

Disciplinary and Transfer: Students' Perceptions of Learning to Write¹

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INTRODUCTION

As writing teachers and Writing Center/Writing Across the Curriculum (WAC) director at the small Midwestern technological university at which this research was conducted, we repeatedly observed a tendency among students to actively reject the idea that what they learned about writing in high school or in first year composition (FYC) courses could be applied to the writing they were asked to do in courses in other disciplines. This rejection is particularly problematic because the writing requirements at many institutions, ours included, stem from the belief that writing is a skill that can, in part, be taught in a writing class dissociated from other disciplinary content, and the corollary belief that what students learn in their FYC courses can serve as the groundwork for further writing instruction in more discipline-specific contexts. As our university's requirement that students take either four "Writing Emphasized" (WE) courses or two "Writing Intensive" (WI) courses after FYC suggests, faculty and administrators shared the view that learning to write occurs in three roughly sequential stages: first, students enrolled in the FYC course learn generalizable techniques and expectations of academic argument and expository prose; next, students enrolled in WE and WI courses start to learn both the domain knowledge and the discipline-specific genres and conventions that characterize the discourse communities into which their education seeks to induct them; and finally, students engaged in senior design projects or student-faculty research become apprentice members of a community of practice defined in part by its writing goals and techniques. This characterization of learning to write was widely accepted by faculty across the disciplines teaching WI courses and senior capstones, and it did help overcome the idea that writing could be learned in one or two composition courses.²

But however well this conceptualization overcame the "inoculation" approach to teaching writing, it was nonetheless called into question as we

fielded informal (and by and large friendly) complaints from our engineering colleagues about the quality of student writing, in mechanics (failure to spell-check and to punctuate successfully), in usage, and in what we consider rhetorical skills, such as using effective organization for a particular purpose and appropriately addressing particular audiences. In informal conversation in the Writing Center and elsewhere, some students readily admitted that they thought they could be much more indifferent about such aspects of writing with technologically-oriented faculty, based on the common misconception that employers and faculty outside the English Department are concerned only with ideas and verifiable “facts,” and therefore do not notice or object to rhetorical flaws or mechanical carelessness (at least until these faculty lowered their grades for ineffective writing). Moreover, the terms students used to characterize the kind of writing they did in FYC and other courses in the English Department included “fluff,” “b.s.,” and “flowery,” whereas in talking about the writing they did in other classes, students used descriptors such as “concise,” “to the point,” and “not a lot of flowery adjectives.” Hence, we suspected that students grouped everything they were being taught about academic writing in FYC under the heading of “How to b.s. your way through an English paper with a lot of flowery adjectives and other fluff,” and therefore failed to perceive the transferability of most of what these courses purported to teach them about writing.

We decided to take these comments from faculty and students seriously, as indicating that students may not be transferring to their upper level writing experiences the knowledge that we hoped they had acquired in the earlier stages of the process. This did not seem an instance of the phenomenon, described by Joseph Williams and Gregory Colomb, of students tending to backtrack in language and organizational skills when facing a new and more sophisticated set of expectations for their writing—particularly when we heard students actively reject the possibility that what they learned in high school English classes or FYC could be applied to writing in their disciplines.³ Our project, then, was undertaken to discern how students perceived their own process of learning to write and to understand this attitude among students who are otherwise relatively high achievers and well prepared for college in terms of academic background and socio-economic indicators.⁴

Longitudinal studies of how students acquire discipline-specific writing skills, such as those by Winsor, Chiseri-Strater, Herrington and Curtis, and Blakeslee, as well as the new abolitionists in Petraglia’s *Reconceiving Writing, Rethinking Writing Instruction*, make a strong case that the orderly progression implied by a FYC-to-writing-in-the-disciplines model is little more

than an optimistic fiction. These findings accorded with what we were hearing from students and faculty and suggested that although this “optimistic fiction” had been very useful in engaging faculty in this university’s WAC program, it was based on ideas about a kind and degree of transfer that did not seem to be taking place among our students. However, taken together, several of those studies also suggest that students’ experiences of learning to write in their disciplines tend to follow fairly predictable patterns accompanied by somewhat predictable realizations on the part of students. The similarity of these patterns among students from different kinds of courses and schools suggests that students’ conceptions of learning to write are composed of some combination of individual experience and peer culture. Thus, we sought snapshots of students in various departments and years of study at our own institution, in order to examine more closely the beliefs and understandings about developing as writers they take with them as they move from FYC to writing in other disciplines and prepare for writing in workplace settings.⁵ In order to expose at least some aspects of peer group influences and interactions, we chose to use focus groups that would allow us to “overhear” and document how students talk together about the process of learning to write and how they draw on each others’ stories to flesh out and elaborate their own understanding of themselves as writers.

In framing our research as group discussions, we tried to avoid blaming either students or teachers for what seems to be a troublesome failure to connect. We do not take these students’ stories as necessarily accurate representations of their actual processes of literacy acquisition. Instead, we read them as representations of students’ own perceptions of how and where they learned to write and, most of all, what students believe themselves to be learning--what knowledge or skills they understood themselves to have acquired as thinkers and writers. Although such group discussions do not provide the depth of description possible in a case study or longitudinal study, they do raise some new issues that will need to be further explored in subsequent research.

RESEARCH METHODOLOGY

Between July 2000 and May 2001, after a receiving IRB approval for the project and conducting a pilot session to test the questions and procedures, we conducted an initial series of four focus groups of 1 ½ hours each, drawing on students from the College of Arts and Sciences, the School of Engineering, and the School of Mines and Metallurgy, at the University of Missouri-Rolla.⁶ Each of the first three focus groups drew students from a single division of the University, and the fourth session combined

first-year students from all three divisions.⁷ There were 7-10 participants in each group. Participants from the College of Arts and Sciences were recruited through invitations proffered in upper-level courses; participants from the School of Engineering and the School of Mines and Metallurgy were recruited from honor societies; and first year students were primarily drawn from the selective “Chancellor’s Leadership Class.” We would have preferred a less academically gifted (i.e., more generally representative) population; however our efforts to recruit a more widely representative sample through advertisements in the student newspaper and numerous classroom visits to administer a writing skills survey yielded too few respondents to make the study workable.⁸

The focus group sessions were audio-taped, and at least one investigator and one student assistant took notes during the sessions, using a double-entry system with adjoining spaces for summarizing the discussion and recording the investigators’ immediate responses and ideas about it. Immediately following each session, the research team met to fill in notes and discuss their initial responses to the focus group. The tapes were later transcribed by a student research assistant.

The first four focus groups were asked the same set of questions (Appendix A), and follow-up questions were modified in order to allow the researchers to pursue issues as they arose in each group (Appendix B). We tried as much as possible to avoid using specialist or discipline-specific terminology that might encourage students to respond in terms of what they thought writing teachers would want to hear, and so the questions reflect the language students frequently used in classes and in the Writing Center to describe writing and learning. In particular, the terms “rules” and “secrets” were intended to draw on students’ own language concerning the conventions they have learned and the expectations they think their teachers have about writing.

The two follow-up groups were recruited from participants in the first four sessions. In the two follow-up focus groups, the questions (Appendix B) were designed to address and clarify responses given in the first four groups. These follow-up questions do not pursue the question of differences students perceive about how writing is taught in various disciplines, since by this time it was clear that, even though learning disciplinary discourse was important to these students, specific disciplinary differences were not particularly relevant to students’ understanding of their process of learning to write. Instead we designed questions to clarify students’ perceptions of the relevance of what they learn in writing classes to the writing they do in other coursework and during internships, and to determine what students actually think helps them learn to write. In these final two focus groups,

we allowed considerable time for exploring responses to our rather pointed questions about students' responses to written comments and other advice from faculty in different disciplines.

The students in our focus groups were generally articulate and forthcoming. Because most students in each group were already acquainted with each other and had numerous interactions outside of our research setting, we were aware of the possibility that some form of peer pressure might reduce the range and variability of attitudes in order to conform to the views of the most influential students in each group. During each focus group, both of the researchers and the student assistant observed participants carefully for vocal and non-vocal clues to their reactions, using techniques that are used during class discussions to identify potential discomfort in non-participating students, and that are taught to writing center tutors to recognize negative reactions in students who are too polite or too intimidated by the one-on-one setting to openly voice disagreement. In particular, we tried to notice and neutralize the effects of who made eye contact with whom, patterns of interruption, and participation in/withdrawal from student-to-student interactions. The moderator made a concerted effort to invite views from all students, through the wording of follow-up probes, through eye-contact, and through addressing questions directly to specific students. The emergence of strong, and in one or two cases rather heated disagreements (for instance about whether a student who preferred creative, expressive writing to writing research-based reports belonged in an engineering major) suggests that we succeeded in creating an environment that allowed dissent, which implies as well that the strong agreement expressed on some points within and across focus groups can be taken as indicating that students really did share those views.⁹

SUMMARY OF RESPONSES

We were particularly impressed by the students' perceptions of themselves as agents of their own learning, rather than as recipients of an imposed curriculum. Taken as students' personal reflections on what happened to them as they learned to write, these stories are remarkable in their consistency across different student populations, particularly concerning attitudes toward writing and learning to write, beliefs about the function of writing in English classes and in other disciplines, and interpretations of teachers' responses to student writing. The strong similarity of responses from students of different majors, from different high schools, and with a wide range of prior experience in high school and college writing courses suggests that before students arrive in college writing classrooms, they already

share certain preconceptions about writing and what it means to learn to write; and that those preconceptions limit students' ability to recognize, understand, or, finally, make use of most of the skills that composition teachers are trying to teach. Although the students' stories were consistent across disciplines, and although we introduced the concept of disciplinarity in only the most limited and rudimentary way (by asking students to tell us about learning to write in different kinds of courses), disciplinarity nevertheless emerged as one of the most important factors in shaping students' understanding of writing, learning to write, and the work they do as writers.

Three distinct themes emerged from our respondents' reminiscences, anecdotes, and opinions about learning to write in different disciplines:

1. Students tend to think of writing in English classes as personal and expressive rather than academic or professional, and therefore think that teachers' comments and suggestions represent an unwarranted "intrusion" into students' own personal and intellectual territory. However, they consider writing in other classes as part of their socialization into the disciplines those courses represent.
2. Students think of this personal writing (that is, the writing they do in English classes) as a "natural" act--like engaging in conversation--for which there are only a very few simple, concrete, and universal rules, beyond which everything else is a matter of personal preference and opinion, rather than informed judgment. However, in talking about writing in other kinds of courses, students also revealed a very strong acceptance of the authority of disciplinary standards, conventions, and expectations to dictate rules for writing within the boundaries of a specific discipline.
3. Students do think of writing skills as "portable" from one discipline or context to another; several participants reported having gained much of their current writing ability (the writing skills they use regularly in a variety of settings) in courses such as history, chemistry, or metallurgy. Their failure to credit English classes with having taught them to write was not, therefore, grounded in students' belief that what they learned about writing in one setting could not be applied in others, but rather in their perception that the writing done for English classes was inherently not "disciplinary" or "professional"¹⁰ and therefore offered few features that could be transferred.

STUDENTS' PERCEPTIONS ABOUT ENGLISH: FYC AND LITERATURE COURSES ARE INDISTINGUISHABLE

It became clear very early in our project that students perceived writing in all English classes to be very different in *kind* from the writing they did in other courses, even in other courses in the humanities. This view that FYC is dissociated from all other writing situations is similar to the views expressed by the FYC students interviewed by Doug Hunt and the cross-disciplinary student attitudes reported by Lucille McCarthy. In stark contrast to students' views of writing in other courses, students saw the writing they did in English classes as personal rather than disciplinary. That is, they did not see it as engaging with the intellectual work of any particular field of study; instead they saw it as inviting them to share their own convictions, opinions, and experiences in a way that is primarily expressive, subjective, and creative.¹¹ In contrast to McCarthy's student, who felt excluded from the kind of thinking and writing done and expected by his literature professor, our respondents perceived little disciplinary expertise in either literature or composition.

Our university's composition courses were primarily taught by the full-time, tenured or tenure-track literature faculty (only a few of whom showed evidence of significant professional interest in composition pedagogy) and a small number of adjuncts. The sections were consistent only in adherence to a very general set of principles (such as the number of pages of finished draft required). Some sections focused primarily on writing about literature, often embedded in current-traditional pedagogy; some were based primarily on students' own writing and followed expressivist principles; some emphasized argument theory; some emphasized academic discourse and the research paper; and some were based on applications of rhetorical theory. This disparity between sections of FYC was quite evident to the students, standing in obvious contrast to other required multi-section courses such as physics and math, which were highly standardized from section to section. It is not surprising that students could suppose that the institution as a whole did not place a high value on the content of the FYC course (compared to writing in the disciplines), particularly since so many students met the FYC requirement through SAT or other test scores or dual-credit high school programs. This supposition would further support students' widely-shared perception that composition courses are fundamentally different from courses in other departments.

In our study, students did not distinguish between literature and composition courses or the writing assigned in them. We had hoped to find that contrasting required composition courses with the discipline of liter-

ary studies would reveal a difference in students' perceptions that mirrored their perceptions of learning to write in other disciplines. In teaching literature, English faculty at this institution drew explicitly on their disciplinary expertise and were very conscious of their literature courses as opportunities to introduce students to the methods of professional discourse in literary studies. We anticipated, then, that in literature courses students would recognize a set of disciplinary expectations (like the disciplinary expectations they recognized in courses in other departments) that would disabuse them of the perceived "naturalness" of the writing act. We found, however, that instead of literature courses establishing disciplinary credibility for what English teachers say about writing about literature, the general lack of credibility students attribute to statements of English teachers about writing in FYC applies in literature classes as well, with the result that teachers' comments on papers written about literature elicited some of the strongest criticism from our study participants. Typically, participants' objections to teachers' comments on writing about literature were grounded in the assumption, stated explicitly by one student, that "English is subjective." As another student put it:

When you're talking about a literature class, it's more interpretive, you know? It's more your personal ideas about how things are. When you're talking about chemistry or another technical class, you're writing about facts. So when a professor says, 'you've got your facts wrong,' or 'this is not what's happening; it's really this,' it's hardcore facts. You can accept that. But if you're talking about poetry or something like that, and you thought it was a flower, but it's really meaning a bumblebee or something like that, it could be anything, really. It's just your word against theirs, and so it's kind of, it's your personal ideas of how it was.

Because they saw the writing they are asked to do in English classes as personal, subjective, creative, and primarily intended "not to bore the reader," they failed to see any connection between what they have learned about writing in English classes and what they see as the objective, fact-based, information-telling writing demanded elsewhere in their academic and professional lives. When not under attack for attempting to intervene in students' personal interpretations of works of literature, English teachers were seen by our study participants as primarily concerned with "formats" and "styles" that were not rooted in any particular disciplinary framework. However, teachers in other fields, as disparate as history and electrical engineering, were perceived as caring more about content, hard facts,

or “what really happened.” In writing for English courses, an engineering student said, “You entertain. You look for flow and variety. In tech writing, though, what you want is to get ideas across.” There was considerable agreement across all focus groups that the purpose of writing in any English class is to entertain, or to give pleasure to a reader, or to allow the writer to explore his or her own mental spaces. Students in a group from Mines and Metallurgy described the writing done in all English classes as “creative” (by which they appeared to mean personal and expressive), and resented any meddling by English teachers with issues of content, argumentation, or development of ideas (a position strongly supported by students in the follow-up groups).

While perfectly willing to subordinate themselves as writers to the very specific professional discourse demands of ROTC or an internship and to the disciplinary requirements of courses both in and out of their majors, participants did not see English—either literary studies or rhetoric and composition—as a legitimate discipline or as having anything useful to contribute to their development of disciplinary or work-related writing skills. One student in a follow-up group said, “Even in history, your argument is based on facts, but in English it’s yours alone.” And both because they feel this ownership and because they perceive no discipline behind English teachers’ directions and comments, they take writing teachers’ suggestions as meddling rather than teaching or coaching. For example, during a discussion of the types of teacher comments students found helpful or unhelpful, students reported very different reactions to teacher comments about the effectiveness of supporting evidence in two different types of classes. Referring to a history teacher’s comments, one student said, “[the teacher would] say ‘You didn’t back this up. It’s really weak here. Your thesis was written really well, but you didn’t write on it at all’. . . That was really beneficial, much more than just a couple of commas circled, you know. It was a lot more helpful.” However, in discussing an English teacher’s comments, another student in the same focus group listed almost exactly the same categories of comments as examples of unreasonable teacher interference in student writing, saying “[my teacher] would say, ‘Well you needed more details here. You didn’t talk about this nearly enough. And here you talk about it way too much’ . . . Well she would want me to write it another way . . . when I actually thought that mine was quite a bit better.”

Students’ attitudes toward grammar, punctuation, and other mechanicals skills were ambiguous. On the one hand, students freely admitted to mechanical carelessness in writing for faculty outside the English Department on the grounds that teachers in other content areas only care about facts and ideas, not the surface qualities of writing. On the other hand, in

spite of the conception that teachers outside of English do not know or care much about English usage, our respondents' highest praise and appreciation seemed to go to teachers in all departments who held them to extremely high standards of mechanical correctness, except when mechanical correctness was enforced by TAs and, occasionally, when it was enforced by English teachers. English teachers who demanded a high degree of mechanical correctness were sometimes stigmatized as only concerned about "where you put the commas" and not caring about ideas. At the same time, several students argued that FYC does not do enough to teach and enforce grammatical correctness and editing skills, skills that they believed to be of primary importance in the workplace, and the only skills our respondents seemed willing to allow English faculty to teach them. All of the many other concepts and skills that form the basis for composition pedagogy were perceived by our respondents as either inapplicable to their professional development (and therefore worthless) or as meddling with their self-expression or creative thinking (and therefore out of line). Moreover, for all the work of compositionists over the past two decades to distinguish their work from literary studies, the students overwhelmingly failed to see that distinction.

HOW STUDENTS PERCEIVED THEMSELVES AS WRITERS

Almost all of our respondents expressed a moderate to high degree of confidence in themselves as writers.¹² However, they admitted to taking away from composition classes only some knowledge of mechanics, some guilt about not mastering MLA citations, and a very general and not very accurate understanding of a writing process they did not actually use. When asked what they saw as the secrets of good writing, students listed primarily "life strategies" or "moral shoulds": leave plenty of time, have someone else read it, don't get stressed, organize, stay focused, have a glass of whiskey before you start. On the other hand, when students named the rules for good writing that they had learned over the years, they focused on citation systems and conflicting stylistic rules, such as do write in the third person, don't use passive voice, do say "this was done" instead of "I did this," do use "I" when writing e-mail.

The students' conception of writing for an audience was what one would expect: like the participants in McCarthy's and Richardson's studies, all of the participants in our study seemed to have internalized a strong sense of the real rhetorical situation of the classroom. In almost every response to every question, study participants showed their conviction that the purpose of school writing is to get a grade, that the audience is the teacher, and that

a successful paper must take into account both stated constraints (length requirement, number of sources, and sometimes even sentence types that must be included) and unstated (a teacher's known preference for papers that exceed the length requirement, or a teacher's obsession with what students typically see as meaningless details). While these responses indicate a potentially powerful—though often inchoate—rhetorical awareness, these students' ways of talking about their approach to writing assignments suggest that they consistently limit its application to figuring out “what the teacher wants,” what they have to do to get the desired grade, and, in the most general sense, what the discipline expects. Students seemed to be completely unaware that the purpose of FYC might be to help them turn their rhetorical “street smarts” into conscious methods of analysis—of situation-specific audiences, discourse communities, rhetorical situations, and relevant textual models—that they could then apply to writing situations in other contexts. Students' failure to see the connections between what they had presumably learned from writing instruction in English courses and what they drew from their practical rhetorical savvy based on widely-shared peer-group lore (this teacher is an easy grader, that one takes points off for using the wrong format for figure captions) suggests that the students in our study failed to take from their writing classes even a novice version of the skills most likely to be transferable to other writing situations.

Although the students in our study admitted to resisting and rejecting much of what their teachers may have hoped they would learn in composition classes, they nonetheless clearly perceived themselves as writers and saw writing as part of their professional work. Like the engineering students in Dorothy Winsor's longitudinal study, our subjects saw learning to write as part of their socialization into the world of the practicing professional and conceived of writing as part of a larger range of professional tools. The students in our focus groups, regardless of major, explicitly included “writer” and “communicator” among their self-identified roles.

Our students' self-perception as writers may be an artifact of our recruiting strategy for this study: possibly the students who felt that they had something to share with us about how students feel about learning to write were also students who thought of themselves as “writers.” It may also be that the university-wide emphasis placed on writing as a part of the everyday work of all professionals (and reinforced by faculty through writing assignments and by the administration through support for a well-funded Writing Across the Curriculum program) had made writing a substantial part of the institutional culture for students.¹³ The students at this institution, then, may have been primed to think of themselves as writers, even though they did not associate this identity with their work in composition

courses—and even though the faculty in their majors did not see their writing as particularly effective.

HOW STUDENTS TALKED ABOUT ACTUALLY LEARNING TO WRITE

When asked how they actually learned to write, as opposed to what they learned in writing classes, students described a process of, on the one hand, learning to respond appropriately to the apparently idiosyncratic demands of particular teachers and, on the other hand, imitating models of successful papers. In some instances, the two processes were one and the same, as in the case of the student who recycled his older brother's high school history papers as the basis for his own papers in the same class. All participants perceived the writing they did in their major courses—and indeed in all courses other than English courses—to be disciplinary writing, in the sense that they saw it as engaging with the intellectual work of a particular field of study (even when that field was not their major). As our study participants describe it, disciplinary writing is expository rather than expressive, authoritative rather than creative, and objective rather than subjective. Moreover, disciplinary writing, as they portray it, is formulaic and therefore subject to rules that are inherent in the discipline itself and that are known, to varying degrees, by the disciplinary experts who are their teachers. One student said that the secret to good writing in his discipline was to “get a lot of perspectives so that you can see the formula behind it.” But despite their perception that disciplinary writing is formulaic, the one piece of advice that was posed as both a “rule” and a “secret”—and that came up in many other guises as well—is that the key to good writing is to know and consider your audience. As the students frequently observed, knowing your audience means figuring out what the teacher wants—and the students were brutally frank about their perception that the first paper in any course should always be treated as a “range-finder” for discovering what the teacher is looking for. According to one student, the first paper in any course is “always a crap shoot.” Another said that “those first couple of lab reports of each semester are kind of up in the air as to what you're going to get. And, like, you'll put extra time into it because it's a new semester and you're going to get straight A's, and it won't be what they wanted.” About whether any prior writing experience carries over into future classes in the same discipline, one student said “every time you get a new professor it starts over.”

Yet despite their agreement that every new professor is an unknown quantity when it comes to grading papers, study participants also showed a strong conviction that disciplinary writing is governed by non-arbitrary

rules to which their professors and workplace supervisors have access. So although students acknowledged the *appearance* of variation in teacher expectations across courses in a single discipline, they explained the apparent variability in the following terms:

1. their own lack of experience in a discipline (“its just because they know so much more about what’s going on than you do. It’s just a lack of experience and knowledge”);
2. different levels of rigor (“the guy who graded my first lab report was a really hard grader; he, like, knew a lot. . . whereas now the guy [a different teacher in a different course] is, like, a little bit easier”);
3. or, complete irrationality on the part of the professor (“you also get fruitcake teachers that if they like your font better than the other person’s, you get an A”).

As a group, the participants in our study prided themselves on their ability to figure out what teachers want, on both personal and disciplinary levels, and then do it. Students who had had jobs or internships that involved writing spoke in similar terms about understanding and addressing the workplace audience—about the need to know who will be reading a memo or set of procedures, and for what purpose—but even more obviously about the need to find out what your supervisor wants and to produce it. As one student put it “he who controls the paycheck controls the world.” In an interesting perspective on the role of status in creating the appearance of expert knowledge, we found that engineering and mining undergraduates generally held extremely low opinions of their TAs as disciplinary experts and typically rejected TA comments on their writing as completely without merit.

Although students showed exposure to a process-oriented approach to writing in high school as well as college, they were nonetheless highly product-oriented, believing that the final product of any piece of writing in school is the grade it received, and that the final product of a piece of writing at work is the extent of its acceptance or approval by their supervisor. Our study participants used the language of process to talk about writing and learning to write (which suggests that they may have picked up some of the vocabulary for talking about writing in composition classes), but their most frequent references to a writing process described only procedures that they felt they should follow, or had been required to follow at some point, but that they consciously rejected. For example, they commonly mentioned revision as one of the “secrets” of good writing, although they talked pri-

marily about avoiding it. One student said: "I do find myself at times restructuring my sentences. I personally hate to admit that I did something wrong. But once in a while I will look at something I've written and say 'well, that's extra and that's extra and I can take it out,' and I will modify it, so I guess I didn't get it quite right at first." This student still believes that "getting it right at first" is better than "doing something wrong" and revising it, when it comes to writing. Another student said, "I've been told many, many times that the secret to good writing is rewriting. I agree that that's a good secret, but I'm not patient enough for it to help me, and I just don't like it." Although students generally identified revision as an important tool for competent writers, in actual practice revision contributed little to their own writing competence. Other stages of the writing process elicited even more overt resistance. With respect to pre-writing, students were especially resistant to the requirements designed to help them benefit from a mandated process approach to writing research papers. One student, for example, described a high school research project in which he created not only his "rough" draft, but also a hundred note cards, *after* producing his final draft. Most study participants revealed a similar discrepancy between their own one-draft-and-it's-done method and their teachers' attempts to encourage or force them to engage in prewriting or other invention strategies or to seriously undertake revision through multiple drafts.

SOME IMPLICATIONS OF THESE STUDENTS' RESPONSES

The responses of the students in our focus groups suggest that, overall, these students seemed to connect with writing pedagogy only at a narrowly mechanical level and at a broad, moral level—taking away a series of behavioral "shoulds" that they remember and apparently accept, but don't necessarily follow: you *should* give yourself plenty of time to revise; you *should* ask two or three people to read it before you turn it in; you *should* approach writing with a detailed plan for what you're going to say. As writing teachers, our sense is that both moral imperatives and stylistic directives—in other words almost all of the things our respondents reported learning about writing in their English classes—are very much on the periphery of the "real" work of composition pedagogy. Hence, the astonishing blankness of the space between morality and the style sheet, as the students represented it, is one of the most significant findings of our study. At a strictly mechanical level, our respondents generally agreed that they are happy to be told when they're doing something wrong so they can fix it, but their sense of what constitutes a genuine "error"—and therefore falls within an English teacher's realm of authority—is limited to issues of grammatical

correctness and proper use of citation systems. Moreover, as our initial observations indicated, they did not always feel that these mechanical skills were of much concern to technological faculty or employers, at least until they faced the rigors of an internship or a “rough” professor in their field. This ambivalence about the role of English courses suggests that students recognize that their success in the “real world” will depend on their ability to communicate effectively, particularly in writing, but that they do not draw sufficient rhetorical expertise from their FYC courses to understand that “effective communication” is a product of more than mechanical correctness.¹⁴

The general agreement among students across the disciplines about the purposes and effectiveness of English classes, both composition and literature, suggests that these students’ perceptions of learning to write may be part of a peer culture that the typical writing class does not touch and rarely recognizes. For these students, first year composition seems to be merely an irrelevant distraction from the important work of professional socialization that occurs in their “content-area” courses during the first year or two, and more particularly from socialization into their peer culture. Their non-engagement with writing may be exacerbated by the minimal contact first and second year students have with actual communities of practice in their disciplines. First and second year students are typically enrolled in large lecture classes in their majors, and their labs and recitation sections tend to be taught by TAs rather than full-time faculty, with the result that these students have relatively little individual contact with experienced members of their disciplines. Composition courses, because they are smaller, can potentially give students greater contact with experienced practitioners. However, students’ perception of English as having less disciplinary clarity and rigor than their intended majors prevents them from engaging with the composition course, except on their own terms: that is, as a course in creative, expressive writing, designed to teach them mechanical skills and the MLA citation system, and in which their highest priority should be to achieve the required page length without boring the reader too much. These terms severely limit their ability to recognize, understand, or internalize most of the skills that composition teachers are trying to teach.

It may be that this socialization process is particularly strong in engineering schools, which tend to have a tradition of “toughness,” passed along by both faculty and peers. At this kind of institution, numbers and the representation of ideas through numbers are frequently regarded as scientific, rigorous, masculine, and “hard,” while the expression of ideas in language (and, by extension, English courses) may be perceived as fluffy, unscientific, feminine, and “soft” (Meinholdt, Murray, and Bergmann). Follow-up stud-

ies with other student populations are clearly necessary to explore whether our findings can be generalized to a broader range of students.

However, initial support for our findings is provided by Delli Carpini's study of high school students, first presented at the 2004 WPA Conference and more fully at the 2005 CCCC Conference. In response to a very different set of questions (about their assumptions about what college writing would be like, their expectations for how the writing required in college courses would differ from the writing they had done in high school, and their level of confidence that they were well-prepared for college writing), Delli Carpini's respondents expressed many of the same convictions expressed in our focus groups: that writing consists solely of content (sharply divided into content dictated by the teacher, the class, or the assignment; and content generated by the writer's own experience, emotional state, or artistic inspiration) and of rules of correct grammar, punctuation, usage, and source citation. Rules, for these students, seemed objective and inevitable—rather like the laws of gravity and the speed of light—but also arbitrary and meaningless, in the sense that writers follow them only because they are there, and not because the rules contribute in some way to effective communication of ideas or pleasurable use of language. Like our respondents, Delli Carpini's respondents appear familiar with the idea of a writing process, but for them "writing process" refers to some external—and again arbitrary—procedure dictated by the teacher, often including either note cards or an outline, and which the students see at best as a waste of time and at worst, as "bondage."

APPLICATIONS TO THE STUDY OF THE TRANSFER OF WRITING KNOWLEDGE ACROSS DISCIPLINES

We believe that our research casts some light on whether and how much students transfer to later situations writing skills that are taught in first year composition courses. The attitudes expressed by our respondents suggest that the primary obstacle to such transfer is not that students are *unable* to recognize situations outside FYC in which those skills can be used, but that students *do not look for* such situations because they believe that skills learned in FYC have no value in any other setting. While our participants' responses are consistent with the basic contentions of activity theory as outlined by Russell ("Rethinking")¹⁵, they particularly demonstrate the influence of students' limited understanding of English study (whether of literature or composition) as a discipline. In part, this view seems to arise from students' quite correct understanding of the rhetorical situation of "school writing," which is, as students learn in college, substantially dif-

ferent from any other rhetorical situation they are ever likely to encounter. But it also seems to arise from students' inability to recognize the possibility that English classes, like math and physics classes, might be capable of teaching problem-solving skills whose real-world applications are many and varied. Because they believe that the writing done in English classes is personal, expressive, and creative, our students neither recognized the transferable rhetorical problem-solving skills FYC offers nor thought they benefited from the coaching in style, organization, and argument strategies offered in their FYC courses.

We often considered our respondents' points of view to be distorted, mistaken, or disturbing, but we were impressed both by their willingness to discuss their experiences openly and freely and by the consistency of their perceptions across different student populations. And yet, in some ways, this very rejection of FYC and everything it offers shows that students do have a strong rhetorical sense. It is this sense, after all, that teaches them to understand the rhetorical situation of school writing and that makes them aware of its limited scope. Moreover, students seem to have an established grasp of the concept of disciplinarity and at least a rudimentary notion of discourse community. Likewise, they seem to be very much aware that writing is situated and context-driven and that definitions of "good" writing are specific to communities and contexts. Finally, and most impressively, the students in our study seemed entirely alive to the fact that successful writers learn the rules for a particular type of writing task in a particular community by analyzing models. Although the students in our study typically used this knowledge in uncritical ways (for example, analyzing other students' papers in order to improve their grades on assignments for a particular professor), these practices may offer room to develop the understanding of genre and genre-based conventions that allows workplace writers to use models of unfamiliar genres to learn to write new types of documents (Beaufort). Like those experienced writers, the students in our study used models successfully because they were aware, at some level, that any given text is a product of both situation-specific content and genre-based conventions that are both context-sensitive and transferable from one situation to another.

IMPLICATIONS FOR WRITING PROGRAM ADMINISTRATORS

The results of our study suggest that students approach learning to write with a number of preconceptions that strongly influence how much they are able to learn and also with strong, if intuitive, rhetorical skills that if tapped appropriately might serve as the basis for very effective writing instruction.

The students in our study rejected what they saw as the unwarranted intrusions of English teachers in their creative processes, but welcomed writing instruction when they saw it as having disciplinary legitimacy (that is, when it occurred in the context of being socialized into some other discipline). The fact that the students in our study frequently identified specific courses in which they had learned the writing skills they use on a daily basis indicates that students *do* transfer some writing skills. The fact that none of the courses they identified as crucial to their development of writers were English courses supports the claims of Petraglia, Russell, and others that such transferable skills are not successfully taught in a general skills writing course.

One obvious outcome of this study is additional empirical support for proponents of writing in the disciplines, *taught by experts in that discipline*. Clearly the students in our study were much more open to learning to write like historians, chemists, or electrical engineers in the context of studying chemistry, history, or electrical engineering than they were to learning to write like students in the context of a writing class. But although students may be willing to learn to write in discipline-specific courses, few faculty in those courses are comfortable taking on the role of writing teacher. Historically, the goal of the FYC course has been to remediate the inadequate writing skills of incoming college freshmen in order to prepare students for the real work of their disciplines, or in other words, to save faculty in other disciplines including literature the trouble of teaching students how to write (see, for example, Berlin). And even at the university where our research was done (an institution that prides itself on its commitment to writing instruction at all levels and in all disciplines), the majority of faculty outside the English Department are at best hesitant to teach writing, both because of the additional workload involved and because they feel unqualified to do so. Equally important to administrators is the question of cost. Faculty members in engineering and the sciences are dramatically more expensive per student credit hour than typical writing instructors, which means that an institution that adopts an exclusively WID approach to teaching writing is adopting a much more expensive model. Whether it is a more effective model may not be the most important consideration for schools already facing budgetary constraints in other areas.

In addition, although students do learn transferable writing skills in their classes in other disciplines, they often learn those skills by trial and error, sacrificing at least the first paper and often several papers to the “crapshoot” of writing in each new course. A solution to both problems could be provided by a FYC course that introduced students explicitly to the concept of disciplinary and focused less on teaching students how to

write than on teaching students *how to learn to write*. Russell's argument that writing, like the skills necessary to play any specific game involving a ball, is not transferable from one context to another, suggests a solution to the very dilemma it raises.¹⁶ Specific skills athletes learn in one sport (such as how to dribble a basketball) may not be directly transferable to another sport (such as soccer), but what athletes are able to transfer from one sport to another is what they know about how to learn a new sport. Everything about getting one's head into the game is transferable, as are training habits, on-field attitudes, and a generally competitive outlook on the whole procedure. We might use this metaphor, then, as an incentive for investigating what kind of course could increase students' understanding of the process of learning to write.¹⁷

Such instruction would need to tap into students' extensive, if not fully conscious, rhetorical knowledge by explicitly teaching the concepts of disciplinary and the cross-disciplinary transfer of such rhetorical skills as the ability to think consciously about a particular reader's needs and expectations in a particular communication. Students can be taught to recognize how different disciplines use common features of writing like literature reviews, experimental research, and personal observations in particular ways. Such instruction might also focus on the place of research in the university—how faculty members use different kinds of research, how and where research is done, and by whom. This is not simply a matter of teaching particular disciplinary conventions, but rather involves teaching students where and how to see conventions and practices at work in a particular piece of discourse—including their own. For example, the practices writers commonly use to incorporate sources into texts—practices such as summary and synthesis and indicating agreement or disagreement—are also sites where differences among disciplines can be identified. Helping students discover how communication practices vary may invite students not only to use conventions but also to critique them. The point is to teach students to recognize where differences tend to occur, and how to adapt their practices accordingly (or to choose to violate them for a specific reason), building upon their intuitive rhetorical awareness and the writing lore they share with their peers. Such an approach to teaching students how to learn to write would help students recognize that they are making choices, and how to make those choices consciously, based on knowledge about the discourse community and rhetorical situation in which they are working.

NOTES

¹ This project was funded by a Council of Writing Programs Research Grant (2000) and by contributions from the Dr. Beverley Moeller Writing Studio at the University of Missouri-Rolla.

² The extent to which we believed this characterization was eroded both by the problems we saw with students' writing even in the senior capstone courses, and by our ongoing reading in writing in the disciplines.

³ The efficacy of "general writing skills instruction" has been ably challenged by Joseph Petraglia and David Russell, among others, but although the new abolitionist arguments against "general writing skills instruction" are convincing to many researchers with experience in Writing Across or in the Disciplines, they have yet to have noticeable impact on most first year writing programs. Moreover, in the ten years since the publication of Petraglia's ground-breaking collection, *Reconceiving Writing, Rethinking Writing Instruction*, the most recent "back to basics" movement has gained substantial momentum. As a result, even though the field of composition studies is beginning to look very closely at the implications of activity theory for writing instruction, administrators and legislative bodies are demanding ever more narrowly defined skills-based instruction producing writing that can be easily measured through standardized testing.

⁴ The University of Missouri-Rolla, with about 4800 students, is the science and engineering campus of its statewide university system. UMR students are bright and ambitious; the average composite ACT score in 2000-2001 was 27.3, and while UMR students tend to achieve higher scores in the math section than in the verbal section, their verbal scores are better than those of students at many other institutions.

⁵ Typically, only about 40% of students who graduate from this institution actually enroll in FYC. Most students arrive with FYC credit from a community college or dual credit high school course or test out of FYC using AP or SAT scores. Because this study was not meant to measure the success or failure of this university's FYC program, but rather to solicit students' thoughts on how they learned to write, it does not distinguish between students who had taken FYC at University of Missouri-Rolla and students who had not.

⁶ Students were paid for participating and food was provided. The focus group questions were reviewed and approved by the Human Subjects Review Board. Janet Zepernick asked the questions and led the discussion, and Linda Bergmann took notes.

⁷ The three divisions represented here accounted for the entire student body at this institution at the time the study was done. Subsequent organizational changes have resulted in the addition of the School of Management and Information Systems and the renaming of the School of Mines and Metallurgy to the School of Materials, Energy, and Earth Resources, and the renaming of the university as a whole.

⁸ Initially we feared that the selective nature of our student sample might make our results too idiosyncratic to use as the basis for widely generalizable conclusions about student attitudes toward writing, since the qualities that make students more academically successful than their peers (qualities such as superior insight into school as a unique rhetorical situation, greater willingness to adopt a subordinate role and to acknowledge the classroom authority of teachers, a stronger drive for socially-recognized success, and a greater tendency to be motivated by extrinsic rewards) might also make students more insightful about the nature of school writing. Having completed our study, however, we would argue that our results are more widely representative than we initially expected them to be, given our sample population. The students in all our focus groups expressed very similar views about the goals of writing in various disciplines, about their roles as writers in different settings, and about the goals and intended outcomes of various types of classes and writing assignments. These views did not vary with age, prior experience with college writing, or academic discipline; and they were consistent with the failure to transfer skills from FYC and other writing classes that we had observed across the student body more generally. The high-achieving students in our study might have been more articulate in describing student attitudes or more willing to share their experiences of learning to write than some of their peers, but less effective and less articulate students would presumably be as much or even more affected by these same views. In other respects, however, our subjects seem to be representative of the student body at this university: average to above average students who are well-socialized to school and who strive to achieve academic success by understanding how school works and taking the path of least resistance to the best possible grade. Clearly they believed their own experiences with writing to be typical of students in their majors.

⁹ Students were sufficiently impressed by the experience of being *asked* about how they learn and why, that they talked about our study across the campus, as we heard from faculty in other disciplines who supported our efforts.

¹⁰ Similar lack of understanding of the disciplinary roots of First Year Composition are evident in Hunt's and Richardson's studies, in which students are seen to struggle with their instructors' expectations and to ignore or reject their comments.

¹¹ Because English, both as a high school subject and as part of a general education requirement in college, has tended to assume responsibility for teaching critical thinking and encouraging intellectual curiosity, this tendency to privilege evidence of independent thought over socialization into the discipline of literary studies or the acquisition of extra-academic writing skills is pedagogically understandable. However, this focus on individual thought has the disadvantage of producing students who, not unnaturally, don't recognize the difference between writing to learn and learning to write. Bawarshi offers a cogent analysis of this effect, arguing that "the writer's subjectivity [has become] and . . . largely continues to be the subject of writing instruction" (152) and that "the composition course

as we know it today exists first and foremost not to introduce students to the ways of academic discourse . . . but to develop and articulate the writing self” (153).

¹² Because students in our FYC courses have a tendency to describe themselves as “math” people and not as writers, we had assumed that this perception was characteristic of the student body as a whole. However, as a relatively large proportion of students place out of FYC with dual enrollment credit for high school courses or through the Advanced Placement Language and Literature or Language and Composition tests, these focus groups indicated that our view of the student body from the perspective of students we encounter in the FYC is not entirely representative.

¹³ In this they resembled the professional writers Beaufort studied, who were highly conscious of learning to write successfully (“success” being seen as getting what they asked for in their writing).

¹⁴ In this respect, the students in our study were not noticeably less insightful or informed than any of the many college faculty and administrators whose response to poor student writing is to call for more instruction in mechanical skills. Linda Bergmann’s experience in working with faculty in a variety of disciplines has shown that faculty who are unhappy with the quality of students’ writing seldom explicitly identify any problems other than grammatical and mechanical errors. Yet when students improve the quality of argument (by using thesis statements, topic sentences, and clear organizational patterns) faculty satisfaction with their writing increases even if the overall level of mechanical correctness is basically unchanged. In the case of the 2005 SAT Writing Exam, this focus on lower-level skills has been encouraged by the injunction to scorers to ignore factual accuracy when judging writing. Such estrangement of writing from conveying information only exacerbates the perceived non-disciplinary of English in general and writing in particular.

¹⁵ While rejecting the idea of general writing skills, Russell observes that we all engage in more than one activity system, and that general education courses in particular admit students only to the periphery of a variety of these fields. Thus, “The process of ‘learning to write’ can be analyzed by tracing students’ and teachers’ mutual appropriation of new discursive tools with and among genre systems and the activity systems they mediate” (“Rethinking Genre” 19).

¹⁶ Russell compares “General Writing Skills Instruction” with trying to teach students “general ball” rather than specific games (“Activity Theory”).

¹⁷ This might take the form suggested by David Russell of “a course *about* writing” (Activity Theory 73), although more investigation into “how to teach students how to learn to write” might suggest other possibilities.

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APPENDIX A

STUDENT PERCEPTIONS OF WRITING ACROSS THE CURRICULUM at a Technological University

First set of focus group questions (sessions 1-4)

Ice Breaker Question: To start off with, I'd like to just go around the room and have you each introduce yourselves and tell us what kind of writing you most like to do. I'm Janet Zepernick, and the writing I enjoy most is posting to discussions on the listservs I belong to and writing letters to my friends.

Transition: Think about when you sit down to write. What are some of the rules you carry around in your head about good writing?

Probe: Which of those rules do you actually try to follow?

Probe: Where did you learn them? From a class? or a book? or trial and error?

Q1: Think about the kinds of writing you do in the classes you've taken at UMR. What kind of writing is most difficult for you?

Q1 Probe: What is it that makes it so difficult?

Q2: Think back to writing classes you've taken. What kinds of activities took place in class? Lecture? Class discussions? Revision workshops? In-class writing?

Q2 Probe: Which of those activities did you find most useful?

Q2 Probe: What are some differences between the way writing is taught in English classes and the way it's taught in other classes you've taken?

Q3: Think about some of the comments faculty have made about your writing. What were some of those comments?

Q3 Follow up: The common wisdom among writing teachers right now is that all comments on papers should be positive--telling writers what's working in the paper. According to this view, negative comments are too discouraging and do more harm than good. But in our first focus group, some people commented that they'd learned the most from comments telling them what didn't work. How do you feel about this?

Q3 Probe: Which of those comments have helped you improve your writing?

Q3 Probe: What kinds of comments do you find most useful?

Q4: Now I'm going to ask you to think about the kinds of grades you've gotten on papers you've written for school. How closely does your own opinion of the papers you've written match the grades you've been given on them?

Q4 Follow up: What do teachers look for when they're grading writing? That is, what do they base their grades on?

Q4 Probe: Is this the same in every class?

Q4 Probe: When you're in a new class, how do you figure out what the professor is going to be looking for?

Q5: Teachers in math and the sciences see what they call the "box under the bed" syndrome when they ask students to recall in one class information they've learned in a different class. They find that students metaphorically put what they've learned each semester in a box under the bed instead of trying to make connections and see how things learned in previous classes apply in other situations. We're trying to find out if students ever have "box under the bed" syndrome with skills or knowledge gained in writing classes.

How easy is it for you to use what you've learned in a writing class in another class or another writing situation?

Q5 Probe: What makes it easy or hard for you to do that?

Q5 Follow up: Think back to a time when you used something you learned in a writing class in another situation. What was it that you used?

Q5 Probe: Why was it useful?

Closing: If someone were going to ask you for the secrets of good writing, what would you tell them?

APPENDIX B

STUDENT PERCEPTIONS OF WRITING ACROSS THE CURRICULUM AT A TECHNOLOGICAL UNIVERSITY

Focus Group Follow-up Questions (Sessions 5 & 6)

1. The groups we met with in the first round generally seemed to feel that teacher expectations about writing for one class are irrelevant to other

classes, so that there's really no point in trying to use things learned in one class in other classes. Do you think that's a pretty accurate reflection of your experience?

Probe: What kinds of things that you've been taught in one class have you seen as most specific to that class, in other words, as least transferable to other writing situations?

2. In the first round we asked about teacher comments both in English classes and on writing done in other classes. One of the things we saw most often in response to that question was that students resented it when English teachers commented on the content of their essays or criticized their arguments. But they did not object when teachers in other courses such as history or chemistry make similar comments. We interpreted that as meaning that participants felt that the writing they did for English classes was more personal and "private" than writing for other courses. Would you agree with this interpretation?

Probe (if yes): What makes it more personal or private?

Probe (if no): Why do students react negatively when English teachers make comments on content?

3. When you're trying to achieve a professional tone, what do you have in mind as a gauge for what makes writing sound professional?

Probe: Tell us about your audience and why it is that your audience thinks these things sound professional.

4. In a writing class, how much do you feel as though you are personally in charge of how much you learn about writing?

Probe: What kinds of things can students in writing classes do to learn more?

Probe: Do you do them? Why or why not?

Normally when writing teachers design a course, they have in mind certain goals for what the students will learn and a certain means through which those goals will be achieved. What would you say would be appropriate goals for a writing course, and how could those goals be achieved?

