Ericka Menchen-Trevino, and Kristin Yates Thomas. 2010. "Trust Online: Young Adults' Evaluation of Web Content." *International Journal of Communication* 4: 468–94.

- Haviland, Carol Peterson, and Joan A. Mullin. 2009. "Conclusion: Rethinking Our Use of 'Plagiarism.'" In *Who Owns This Text? Plagiarism, Authorship, and Disciplinary Cultures*, ed. Carol Peterson Haviland and Joan A. Mullin, 156–77. Logan: Utah State University Press.
- Hawhee, Debra. 1999. "Composition History and the *Harbrace College Handbook*." *College Composition and Communication* 50.3: 504–23.
- Herring, Susan Davis. 2001. "Faculty Acceptance of the World Wide Web for Student Research." *College and Research Libraries* 62.3: 251–58.
- Jackson, Jean E. 2005. "Stigma, Liminality, and Chronic Pain: Mind-Body Borderlands." *American Ethnologist* 32.3: 332–53.
- Kinkead, Joyce, ed. 2003. *Valuing and Supporting Undergraduate Research*. San Francisco: Jossey-Bass.
- . 2007. "How Writing Programs Support Undergraduate Research." In *Developing and Sustaining a Research-Supportive Curriculum: A Compendium of Successful Practices*, ed. Kerry K. Karutsksis and Timothy E. Elgren, 195–208. Washington, DC: Council on Undergraduate Research.
- Kirszner, Laurie G., and Stephen R. Mandell. 2007. *The Brief Wadsworth Handbook*, 5th ed. Boston: Thomson Wadsworth.
- Knoblauch, A. Abby. 2011. "A Textbook Argument: Definitions of Argument in Leading Composition Textbooks." *College Composition and Communication* 63.2: 244–68.
- Knox, William E., Paul Lindsay, and Mary N. Kolb. 1992. "Higher Education, College Characteristics, and Student Experiences." *Journal of Higher Education* 63.3: 303–28.
- Kogan, Maurice. 2000. "Higher Education Communities and Academic Identity." *Higher Education Quarterly* 54.3: 207–16.
- Lederman, Doug. 2004. "Google: Friend or Foe?" *Inside Higher Ed*, April 11, www.insidehighered.com/news/2005/04/11/google.
- Maimon, Elaine P., Janice H. Peritz, and Kathleen Blake Yancey. 2007. *A Writer's Resource: A Handbook for Writing and Research*, 2nd ed. Boston: McGraw Hill.
- . 2010. *A Writer's Resource: A Handbook for Writing and Research*, 3rd ed. Boston: McGraw Hill.
- Miles, Libby. 2000. "Constructing Composition: Reproduction and WPA Agency in Textbook Publishing." *WPA: Writing Program Administration* 24.1–2: 27–51.
- Miller, Connie, and Patricia Tegler. 1986. "Online Searching and the Research Process." *College and Research Libraries* 47.4: 370–73.
- Miller, Susan. 1991. "The Feminization of Composition." In *The Politics of Writing Instruction*, ed. Richard Bullock and John Trimbur, 39–53. Portsmouth, NH: Boynton/Cook.
- Miller, William, and Rita N. Pellen, ed. 2009. *Googlization of Libraries*. New York: Routledge.
- Moran, Charles. 2001. "Technology and the Teaching of Writing." In *A Guide to Composition Pedagogies*, ed. Gary Tate, Amy Rupiper, and Kurt Schick, 203–23. New York: Oxford University Press.
- Murray, Janet H. 1997. *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. New York: Free Press.
- Norcia, Megan A. 2007. "Out of the Ivory Tower Endlessly Rocking: Collaborating across

- Disciplines to Promote Student Learning in the Digital Archive.” *Pedagogy* 8.1: 91–114.
- Norris, Benjamin P. 2006. “Google: Its Impact on the Library.” *Library High Tech News* 23.9: 9.
- Olson, Gary A. 1999. “Toward a Post-process Composition: Abandoning the Rhetoric of Assertion.” In *Post-process Theory: Beyond the Writing Process Paradigm*, ed. Thomas Kent, 7–15. Carbondale: Southern Illinois University Press.
- Place, Emma, Margaret Kendall, Debra Hiom, Helen Booth, Paul Ayres, Anne Manuel, and Paul Smith. 2006. “Internet Detective: Wise Up to the Web,” 3rd ed. Intute Virtual Training Suite, www.vts.intute.ac.uk/detective.
- Prior, Paul, Janine Solberg, Patrick Berry, Hannah Bellwoar, Bill Chewning, Karen Lunsford, Liz Rohan, Kevin Roozen, Mary Sheridan-Rabideau, Jody Shipka, Derek Van Ittersum, and Joyce Walker. 2007. “Re-situating and Re-mediating the Canons: A Cultural-Historical Remapping of Rhetorical Activity: A Collaborative Webtext.” *Kairos* 11.3, www.technorhetoric.net/11.3/index.html.
- Purdy, James P. 2007. “A ‘New Way to See’ Students as Researchers and Writers: A Review of *i-cite* and *i-claim*.” *Computers and Composition Online*, www.bgsu.edu/cconline/reviews/Purdy_icitclaim.
- . Forthcoming. “Scholarliness as Other: How Students Explain Their Research-Writing Behaviors.” In *The New Digital Scholar: Exploring and Enriching the Research and Writing Practices of NextGen Students*, ed. Randall McClure and James P. Purdy. Medford, NJ: Information Today.
- Purdy, James P., and Joyce R. Walker. 2007. “Digital Breadcrumbs: Case Studies of Online Research.” *Kairos* 11.2, kairos.technorhetoric.net/11.2/binder.html?topoi/purdy-walker/index.htm.
- Reitzes, Donald C., and Peter J. Burke. 1980. “College Student Identity: Measurement and Implications.” *Pacific Sociological Review* 23.1: 45–66.
- Ritter, Kelly. 2006. “Buying In, Selling Short: A Pedagogy against the Rhetoric of Online Paper Mills.” *Pedagogy* 6.1: 25–51.
- Rose, Mike. 1981. “Sophisticated, Ineffective Books—The Dismantling of Process in Composition Texts.” *College Composition and Communication* 32.1: 65–74.
- . 1983. “Speculations on Process Knowledge and the Textbook’s Static Page.” *College Composition and Communication* 34.2: 208–13.
- Rounsaville, Angela, Rachel Goldberg, and Anis Bawarshi. 2008. “From Incomes to Outcomes: FYW Students’ Prior Genre Knowledge, Meta-Cognition, and the Question of Transfer.” *WPA: Writing Program Administration* 32.1: 97–112.
- Russell, David. 2002. *Writing in the Academic Disciplines: A Curricular History*. Carbondale: Southern Illinois University Press.
- Russell, David, and Arturo Yañez. 2003. “‘Big Picture People Rarely Become Historians’: Genre Systems and the Contradictions of General Education.” In *Writing Selves: Writing Societies*, ed. Charles Bazerman and Paul Prior. Fort Collins, CO: WAC Clearinghouse, wac.colostate.edu/books/selves_societies/.
- Salvatori, Mariolina Rizzi, and Patricia Donahue. 2010. “Disappearing Acts: The Problem of the Student in Composition Studies.” *Pedagogy* 10.1: 25–33.

- Shipka, Jody. 2005. "A Multimodal Task-Based Framework for Composing." *College Composition and Communication* 57.2: 277–306.
- Sidler, Michelle. 2002. "Web Research and Genres in Online Databases: When the Glossy Page Disappears." *Computers and Composition* 19: 57–70.
- Simmons, W. Michele, and Jeffrey T. Grabill. 2007. "Toward a Civic Rhetoric for Technologically and Scientifically Complex Practices: Invention, Performance, and Participation." *College Composition and Communication* 58.3: 419–48.
- Sommers, Nancy. 1980. "Revision Strategies of Student Writers and Experienced Adult Writers." *College Composition and Communication* 3.4: 378–88.
- Sorapure, Madeline, Pamela Inglesby, and George Yatchisin. 1998. "Web Literacy: Challenges and Opportunities for Research in a New Medium." *Computers and Composition* 15: 409–24.
- Sunstein, Bonnie Stone, and Elizabeth Chiseri-Strater. 2006. *Fieldworking: Reading and Writing Research*. Boston: Bedford/St. Martin's.
- Tensen, Bonnie L. 2010. *Research Strategies for a Digital Age*, 3rd ed. Boston: Wadsworth.
- Trimbur, John. 1989. "Consensus and Difference in Collaborative Learning." *College English* 5.6: 601–16.
- Turner, Victor. 1969. *The Ritual Process: Structure and Anti-structure*. Ithaca, NY: Cornell University Press.
- Vaidhyathan, Siva. 2009. "The Googlization of University." In *The NEA 2009 Almanac of Higher Education*, ed. Mark F. Smith, 65–74. Washington, DC: National Education Association, www.nea.org/assets/img/PubAlmanac/ALM_09_06.pdf.
- Välilä, Jussi. 1998. "Culture and Identity in Higher Education Research." *Higher Education* 36.2: 119–38.
- Van Gennep, Arnold. 1960. *The Rites of Passage*, trans. Monika Vizedom and Gabrielle L. Caffee. Chicago: University of Chicago Press.
- Wang, Yu-Mei, and Marge Artero. 2005. "Caught in the Web: University Student Use of Web Resources." *Educational Media International* 42.1: 71–82.
- Weiler, Angela. 2005. "Information-Seeking Behavior in Generation Y Students: Motivation, Critical Thinking, and Learning Theory." *Journal of Academic Librarianship* 31.1: 46–53.
- Writing in Digital Environments Research Center. 2010. "The Writing Lives of College Students." *A WIDE Survey and Whitepaper*, September 7, wide.msu.edu/special/writinglives/WIDE_2010_writinglives_whitepaper.pdf.
- Yancey, Kathleen Blake. 2004. "Made Not Only in Words: Composition in a New Key." *College Composition and Communication* 46.2: 297–328.

Copyright of Pedagogy is the property of Duke University Press and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.