A Preview of Writing Development

Our analysis alters the traditional view that at the moment a child assimilates the meaning of a word, or masters an operation such as addition or written language, her developmental processes are basically complete. In fact, they have only just begun at that moment.

—Lev Vygotsky, *Mind in Society*

It was the kind of note all too familiar to writing center directors. Professor X in the business division had sent me a copy of a student paper, the printed text barely readable through the professor’s copious corrections. Professor X complained that he had directed the student, Eric, to the writing center, but his final draft was still filled with errors and sometimes incoherent. Who had tutored this student? I did, I realized as I reviewed the paper. I remembered the assignment for a freshman seminar class, “Discuss the ethics of the ZZZZ Best case.” (Despite a general shift in the academy to gender-neutral language, this required first-year introduction-to-college course is still called a freshman seminar.) Eric and I had spent half an hour trying to untangle information about the case—a complicated series of frauds perpetrated by an overly zealous young entrepreneur named Barry Minkow, who had turned a carpet-cleaning business into a financial empire built on other people’s money. Minkow had fooled hundreds of investors and numerous accountants, so it is no wonder that Eric and I had some trouble following the ins and outs of his schemes. Eric’s paper was still confusing when he had to rush off to his next class. He didn’t have time to come back to the writing center but vowed to revise, at least to get his facts straight, before he turned his paper in to Professor X later in the day. His final draft, slightly rearranged, was not much better than his first.

I sympathized with Professor X, who assured me that Eric’s
paper was not an exception, only the worst of a very bad set of es­
says, despite the fact that every student had been required to “stop
by” the writing center. After I explained why I was unable to fix
Eric’s paper in half an hour, Professor X shifted the blame for Eric’s
poor performance to his high school teachers, saying it was a shame
that these young people hadn’t been taught to write before they got
to college. I share Professor X’s fantasy that someone somewhere
could teach students to write once and for all, so that ever after one
has only to say, “discuss romanticism, or stock market fluctuations,
or world hunger, or the life cycle of tree frogs,” and a stack of well-
crafted, cogently argued, eminently readable essays would appear.
But how close is that fantasy to the reality of how students develop
as writers during their college years?

Writing Ability and Literacy Tasks

The 20 students in the study group we followed for four years would
probably be judged to have been at least adequately prepared for
college based on traditional measures such as high school GPAs,
SAT/ACT scores, and the mostly “A” and “B” grades they earned in
their first-year college courses. Yet these students often felt besieged
by a barrage of disparate writing tasks in their first two years of
college and needed continuing support and practice in their junior
and senior years to develop proficiency in the specific genres of
writing in their academic majors. They were unable to fulfill the
fantasy that they should be able to write fluently on any topic and
under any circumstances.

Much of the frustration experienced by students like Eric and
their professors comes from a misunderstanding of what constitutes
“writing” in college. Current theorists in composition, especially
those who draw on postmodernist views of knowledge and dis­
course as socially constructed, challenge the notion of a stable, uni­
ified “writing ability” that can easily be measured by looking at iso­
lated texts. They portray writers not as isolated individuals reaching
within themselves to produce original writing but as more fluid
selves pulling together bits and pieces of language to accomplish social and cultural goals. (See, for example, Bartholomae, 1985; Berlin, 1992; Carroll, 1997; Clifford & Schilb, 1994; Faigley, 1992; Harkin & Schilb, 1991; McLaren & Lankshear, 1993; Miller, 1991.)

From this perspective, Witte and Flach (1994) argue that "the advanced ability to communicate effectively" expected in college cannot be assessed apart from the contexts in which individuals use writing, speech, and other sign-systems to accomplish specific purposes. "Ability" is an abstract concept inferred from the individual's performance in specific situations, and our judgments of success or nonsuccess vary, according to the context in which communication occurs. Situations requiring advanced ability, as in college writing assignments, are often "messy," presenting ill-defined problems, and as Witte and Flach note,

> it is the ability to deal effectively and appropriately with the social messiness of text (broadly defined) production and use in naturally occurring situations and contexts that lies at the heart of our conceptualization of "advanced ability." (p. 226)

Myers (1996) calls this ability to use language and other sign-systems strategically "translation/critical literacy" as opposed to the "decoding/analytical literacy" that was emphasized in schools for most of the past century. He demonstrates how rapid changes in information technology, media, and the workplace require that students, citizens, and workers not only be able to decode and analyze texts but also to manage actively their own use of language, to match resources to problems, to shift between different modes of communication and sign-systems, and to understand differences in styles of discourse (pp. 285–288).

What are usually called "writing assignments" in college might more accurately be called "literacy tasks" because they require much more than the ability to construct correct sentences or compose neatly organized paragraphs with topic sentences. In order to
complete these “writing assignments,” students must, in fact, or­chestrate a complicated sequence of “literacy acts.”

Eric, for example, in order to complete Professor X’s rather vague and open-ended assignment, needed to locate relevant information about ZZZZ Best on the Internet and digital databases. He needed to read and understand the financial, legal, and ethical aspects of the case and explain his understanding in a conventional academic essay form. And he needed to produce this revised and edited essay in one or two weeks. In this more complicated sense, Eric, a first-year student, does not “write” well enough for Professor X’s class. It would be helpful to Eric and Professor X to rethink this supposedly basic writing assignment in terms of the more complex literacy tasks it involves. Projects calling for high levels of critical literacy in college typically require knowledge of research skills, ability to read complex texts, understanding of key disciplinary concepts, and strategies for synthesizing, analyzing, and responding critically to new information, usually within a limited time frame.

The complexity and messiness of this critical literacy, with writing as only one component, makes it difficult to accurately assess a student’s writing ability at any given point in the student’s career and even harder to measure a student’s “development” over several years. What is good writing by a first-year student; how will we define “better” four or five years later? Most writing programs have rubrics that outline criteria for judging writing in first-year classes, and these criteria are often taken to be general standards by which most student academic writing can be judged. While such rubrics can increase the reliability of judgments among trained readers, important in high-stakes exams and in grading by different teachers across many sections of the same course, they cannot, as this study will show, adequately account for the success or non-success of students as they go about their actual work as writers across the university. Any assessment of writing ability must examine the interplay between the writer and the learning environment and take into account the writer’s perception of the task, as well as the “objective” reality of the situation.
Examining Writing and Literacy Across Academic Disciplines

In order to more fully understand the complex literacy tasks required in college, we asked our 20 students to collect portfolios of their writing across a variety of disciplines, to complete regular self-assessments, and to participate in a series of focus groups and interviews about their academic work. Our data suggest that both composition faculty and professors of courses in disciplinary majors are likely to have distorted views of student literacy. The composition establishment tends to view writing through the wrong end of the telescope, focusing on forms of writing appropriate to first-year composition courses but often mistaking these forms for academic writing in general. In fact, composition specialists may be dismissive of discipline-specific genres that do not meet their own criteria for good writing. When I presented samples of advanced student writing in science and literature at a writing conference, samples that had been judged as very successful by the student writers and their professors, some writing teachers dismissed the science writing as lacking a sense of audience and voice, and others said that the literature essay was "too jargony." These teachers much preferred a pop-up book on insects, written by two biology students in the writing-across-the-curriculum course of another presenter, also a composition teacher. The pop-up book may be an excellent writing-to-learn activity, requiring biology students to explain their specialized knowledge in an entertaining way to a less knowledgeable audience; however, this type of assignment cannot replace the more difficult work in science and in literature of writing about specialized topics for more critical readers.

It is no wonder, then, that when our study students looked back on their first-year composition courses, their descriptions of their writing in these courses ranged from fun and creative to frustrating and random. For these students, first-year composition served primarily as a transition from high school—not the capstone of their K–12 literacy careers but an introduction to the more diverse ways of writing expected of prospective psychologists, scientists, philosophers, or business managers. While most students gave compo-
tion classes credit for promoting some general writing and research skills, all continued to learn new, more complex, and, often, quite different ways of writing in their major disciplines.

On the other hand, professors in major disciplinary courses may underestimate how different their expectations about writing are from those that students have already experienced and how much practice is needed to apply discipline specific concepts, knowledge, and conventions in writing. Because faculty across the disciplines tend to see writing as a unitary ability simply applied in a variety of different circumstances, they often focus their attention on the most obvious features of student writing—word choice, sentence structure, usage, punctuation—and, like Professor X, spend precious hours actually rewriting student work. Professors in major disciplinary courses who often assign only one or two pieces of writing a semester tend to miss the bigger picture of how student writing develops slowly over several years. These teachers may continue to mistake a one-time performance constrained by time and circumstance for an abstract quality called writing ability.

Unfortunately, few research studies have looked closely at how students actually negotiate the frustrations and successes of writing across disciplines over time. In a classic work from 1975, *The Development of Writing Abilities (11–18)*, James Britton and his co-authors, Burgess, Martin, McLeod, and Rosen, analyzed “2122 pieces of writing from sixty-five secondary schools by school students in the first, third, fifth and seventh years, drawn from all subjects of the curriculum where extensive writing was used” (p. 7). Rejecting previous methods of evaluating student writing, they developed a multidimensional model, demonstrating how the students’ sense of audience and ability to employ different functions of writing developed over their secondary school years. Their conclusions were fresh at the time and highly relevant to future studies, including my own. First, development in secondary schools does not mean progress in a single kind of writing but in the ability to produce different kinds of writing successfully. Secondly, writing may actually become more difficult as writers increasingly recognize the need to address these different tasks at greater levels of
complexity. And finally, various disciplines teach ways of writing that are not only different but, often, contradictory. Britton et al. summarize, "As for the student—if it is not always all cries and confusion, it is sometimes a bit like a tug of war" (p. 139).

More recent studies have closely analyzed this "tug of war" at the college level. Walvoord and McCarthy (1990) demonstrate the difficulties students encounter in four disciplinary courses in business, history, human sexuality, and biology and show how each course presents unique problems in constructing the audience and the self, stating a position, using discipline-based methods of support, and organizing and managing complexity. Anderson et al. with Susan Miller (1990) and Chiseri-Strater (1991) remind us how much student learning goes on independently, how students learn to play the game of school, and how a limited version of literacy may constrain rather than enhance development.

Writing in college is sometimes presented benignly as an invitation to students to join an ongoing conversation, a discourse community of scholars passionately and dispassionately searching for truth. However, examinations of academic discourse by writers like Linda Brodkey (1987), Patricia Bizzell (1992), and Marilyn Cooper (1986, 1990) reveal the complex web of social practices that shape what can and cannot be said. Historical, political, and economic forces influence the practices of writers in academic disciplines, and these social practices continue to evolve in ongoing interactions. How do students negotiate these unfamiliar practices? Within disciplines, experienced writers are themselves often unable to articulate exactly what they do. Research studies help to unravel the tacit processes by which not only texts but knowledge itself is produced. For example, studies by Geisler (1994), Haas (1994), Stockton (1995), and MacDonald (1994) look closely at reading and writing practices in philosophy, biology, history, literature, and psychology. Volumes edited by Jolliffe (1988) and Herrington and Moran (1992) collect additional studies that suggest how students become acculturated to the "ways of knowing" in various academic disciplines. Much of this research takes a pragmatic approach—look at how experts do literacy, look at how students do it, teach
students to be more like experts. At the same time, acculturation is not a universal goal. Geisler (1994), writing about philosophy as a discipline, argues,

But, as we have seen, academic expertise is a culture into which all students neither want nor need to enter. For this reason, we need to use the curriculum to find a way to interact with those who are different than us and intend to stay that way. A reconceptualized general education would acknowledge the difference between expert and amateur perspectives and give as much attention to educating the one as the other. (p. 255)

Sternglass's *Time to Know Them* (1997) is one of the few truly longitudinal studies that captures both the academic environments in which students write and, most importantly, their perception of this environment and demonstrates why composition specialists and faculty across the curriculum need to pay careful attention to both environment and perception if they want to understand and support student development. In the study reported on here, we attempt to understand another group of students in a different environment.

*Profiles of Writing Development*

The gap between faculty fantasies about writing and the reality of students struggling to make sense of academic literacy is best illustrated by actual portfolios of student work and the responses of teachers and students themselves to this work. The 20 different students have 20 different portfolios with characteristic strengths, weaknesses, and interests that reappear in their work over time. However, some general patterns do emerge. I would like to profile 4 of these students here to lay the groundwork for the claims I will develop in the next three chapters. These claims include:
• Writing assignments in college generally call for high levels of critical literacy, typically requiring skills in researching, reading complex texts, understanding of key disciplinary concepts, and strategies for synthesizing, analyzing, and responding critically to new information, usually within a limited time frame.

• Faculty are likely to underestimate how much writing tasks differ from course to course, from discipline to discipline, and from professor to professor.

• Lessons learned in first-year writing courses do not directly transfer to students' work in their major areas of study.

• Students who begin as fluent, effective writers generally continue to be successful, though their writing sometimes appears to be weaker when they encounter new and unfamiliar expectations.

• Students who demonstrate difficulty both in writing and learning content material, nonetheless, do come to better understand the genres and demands of their disciplines and show increasing (but not perfect) ability to write in these genres. Professors reading individual papers in upper-division courses are unlikely to observe this growth over time, and their comments reveal both their patient efforts to help students improve and their frustration that some of their junior and senior students "still can't write."

• Students' literacy develops because students must take on new and difficult roles that challenge their abilities as writers. In fact, student writing may sometimes need to get "worse" before it can get "better." Because many college writing tasks are essentially new to students, they will need repeated practice to become proficient.

• Comparing the writing of students across disciplines on standardized assessment tests cannot capture the diversity of their literacy experiences or their ability to use
literacy successfully in negotiating the demands of their major disciplines.

The four profiles of Sarah, Carolyn, Kristen, and Andrea illustrate the variety and complexity of literacy tasks that engage students across disciplines. These profiles demonstrate why it is not possible to design a one-size-fits-all writing curriculum that can prepare all students for writing situations they have not yet encountered. Instead, each of the four young women profiled in this chapter did develop new literacy skills to meet the demands of new roles she desired or was required to play.

Sarah: The Peculiar World of English Majors

Because writing in high school and college is taught most directly in literature and composition classes, students and faculty members may either consciously or unconsciously base many of their assumptions about “writing” on the kinds of writing typically produced in English courses. In reality, the literacy world of English majors is somewhat peculiar in that English majors, unlike students in other majors, continue from high school and throughout college to produce a similar genre of highly text-based, usually thesis-driven essays. Sarah, for example, an English major and philosophy minor, perfected this similar style of writing from her first year in a “Great Books” alternative to her first-year composition course to her senior honors seminar. Therefore, it is relatively easy to trace a consistent pattern of development from the first essays in her portfolio from her first year to the work she completed in her junior and senior years.

Sarah began her English studies in 5th grade in Eastern Europe and continued in an American 7th grade ESL class when her family immigrated to the United States. An avid reader from a literary family, she scored 620 on the SAT verbal in the 11th grade and graduated from high school in Arizona with a 4.00 GPA. She graduated from Pepperdine University with a GPA of 3.71, as well as more than $20,000 in financial-aid loans.

In September of 1994, during her first semester of college,
Sarah wrote an essay on "Fate vs. Free Will As Acted Out In the Iliad," which her teacher marked, "A," "Very well done—well argued & gracefully written." This essay began:

The founding pillars of The Iliad constitute [sic] a series of questions which Homer repeatedly rises [sic] as the plot unfolds. How far can an individual be held responsible for actions which are the result of some direct divine intervention? What is to be considered fate, and what free will? Is there in The Iliad any developed concept of free and responsible human deeds? As the epic poem is analyzed we can find enough examples to support and negate any answer we might consider true. Homer provides no concrete answers to such questions, but rather incites the reader to analyze own [sic] existence through the lens of the Greek and Trojan culture.

In four and a half pages, Sarah developed her thesis, citing evidence to support her analysis of the roles of fate and free will in The Iliad. She was especially good at dealing with these themes from several perspectives, considering complexity and ambiguity in the epic.

Almost two years later, Sarah still demonstrated a rather florid style and increasing sophistication as a literary critic. For modern drama, she wrote about Heiner Muller's play Hamletmachine in an essay she entitled "Shakespeare's Factory." It began:

Toward the end of the twentieth century, Beckett got his foot in the door of a new era in literature, a period permeated by a post-Cartesian rationalism which adopted an avant-garde opposition to social and artistic conventions, or as it was more poetically phrased by Adorno and Horkheimer in Dialectic of Enlightenment, a gradual "disenchantment of the world". [sic] This period, shattered by an alarming obsession with "reality" and its "representation" became to be known as the postmodern period. " Meaning" ironically rediscovered itself in ways that revolutionized
theatre and blurred the well-defined spheres of what is perceived to be real in the world, and what is a mere artificial representation of it.

Sarah received an “A-/B+” on this essay. Perhaps because Sarah’s writing was already fluent, her professor made few comments on the text and instead wrote a long and thoughtful response, urging Sarah to consider more deeply the political content of the play she was analyzing.

Sarah’s portfolio contains many similar examples of successful writing on Milton’s *Comus*, Conrad’s *Heart of Darkness*, Mishima’s *Sound of Waves*, Kingston’s *The Woman Warrior*; and other writers and works. In addition, Sarah wrote her own poems and a play in a creative writing class. Only in her philosophy minor did she find that her usual style did not work quite so well. For example, although she received a “B” on her nine-page paper, “The Problematic Aspect of Descartes’ Mind and Body Dualism,” her professor marked and questioned word choices, sentences, and ideas in almost every paragraph, urging Sarah to write more simply, make more careful word choices, and develop more “direction” in her argument. Sarah recognized a difference in writing in English and writing in philosophy and explained that English allows more subjective interpretation. Philosophy for her required a more careful analysis of exactly what the writer is saying.

Sarah began as a successful academic writer and added to her repertoire as she progressed over four years. Because she practiced the genre of the critical/analytical essay throughout her college career, it is easy to find in her portfolio similar kinds of papers to compare as “pre-” and “post-” samples of the development of her writing. Faculty members across the disciplines may assume that this critical genre forms the basis for much of academic writing and advocate standardized testing in this general format to assure that students “can write” before they advance to new tasks. However, this may not be the type of writing that students outside of English majors actually want or need to be able to do in their own major areas of study.
Carolyn: Learning to Write as a Professional in Public Relations

Carolyn is a student I will return to frequently in this study. Although no one student can be typical of a whole group, Carolyn's SAT of 1060 and her high school GPA of 3.58 fall in the average range for her class. As a first-year student from Minnesota, Carolyn described herself as "well motivated." She originally considered majoring in biology but then chose public relations as better suited to her skills in working with people. Carolyn exemplifies how even students who would likely be judged well prepared for college still must develop new and unfamiliar forms of literacy.

Like Sarah in English, Carolyn as a communication major took her own writing seriously and was successful in her academic work from her first year. Yet much of Carolyn's work in her upper-division courses looked quite different from Sarah's and quite different from Carolyn's own work as a first-year student. It is difficult to make comparisons between Carolyn's essays in English I and II and her junior-year project in her public relations course, a twenty-six-page packet of materials promoting a charity fund-raising luncheon. Though this packet included several extended texts, they were in different genres. For example, an opening one-page statement of purpose began:

Sleighbell is an annual luncheon put on by the Los Angeles Delta Delta Delta Fraternity Alumnae for the purpose of raising money for the fraternity's philanthropy: Children's Cancer Charities. All of the proceeds raised by Sleighbell will go to Children's Hospital Los Angeles Hematology-Oncology Research. Children's Hospital uses the money for research and also to pay for some of the procedures and treatments for children with cancer whose [sic] families need the financial help.

The packet also included explanations of mission, tactics, key messages, and logistics; a budget; an agenda for the luncheon; a speech to be given by guest speaker Elizabeth Dole (a Delta Delta Delta alumna); 8 press releases; and a publicity timeline. Each section was
formatted appropriately using heads, subheads, and bullet points as needed. The style ranged from straightforward explanation to heartwarming appeal as in Dole's speech, which began:

Mary is a beautiful three-year-old girl. She likes to play with dolls, sing "Patty Cake" and chase butterflies. Mary is not unlike other children her age in most respects. However, unlike other children Mary is not expected to see her fifth birthday. You see, Mary has been diagnosed with Leukemia.

Despite Carolyn's training in writing and editing as a future professional in public relations, her professor still found editing errors like "who's" instead of "whose" and made suggestions to improve her press releases. Yet this was a successful effort; Carolyn believed it represented her best work. As well as demonstrating writing appropriate for her purposes, it drew on her experience as a leader in her sorority and showed her ability to use a variety of public relations techniques in the service of a worthwhile cause.

Carolyn also did continue to write more traditional academic essays over her four years, especially in general education courses. In her major, her ten-page senior paper, "American Propaganda Against Japan Post Bombing at Pearl Harbor," was an analysis of "Techniques and Tactics Utilized by the New York Times and the Los Angeles Times on December 8, 1941." As a genre of writing, this essay was similar to a rhetorical analysis of a speech by President Clinton that Carolyn wrote in her first year. Carolyn received an "A-" on this eighteen-page research paper, an in-depth but somewhat loosely organized discussion of Clinton's oratorical background and his speech announcing the invasion of Haiti. She was proud of this essay, her first research paper in college. Her senior paper, however, was more tightly organized, more thoroughly researched with many more sources, and demonstrated a deeper understanding of persuasive strategies. This was a paper that Carolyn said she would not have been able to write as a first-year student, not because she lacked writing ability but because she did not have the necessary concepts and knowledge. Carolyn made similar
comments about her senior thesis, a forty-page analysis of an advertising campaign at Northwest Airlines, where her father worked as a pilot.

**Kristen: When the Going Gets Tough in Science**

Kristen, a sports medicine major with SAT scores and a high school GPA similar to Carolyn's, also had the writing ability to complete successfully assignments in her general education and introductory courses but experienced difficulty when she faced new and more complex literacy tasks in her upper-division classes. One of her first research projects in college was a paper on scoliosis for her freshman seminar. She wrote:

> Scoliosis is a disease that affects many young people. It is prominent among young girls between the ages of 8–15 years but there have been cases of young boys with scoliosis. Scoliosis is defined as “a sideways curvature of the spine of 11 degrees or more” (3:26). The severity of scoliosis is measured in degrees of the curve. A mild curve is said to be 25 degrees and below, a moderate curve is 25–40 degrees, and a severe curve is 40 degrees and above. Doctors recommend treatments for cases of moderate or severe curves.

Kristen drew on eight sources for this five-page paper. It was essentially a report restating what she had learned. Although she had some difficulty citing sources correctly, the teacher marked the paper “90%,” “Excellent bibliography. Overall a very good paper. Please see comments inside.” Kristen did equally well in the winter of her sophomore year reporting on a research study on the physiology of exercise, for a sports medicine course. Her style had become more sophisticated; she could employ a more specialized vocabulary and concepts. This report began:

> The purpose of this study was to investigate the effect thirty hours of sleep loss would have on exercise performance and cardiorespiratory functions. Exercise perfor-
mance included maximal exercise performance and exercise endurance. Cardiorespiratory functions included blood gases, heart rate, minute ventilation, oxygen consumption, and carbon dioxide production rate. Also measured were plasma epinephrine and norepinephrine levels to assess the influence of sleep loss on baseline sympathetic activity. This study was necessary because college-age athletes do not always get enough sleep and jet lag is prevalent among athletes who travel long distances to perform.

Kristen's grade was 10 points out of 10 for this summary. She was equally successful on the 10 lab reports for this course, receiving only one grade lower than an 8 out of 10.

However, in the winter of her junior year, she was not as successful in her motor control and development course. Her professor made extensive corrections on her first lab report, an experiment in learning to juggle (see the following figure).

The purpose of this experiment is to critically examine the processes involved in learning.

It is hypothesized that the subject will learn to juggle throughout seven sessions of one-handed juggling.

Results

The subject's juggling did improve as the study progressed from the first five minute session through the seventh session of juggling. As seen in Figure 1, the subject's average scores progressed in an upward trend. This shows that she began to improve slightly but did not improve significantly over the course of seven sessions. During the first few sessions, the subject's scores did not increase. The subject's fourth session scores showed an improvement of about seventy percent. Also, the sixth session scores showed an improvement of over sixty percent. Compared with...
The professor's detailed comments and corrections continued for the entire five pages of the lab report. The tone of the comments and the frequent use of exclamation points suggest that the professor might have been somewhat exasperated by Kristen's inability to report data precisely, clearly, and in correct form. Kristen also had difficulty with basic concepts like performance, learning, improvement, and significance. She used these terms as they might apply in everyday speech, not as they should be applied in sports medicine. This project involved conducting an experiment, doing statistical analysis and graphing the results, reporting data, and explaining the conclusions that could be drawn. Kristen earned a “C” on this project, a low grade for her.

Yet, this was one of the projects Kristen chose to include in her digital portfolio. She explained that doing this first lab write-up was “a humbling experience” and that she did not do as well as she had hoped. Her paper was “ripped apart.” However, it was helpful because she had a chance to improve. In this course, with a lab due almost every week, she could apply what she learned from each effort. By the end of the course, she received comments like “well-done” and “well written.” The first lab was an important learning experience, and Kristen added that it was fun trying to learn to juggle with one hand.

Kristen's experience again challenges the fantasy that students can be taught to write at some particular point in their educational careers and ever after perform successfully regardless of context. I do not want to entirely discard the concept of “writing ability.” Kristen clearly had skills and knowledge, both in writing and in her major field, that enabled her to produce a rough approximation of the lab report her professor required. Her previous experiences as a writer in general education and introductory major courses had helped build these abilities. However, in her motor control and development class, she needed to learn to write in a new situation for a new professional audience. We did not expect her to be able immediately to juggle with one hand, even though she undoubtedly had some experience throwing and catching balls. She needed feedback and practice to become proficient in juggling and in writing lab reports.
Andrea: Learning the Hard Way in Political Science

Andrea graduated from a public "magnet" high school in Los Angeles that emphasized math and science. Angela's father, who was an airplane technician, and her mother, a medical assistant, were working in Saudi Arabia at the time of our study. Although Andrea had a 530 SAT verbal score and a high school GPA of 3.69, she struggled to earn " Cs" and " Bs" in her political science and economics courses.

Andrea recalled her frustration in her first year when she was asked by her freshman seminar teacher to investigate the history of her African American family and integrate that history with library resources. Although the paper made interesting reading and she received a "B" on it, Andrea objected, "It literally takes people years to find out who they're related to, and he wanted us to do all that in one semester, and I thought that was literally impossible, and so I wasn't satisfied with the information I came up with." She did, however, locate ten sources and relate them to a family story. For example, after explaining the system of sharecropping, she wrote:

Sharecroppers were forced to live in run-down shacks or cabins. Most of them were built out of sight because they were an eye sore to the white people. After Negroes became free, most of them traveled to the north, the land of opportunity. Some families willingly split apart and others traveled together to the north. Some families didn't want the city atmosphere and preferred the rural setting (Cole 156). Other families believed in superstition and that something bad will happen if they fled to the city (Cole 156).

Along with some other families, my ancestors migrated from Pittsylvania county to Halifax county. There were various reasons why people migrated to different counties. The owners of the land sold their portion of the land and were forced to move to another county.

Despite some of her difficulties with this assignment, Andrea's writing was certainly adequate for this freshman seminar class. Her
professor responded to her family story, commended her list of sources, and credited the paper with 45 points out of 50.

However, by winter 1996, her sophomore year, much more was required in her African political thought course. There were more than 55 comments, everything from one-word corrections to probing questions, on Andrea's eight-page paper, "Progress Within the Supreme Court." Although the professor in an endnote gave the paper a "B," he wrote:

+ good research but your arguments were hampered by grammatical and stylistic weaknesses.
+ There are a number of questions raised by this paper that you have not answered. (i.e.) What are the essential criticisms of the Court as a "friend" to Blacks viz. a viz. their inability to garner support in the Congress or executive branch?
+ What was Earl Warren's agenda in helping Blacks gain civil rights?
+ Your paper never makes an emerging point or theme.
+ Do you think that progress is occurring even in light of Shaw v. Reno 1993 & the recent anti-affirmative action cases in Texas? Univ. of California?
  - spelling
  - sentence structure needs development. Have your papers proof read [sic] before submission.

These were very similar to the comments of another professor in American foreign policy the previous semester and to the comments of her professor in jurisprudence, which she was also taking in winter 1996. By the fall of 1996, her junior year, Andrea was more proficient in writing legal briefs, especially because she had the opportunity to do three briefs in constitutional law, which earned a "B/B-," "A/A-," and "B/B+." Interestingly, in her "A" paper, Andrea took up the Shaw v. Reno case mentioned by her African political thought professor. After seventeen pages discussing background information and judicial opinion in the case, Andrea explained her opinion:
The Supreme Court's decision in this case deviated from the usual harm requirement in gerrymandering cases. The court held that designing legislative districts to increase minority representation may violate the equal protection rights of all voters. The Court reasoned that irregularly shaped districting plans may violate all voters equal protection rights because such plans reinforce harmful racial stereotypes. Because of this case, the standard will change in which a petitioner must satisfy to prove that a reapportionment [sic] plan is violating the Equal Protection Clause.

The Shaw decision shows evidence that because the Supreme Court majority is adverse to affirmative action, our nation's advancement toward increasing minority membership in government has been severely threatened. Unfortunately, the Court chose to engage in an attack on the Voting Rights Act.

In the following paragraph, Andrea continued to explain why she disagreed with the Shaw decision. Clearly, her experience in the jurisprudence and African political thought courses helped her develop concepts, content knowledge, and ways of writing that she applied in this paper. She also was more willing to invest effort in a topic that interested her.

Yet, Andrea's writing, like that of many students, tended to be uneven. Here is her answer, written during the final semester of her senior year, to a humanities exam question about the romantic hero:

The idea of a romantic hero was portrayed through music, art, and literature. The romantic hero was a superhuman who had the ability to persevere for the betterment of mankind. In Wagner's, Nieblung, Siegfried was a romantic hero because he wanted to obtain knowledge and power from a golden ring, but he was betrayed and killed. Romantic heroes were looked upon as god-like or they wanted to obtain a special ability. In Lord Byron's Don
Juan, Don Juan was lover with insatiable needs. Beethoven viewed himself as a romantic hero because he was a brilliant musician, yet he was going deaf. In the "Wrath of Medusa" [sic] by William Turner [sic], Turner showed the agony in which 11 men persevered after being on a raft for 2 weeks without food or water.

On another answer from the same exam, the professor commented that Andrea should "not just memorize points" but "must connect them." Her exam answers in public policy warranted similar comments. On these essay exams, it is difficult to separate the quality of writing from the knowledge of subject matter. Andrea could write well enough to explain Shaw v. Reno, but in this required general education course that she had put off taking, she clearly did not know, and perhaps did not care, much about romantic heroes. Her final papers in her major, during this semester, were also not her best efforts. A book review in criminology basically summarized Mikal Gilmore's Shot in the Heart, and her report of a service project at a juvenile detention camp earned only a "C" because she consulted no new sources beyond Gilmore. Her final paper in a course on third world and developing countries was an extremely detailed fourteen-page single-spaced report on Ethiopia, but it included little analysis and seemed to be almost entirely drawn from one U.S. government publication, Ethiopia: A Country Study, and the CIA web site.

Did Andrea's writing get "worse" in her senior year? It may be that her final semester was partly a case of "senioritis." Being strategic about how she invested her time, she did just enough to maintain her 3.0 GPA. Would she be able to write well enough to succeed in her goal of attending law school? Certainly, she learned new content and new ways of writing that she did not know as a first-year student. She said she thought that she had improved at writing in her major. She characterized this writing as being based on facts with no "frills." But, perhaps, she misinterpreted. In fact, her writing could use more "frills"—more analysis, more development, more argument. I suspect that if she does go to law school, her
experience there might be similar to her experience at Pepperdine. As she said, “It’s bad that you have to learn the hard way,” learning as you go, not knowing it all before you start. And yet, that is the way many literacy tasks are learned. We learn as the need arises and, often, just enough to meet our personal and professional requirements. Reviewing Andrea's portfolio, it's easy to focus on what she did not do and to overlook all she learned, especially in following her own interests in law, civil rights, and African American studies. Two internships in Washington, D.C., gave her practical experience in addition to her classroom learning. Law school would be a new environment and present new writing challenges, but Andrea developed enough knowledge and skills to take her next steps, and she demonstrated a strong drive to learn what she wanted to know.

A Cultural/Environmental View of Development

A preliminary analysis of students' portfolios of writing and their reflections on that writing indicates that our study group did learn to write differently in college and to write better in the sense of producing new, more complicated texts, addressing challenging topics with greater depth and complexity. How can we begin to describe, account for, and support this development? A cultural or environmental view of development explains the almost “magic-like” power of new environments and new roles to “alter how a person is treated, how she acts, what she does, and thereby even what she thinks and feels” (Bronfenbrenner, 1979, p. 6). It is this perspective on development that underlies my preliminary analysis here and the more detailed analysis in the following chapters.

The cultural view of development is outlined by psychologist Urie Bronfenbrenner in his 1979 book, *The Ecology of Human Development*, and further developed by Jerome Bruner (1986, 1996), Michael Cole (1996), and others. Based on the work of earlier developmental psychologists, especially Lev Vygotsky (1978 ed.), Bronfenbrenner defines development as “the person's evolving conception of the ecological environment, and his relation to it, as well as the person's growing capacity to discover, sustain, or alter its
properties" (p. 9). Bronfenbrenner's definition challenges us to re-think the notion of development as simply getting better at the same task over a period of time. The college students in my study, as in Britton et al. (1975), did not necessarily get better at some predetermined type of academic writing. Instead, they acquired a "more extended differentiated, and valid conception of the ecological environment" (Bronfenbrenner, 1979, p. 27). In students' own words, they became better at figuring out "what the professor wants." These successful students learned to accommodate the often unarticulated expectations of their professor readers, to imitate disciplinary discourse, and, as juniors and seniors, to write in forms more diverse and complex than those they could produce when they entered college.

This development, however, was neither constant nor linear. Michael Cole (1996), perhaps best known to composition specialists for his work with Sylvia Scribner, The Psychology of Literacy (1981), has more recently applied the perspective of cultural psychology to studying children and reading. He notes, "Long-term involvement with a single group of children forces the analyst to recognize the individuality of each child and the difficulty of determining an analytic origin, a 'first' from which it is possible to deduce conclusions logically" (p. 346). He explains how each child exhibits individual patterns of strengths and weaknesses and negotiates ways to minimize disadvantages in reading. There is not a single, unitary theory to predict how the child will handle tasks in the environment.

Bronfenbrenner (1979) emphasizes that development, instead of being a continuous process, takes place during periods of transition. For students, each semester in college involves various types of transitions, and each course, each professor, each task represents a more or less different ecological environment. Transitions promote development because "they almost invariably involve a change in role, that is, in the expectations for behavior associated with particular positions in society" (p. 6). The variety of these expectations is often underestimated by faculty who again fantasize writing as a stable skill that can simply be applied in different
circumstances rather than as a complex set of abilities developing unevenly through many periods of transition requiring a variety of different roles.

However, students are far from helpless subjects of these transitional environments. As Cole (1996) points out, "individuals are active agents in their own development but do not act in settings entirely of their own choosing" (p. 104). Within these settings, Bronfenbrenner (1979) stresses that "what matters for behavior and development is the environment as it is perceived rather than as it may exist in 'objective' reality" (p. 4). Students are actively involved in figuring out "what the professor wants" and how they, as young adults, can accomplish their own goals within the college environment. Students employ literacy strategically as they find their own ways through the curriculum articulated by faculty. As other researchers have noted, this "experienced curriculum" is often at odds with the official curriculum described by faculty (Yancey, 1997). Faculty expectations for student writing in first-year composition and courses across the curriculum are often quite at odds with the perceptions of the students in my study who see writing as just one small part of their overall college experience. Problems that puzzle faculty, such as how to give feedback, how to handle errors, and how to grade student work, are highly dependent on students' own perceptions of feedback, errors, and grades and highly influenced by other factors in the college environment, especially time constraints.

Cole (1996) emphasizes that from the perspective of cultural psychology "mind emerges in the joint mediated activity of people. Mind, then, is in an important sense, 'co-constructed' and distributed" (p. 104). Jerome Bruner (1996) describes the ideal environment promoting learning as a "mutual community," which "models ways of doing or knowing, provides opportunities for emulation, offers running commentary, provides 'scaffolding' for novices, and even provides a good context for teaching deliberately" (p. 21). Within this environment, Bruner argues, "Achieving skill and accumulating knowledge are not enough. The learner can be helped to achieve full mastery by reflecting as well upon how she is going
about her job and how her approach can be improved" (p. 64). Dialogue between the learner and more proficient members of the learning community focuses not only on cognitive tasks, how to do the job at hand, but also creates metacognitive awareness. What processes are involved and how might they be applied in new settings?

How do the knowledge and skills of the community become part of the individual's development? Vygotsky's (1978 ed.) concept of the "zone of proximal development" connects learner and community. Writing in the early decades of the twentieth century, Vygotsky proposed the counterintuitive argument that the developmental level of a child should not be judged on what the child can do independently but by "the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). He labels as the "zone of proximal development" the gap between the child's level of independent problem solving and the potential level of problem solving with help. Vygotsky demonstrates that the independent level only "defines functions that have already matured, that is, the end products of development" (p. 86). On the other hand, "the zone of proximal development defines those functions that have not yet matured but are in the process of maturation, functions that will mature tomorrow but are currently in an embryonic state" (p. 86). In a maxim that summarizes his point, Vygotsky states "what a child can do with assistance today she will be able to do by herself tomorrow" (p. 87).

Learning and development then take place in this zone of proximal development. If learners merely repeat tasks at which they are already proficient, no development occurs. In addition, as Vygotsky points out, development is also constrained when experienced practitioners within the learning community are unwilling or unable to help learners solve difficult problems. This failure either to present new problems or to provide assistance in problem solving "limits the intellectual development of many students; their capabilities are viewed as biologically determined rather than socially facilitated" (p. 126).
Challenging Faculty Fantasies About Writing

The cultural or environmental view of development again challenges faculty fantasies about writing. It challenges the notion that writing is a natural talent that cannot be taught. Instead, a cultural perspective directs our attention to the fact that writing is always learned in communities that contain both written texts and more experienced practitioners, the kinds of communities we would expect to find on college campuses. A developmental perspective also challenges the beliefs that students ought to know “how to write” before they get to college and that providing assistance amounts to what one professor I have worked with has called unnecessary hand-holding. In these beliefs, college faculty underestimate how writing in college calls for new forms of problem solving and new levels of development.

The study I present here attempts to dispel myths about writing and describe the ways in which college can function as a learning community, a supportive environment for the development of “translation/critical literacy” (Myers, 1996), “the advanced ability to communicate” (Witte & Flach, 1994). Further, our study students demonstrate that even when support is weak and inconsistent, student writers struggle to make sense of their own writing and become more rhetorically sophisticated, perhaps because they must often find their own ways, with little direct instruction, through changing contexts for writing.

This study seeks to fill the gap between the perception that students “can’t write” and the reality that the thousands of students who earn undergraduate degrees each year are apparently able to “write” well enough to satisfy the requirements of their various academic programs. This study began, for me, with a number of simple observations familiar to writing teachers—that some students who cannot pass composition courses or exit exams in writing seem to do just fine in their other courses and, conversely, some students who do just fine in composition can’t satisfy Professor X’s requirements. Obviously, different environments require different kinds of writing. Although composition scholars reject narrow, basic skills definitions of writing, their own views of “academic writing” or
“critical literacy” may be limited by their specific classroom contexts. What individual teachers identify as student resistance to meeting their idealized version of “good writing” or “critical thinking” can represent students’ quite reasonable efforts to sort through multiple and, often, conflicting demands on their time and energy, hearts and minds. As other researchers have noted, the students’ “experienced curriculum” is often at odds with the official curriculum described by faculty (Yancey, 1997). Students who move from course to course, from teacher to teacher, from one discipline to another, often have a broader view of writing in college than the faculty does, and this study is from their perspective.

My analysis challenges the myth that writing is a stable, unitary skill that can be learned once and then simply applied in new circumstances. It shows that the problems students face in writing in college are not primarily grammatical. Instead, our study students demonstrate that even writers who enter college proficient in constructing simple reports or arguments will struggle with tasks that require more complex analysis and methods of presentation. However, it is precisely in struggling with these challenging tasks that they develop new skills. Teachers and, later, employers can support novice writers in these periods of transition as writers work out their own strategies for learning in new roles.

An Admonition, a Dispensation, and a Challenge

The next four chapters will consider in more detail what we can learn from the study students about their development as writers and the role of faculty in supporting this development. However, a superficial overview already suggests the range of literacy tasks students complete in college and the variety in their preparation to take on these tasks. This overview prompts two observations.

First, from a personal perspective as a teacher of composition and a writing program administrator, I find, in students’ portfolios of work collected over four years and in students’ reflections on this work, both an admonition and a dispensation. The admonition is to take the work of teaching “writing” seriously in first-year composition; the dispensation is not to take it too seriously. A first-year
composition course can serve students by helping them make connections between what they have already learned about writing in their K–12 education and ways they might learn to write differently both in the academy and as citizens of the larger society. On the other hand, first-year composition cannot succeed as a course that will teach students how to write for contexts they have not yet encountered. A one-semester writing course is best viewed as just one step in a long process of development that extends from children's first encounters with literacy on through their adult lives. For students, this step, the first-year composition course, can support their transition as writers from high school to college, but, it is, nonetheless, only one step, a step examined more closely in chapter 3.

Secondly, as a former writing center director and composition specialist responsible for working with faculty across disciplines, I find a challenge in what I have learned from students. Composition theory and pedagogy does not qualify me to preach one, true gospel of literacy or cast out of the congregation of good teachers those, like Professor X, who just do not seem to “get it.” Segal, Pare, Brent, and Vipond (1998) suggest in their article, “The Researcher as Missionary: Problems with Rhetorical Reform in the Disciplines,” that playing the missionary role is problematic, and rhetoricians instead ought to “gain knowledge slowly and respectfully, ideally with the collaboration or cooperation of the members of the community being studied,” while concentrating “on problems that the practitioners recognize as significant within their own frame of reference” (pp. 84–85). They further admonish, “Don’t expect to use what you know to save anyone” (p. 87). The challenge is to apprehend the powerful environmental forces that shape the literacy rituals and conventions of other folks. Students can be our best informants as each new recruit enters college and views with fresh eyes the rites of writing in the academy.

In chapter 2, I examine the cultural context and methodology of this study and briefly introduce the additional students in the study. Chapter 3 contains an analysis of student writing in general education and in first-year composition courses. Chapter 4 provides descriptions of students as they encounter the challenges of writing in their major areas of study.