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Best Practice: Bringing the Elements of Effective Practice to the College Writing Classroom

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Best Practice: Bringing the Elements of Effective Practice to the College Writing Classroom

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy in English

by

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Abstract

Studies of college writing students suggest that many students associate writing ability with innate talent rather than sustained, deliberate practice. As a result, these students may lack the motivation to improve their writing abilities, leading to a vicious cycle in which they come to increasingly resent writing as a curricular and extracurricular activity. This dissertation argues that the elements of effective practice as outlined by cognitive psychology are equally applicable to writing as they are to skills such as music and that convincing students of the “practice-ability” of writing may improve their motivation to improve their writing abilities.

The dissertation discusses the methodology and results of a study to determine how well the five “elements” of effective practice could be incorporated into a first-year college writing curriculum. More specifically, it examines the author’s design and teaching of “Perfect Practice and Writing,” a course centered on the five elements: setting effective goals, maintaining appropriate challenge, appreciating error and failure, evaluating feedback, and thinking metacognitively. Course discussions and assignments were designed to engage students with all five of these essential components of effective practice, ideally leading students to conceive of writing as a skill that could be practiced and improved upon like any other.

The results suggest that a first-year writing course premised on the elements of effective practice can successfully reorient students’ attitudes about writing as a practice-able skill; however, some elements are more difficult to incorporate into the typical first-year writing classroom than others. The more difficult elements are those which require an especially individualistic approach, which may be logistically problematic for larger classes. The dissertation concludes with potential strategies for overcoming these obstacles, as well as implications for further research.

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Table of Contents

Introduction.....	1
Chapter I: A Historical Synthesis of Music Education and Composition Pedagogy.....	12
Chapter II: The Elements of Effective Practice.....	41
Chapter III: Methodology.....	73
Chapter IV: How Students Responded to the Elements of Effective Practice.....	108
Chapter V: Case Study of Giovanni.....	145
Chapter VI: Case Study of L.A.....	173
Chapter VII: Discussion and Pedagogical Implications.....	199
Conclusion.....	231
Works Cited.....	239
Appendix.....	251

Introduction

Best Practice

Typically, when we in composition studies speak of “best practice,” we mean our *own* practice: how best to teach, how best to grade, and so on. Rarely, it seems, is the phrase turned back to our students; rarely do we ask what constitutes best practice for *them*. Perhaps this is owing in part to the natural talent myth, the idea that one either does or does not have writing talent and that some are just born to be better writers than others. Peter Elbow writes, “Most people’s relationship to the process of writing is one of helplessness...the ability to write is unusually mysterious to most people” (12). It seems common for writing students to lament to their teachers or classmates that they “just can’t write” or to compare themselves unfavorably to other writers who seem to have some mystical, ineffable knack for the skill. But the myth of natural writing talent is not a new phenomenon; even the Greek speech writer Isocrates thought that “formal training...cannot fully fashion men who are without natural aptitude.” Even today, American culture seems fascinated with this idea of innate skill: we are amazed by online videos of five-year-old piano prodigies playing Mozart flawlessly. In film, we crave the instant gratification we get from a *Rocky* montage, where a character goes from chump-to-champ seemingly over the course of just two or three minutes. In literature, we say that our favorite authors have a way with words. Simply put, we are a culture captivated by what we can’t explain—and very often, talent can seem inexplicable.

But the myth of natural talent is just that: a myth. The nature-versus-nurture debate still rages in developmental psychology, but most now agree that talent comes from a little of both: genetics and biology do play a part, but we cannot underestimate the influence of environmental factors. Even in the extreme cases of prodigies, where the talent seems to have materialized out

of thin air, there is often quite a bit of nurture working behind the scenes (Ericsson, Krampe, and Tesch-Römer 365). But aside from just being inaccurate, the natural talent myth is *dangerous*. In the United States, the myth has often been reinforced through the outcomes-oriented environment of public education, which trains students to believe that some people are just better writers than others and that there isn't much they can do about it. Students placed in "remedial" or "basic" classes get the message that they are less talented (or just less intelligent) than their peers. In *Errors and Expectations*, Mina Shaughnessy argues that most basic writers carry with them a feeling of bitterness and helplessness when it comes to writing: "By the time he reaches college, the [basic writing] student both resents and resists his vulnerability as a writer. He is aware that he leaves a trail of errors behind him when he writes...but he doesn't know what to do about it" (7). On the other hand, students placed in "gifted" or "advanced" classes may feel pressured to consistently display their talent and outperform their peers, even if they don't perceive themselves as especially exceptional. However, even for those who do not subscribe to this myth, writing is probably not the first thing to come to mind when they think of a practice-able skill. A Google image search for "practice" returns mostly photos and clip art of people practicing one of two skills: sports or music. The skill of writing is simply not often associated with the idea of practice.

But approaching writing as a practice-able skill could help counteract the myth of natural talent—a myth which, as Elbow says, sometimes prevents students from even trying to improve their writing. If students come to see writing as a practice-able activity in the same way as they see activities like music and sports, they may become more *intrinsically* motivated rather than *extrinsically* motivated to write. Intrinsically motivated learners value pursuing a skill for its own sake: improvement in the skill is its own reward. In contrast, extrinsically motivated learners

must be goaded into pursuing the skill, whether through the temptation of reward or the threat of punishment. According to psychologist David Yun Dai, intrinsic motivation is generally more powerful and more permanent than extrinsic motivation, and experts in any skill tend to display greater amounts of it (313-6). In addition, intrinsic motivation is more likely to lead to what Joseph Walters and Howard Gardner call a crystallizing experience, the moment at which a learner becomes more or less permanently motivated to pursue a skill despite the occasional frustration it may cause (4). If students succumb to the myth of natural writing talent, they are likely to fall back on extrinsic motivators such as the fear of a bad grade, the loss of a scholarship, or the concern of disappointing someone. On the other hand, if they perceive writing as something that *can* be practiced and improved upon, cognitive psychology suggests that they are more likely to pursue writing for its own sake and get greater enjoyment out of the writing they do both in and outside of college.

I argue in this project that writing *is* a skill that can be taught, learned, and practiced. I do so by drawing parallels between the practice of writing and the practice of a sister humanity: music. I explain how the strategies music educators give their students for practicing could be effectively adapted for the writing classroom. Ultimately, I put forth that both the educators and the students of composition could benefit from (1) seeing writing as a practice-able activity and (2) understanding the cognitive abilities that correlate with what we consider “good” writing and writers. I intend to do more than just show the similarities between composition and music. Rather, I intend to suggest that they are similar for a reason. The factors that constitute best practice for students seem to be largely identical across disciplines, and educators may benefit from making those factors a regular part of the classroom. Hopefully, looking at how music educators approach this task—and how cognitive psychology corroborates that approach—will

provide us as writing teachers with a stronger awareness of what makes best practice in our own field.

Where This Project Came From

When I began playing music at the age of twenty-three, I immediately set out to find the best ways to practice my instrument (the banjo). Admittedly, my purpose was selfish: I wanted to get good—really good—and I wanted to do it quickly. In the course of my research, I found that the same practice tips kept surfacing. Play often, but don't burn yourself out—thirty minutes a day is enough. Listen to a wide variety of styles. Set specific, realistic goals. Take risks and improvise. Keep challenging yourself. Don't worry too much about little mistakes. Sign up for one-on-one lessons, and listen carefully to your teacher's feedback. At this time, I considered myself an *experienced* writer: I'd written extensively as an undergraduate and graduate student, and I'd taught composition for a couple of semesters. As I read these tips for practicing the banjo, I noticed that I could have just as easily been reading about how to practice writing: the same principles seemed to apply to both skills. To my excitement, I was finding connections between my vocation and my avocation, and to explore these connections further, I began reading literature from cognitive and developmental psychology on how people learn. There, I found many of the same principles, just worded more broadly. For example, psychologist K. Anders Ericsson, who famously said that it takes about 10,000 hours of deliberate practice to achieve expertise in a skill, outlines the following four elements of deliberate practice: motivation and effort, appropriate challenge, useful feedback, and repetition (367). At this point, I felt reasonably confident that there was *something there*—but it turns out I was only standing on the brink of the rabbit hole.

My readings from all three disciplines—composition pedagogy, music education, and cognitive psychology—kept bringing me back to the same word: *metacognition*, a term coined by John Flavell in 1977 and which he defines as “a kind of ‘metathinking,’ i.e., thinking about thinking itself rather than about objects of thinking” (107). In metacognitive thinking, an individual explores his own ways of approaching a problem, inquiring *what* needs to be done and *why* it needs to be done. Many cognitive psychologists imply that metacognition may be the key ingredient for expertise in any skill, as it seems to be what most starkly separates the experts from the novices. In *How People Learn*, M. Suzanne Donovan et al. contend that “a ‘metacognitive’ approach to instruction can help students learn to take control of their own learning by defining learning goals and monitoring their progress in achieving them” (13). Similarly, Joanne Kurfiss observes that “successful problem solvers aggressively seek connections between the present problem and what they already know... They monitor the effectiveness of their efforts continually” (31). It seems that regardless of the skill or discipline under discussion, one distinguishing factor between experts and novices is the degree to which they have this sort of inner strategist guiding their problem solving strategies. Put simply, the experts know what they’re doing.

Of course, metacognition is not a new concept in composition studies. Though they don’t use the word *metacognition*, composition scholars such as Linda Flower and John Hayes began exploring questions in the mid-20th century like, “How do writers *actually* write? How does that differ from how we *think* they write? How can we use this information to better teach student writers?” Flower and Hayes’ findings suggested that expert writers, unlike their less experienced counterparts, have a *monitor*, an inner “writing strategist which determines when the writer moves from one process to the next” (“Cognitive Process Theory” 374). This monitor essentially

tells the writer why they are doing what they are doing. Since Flower and Hayes' study and the other cognitive research surrounding it, metacognition has appeared with some frequency in composition scholarship. Mika LaVaque-Manty and E. Margaret Evans align the three "stages" of metacognition proposed by Gregory Schraw (planning, monitoring, and evaluating) with the three "stages" of the writing process (prewriting, drafting, and rewriting), implying that, like Flower and Hayes saw with the writing process, the stages of metacognition are cyclical rather than linear. In planning, the learner asks, "What do I need to do, why do I need to do it, and what strategies will help me do it?" In monitoring, the learner asks, "What am I doing and why? Is what I'm currently doing working or not?" In evaluating, the learner asks, "What did I do well, what did I not do well, and how can I use this information in the future?" Effective metacognitive thinkers can and do move fluidly among these skills, returning to previous ones or using one to inform another (e.g., upon meeting a goal, the learner evaluates his performance toward that goal and then returns to planning to develop a new goal). In short, metacognition is recursive, just like the activity of writing itself.

What This Project Does Differently

Despite the extensive work done on metacognition in composition studies, none of it to my knowledge has examined metacognition within the context of effective practice. This, I believe, is vastly underexplored territory, considering that metacognition seems to be the single most important element in transitioning to the mindset of an expert performer. If we operate with Schraw's three stages of metacognition (planning, monitoring, and evaluating), it's not difficult to see how the elements of effective practice fit conveniently into those stages. Part of planning (or prewriting) is setting clear, specific, realistic goals. Monitoring is where the actual *doing* comes into play, as well as the risk taking and improvisation. Evaluating entails learning from

one's mistakes, digesting feedback, and preparing to do better next time. What becomes clear is that metacognition is the "umbrella" concept that covers all the other elements of good practice: it all comes back to the learner's ability to ask the "why?" and "how?" questions about their own strategies. This is easier said than done, though, and metacognition must *itself* be practiced.

Surprisingly little work has been done in our discipline on how to foster metacognitive awareness in students. The "writing about writing" approach pioneered by Douglas Downs and Elizabeth Wardle seems to be a step in that direction. However, I believe their approach falls into the trap of assuming composition students *already* have experience thinking metacognitively. It therefore asks them to do too much too quickly. In reality, reflecting on their own writing strategies is very new to most first-year college students (particularly traditional students), and it must be taught with patience. We, as the educators, must also be on constant guard against what I call the expert's paradox: ironically, experts in a task often make its worst teachers because the task has become so routine, so second-nature, that it's hard for the experts to describe exactly what they're doing. For experts (expert writers included), metacognition has become such an automatic process that they often don't even realize they're using it. The average first-year writing student, of course, is nowhere near this level of ability, and we must remember that what is now easy for us is probably still quite difficult for them.

Additionally, to the best of my knowledge, no one in composition studies has aligned the teaching and learning of writing so closely with the teaching and learning of music. I chose music as the sister discipline for two primary reasons. First, I chose it for its aforementioned "practice-ability"; most people already associate music with practice. That makes it the perfect exemplar for composition to follow: it allows us to ask, "What makes people associate music with practice, and how can we tap into that association for writing?" In other words, working

closely with music may clue us in to what makes people (but more specifically, students) perceive a skill as practice-able. Second, though the disciplines developed along different trajectories, there are remarkable intersections between them, and these similarities likewise allow music education to lead by example; we in composition can learn from how music educators have responded to important developments in cognitive psychology.

Outline of the Dissertation

The first chapter of the dissertation analyzes the historical intersections of music education and composition pedagogy in greater detail. I synthesize the histories of the two disciplines in the United States, pointing out key historical events, figures, and pedagogical trends that similarly informed both disciplines from the 18th century to the present. The purpose of this chapter is to illustrate how music education has responded to developments primarily in cognitive psychology and progressive education, thereby potentially shedding some light on how composition pedagogy could similarly benefit from these developments. Ultimately, I want to argue that our own field perhaps turned away from these developments too early where music education did not: I hope to demonstrate that the successes music education has enjoyed thanks to its pursuit of findings from cognitive psychology could potentially be brought to composition if we gave them more of a chance, if we *immersed* ourselves in them as music education has done instead of just *dabbling* in them.

Chapter II introduces the five specific elements of effective practice that receive the rest of the dissertation's focus: (1) setting effective goals, both short-term and long-term, (2) maintaining an appropriate level of challenge throughout practice, (3) appreciating error and failure as opportunities for learning, (4) evaluating feedback from instructors, peers, and other sources, and (5) developing metacognitive awareness of one's own practice strategies. I first

explain how cognitive psychology defines these elements and what exactly makes them the essential ingredients for effective practice. Then, I delve into how music education has embraced the elements in their curricula, citing examples from a number of music educators. I end the discussion of each element by exploring what relatively little work has been done in composition to integrate that element into writing curricula, paving the way for Chapter III, in which I propose a few ways that they *could* be integrated.

Chapter III of the dissertation describes my methodology for implementing and evaluating a composition curriculum centered on these elements of effective practice. It begins with an explanation of my methodology for answering my research question, and it then provides a theoretical rationale behind “Perfect Practice and Writing,” a “special topics” first-year composition course I designed and taught at the University of Arkansas in order to determine the successes and shortcomings of teaching a writing course based on effective practice. The chapter also covers the course’s structure and sequence of assignments, and it finally addresses the coding method I used to organize my data.

Chapter IV interprets the results of “Perfect Practice and Writing” holistically by analyzing responses from all thirty-eight of the students I taught. Using passages from their written work, as well as interview responses from six particular students, I attempt to illustrate the diverse and interesting ways in which students responded to the “Perfect Practice” curriculum. More specifically, I argue that their responses show the advantages of such a curriculum but also the various logistical and pedagogical challenges that come with implementing it. Chapter IV serves as a broad introduction to the two narrower chapters which follow, chapters which each examine a specific student’s individual response to the course.

Chapter V presents a case study of Giovanni, a student in “Perfect Practice and Writing” who responded to the course in a particularly interesting way. While Giovanni performed well in the course by its end, he at least initially seemed to interpret the course in much more broad terms than the other students; he was passionate about having a disciplined work ethic, immediately skeptical of the notion of natural talent in general, and interested in how the course could help him achieve his *life* goals, not just his writing goals. Giovanni’s case study vividly illustrates the breadth with which students might interpret a “Perfect Practice” writing curriculum, as well as the advantages and disadvantages that come with that breadth.

Chapter VI provides a case study of L.A., the course’s only junior and its most advanced student in terms of metacognitive ability, if not writing ability. More than any other student, L.A. exemplifies the difficulty of—but also the necessity of—individualizing instruction in a “Perfect Practice” writing curriculum, especially when it comes to the second element of effective practice, maintaining appropriate challenge. As the course’s most advanced student, L.A. often found the course lacking in terms of challenge, and her responses shed some insight into how writing teachers might overcome (or at least attempt to overcome) the difficulty of incorporating that element into their courses.

Finally, Chapter VII takes a more reflective approach, drawing on the results from “Perfect Practice and Writing” to discuss the course’s successes, shortcomings, and opportunities for improvement. Expanding on what I wrote in Chapter II about some of the ways other compositionists have incorporated the elements of effective practice, I offer my own suggestions based on how my students responded to a course specifically devoted to those elements. The chapter dedicates particular attention to the difficulties of teaching a “Perfect Practice” curriculum, difficulties which more often than not stem from the broader pragmatic problem of

how to individualize instruction for a large number of students. I intend for my tone in that concluding chapter to be both optimistic and realistic, as I acknowledge the far-reaching pedagogical potential of such a curriculum as well as the logistical obstacles of implementing it.

I conclude the dissertation by acknowledging the limitations of this study, including the limitations of both “Perfect Practice” as a research tool and of the methodology I used to collect and analyze my data. Finally, I recognize that this study focused exclusively on how (and how well) the elements of effective practice fit into a composition curriculum, inviting future research to determine what a practice-focused curriculum might look like in *other* disciplinary contexts. Ultimately, I invite educators across the disciplines to explore for themselves how they might encourage their students to see their disciplines as practice-able skills, just as I have tried to do here with writing.

Chapter I: A Historical Synthesis of Music Education and Composition Pedagogy

Interestingly, there is quite a bit of overlap in the vocabulary of music education and composition pedagogy; *composition*, for one, refers in both fields to the invention and development of an original text. Both fields also seem to share a concern with aural terminology: tone, voice, rhythm. Compositionists even refer to the lyrical essay, a nonfiction genre capitalizing on the musical qualities of poetry. But what is more interesting, I argue, is that we in composition have not really delved any deeper than these superficial similarities with our sister humanity; we haven't stopped to consider what *else* we share with music education and what we might learn from it. In this chapter, I argue that we as writing educators can learn much from examining the convergences (and divergences) of composition pedagogy and music education, especially when it comes to more fully considering the cognitive psychology behind effective practice.

Before looking at the specific influences that determined the fields' trajectories, it's perhaps obvious but still useful to point out that educational priorities are often informed by historical context. Social, cultural, political, technological, and economic concerns of the populace all have a say in what gets taught and how. Music historians Michael Mark and Patrice Madura write, "Music education goals have responded to national needs during times of momentous historical change" (xviii). Likewise, composition scholars need only consider how the technological developments of the last two decades have redefined the very concept of literacy. But educational demands also respond to changes in how we understand the cognitive development of human beings, and it is perhaps these changes that best allow us to see the future of our discipline. While both fields have reacted to advances in cognitive psychology, I argue that composition has been more reluctant to do so, and it has perhaps prematurely turned away from these findings in a way that music education has not. In this way, music education can lead

by example, perhaps giving us new strategies for responding to a changing pedagogical landscape. By observing how music education has responded to developments in such questions as how people learn, whether talent is the result of nature or nurture, and what exactly *intelligence* is, composition educators can get a better sense of how they, too, might want to respond.

The Beginnings: Good Citizenship

Long before the founding of the United States, both writing and music were justified as studies on the grounds that they contributed to building better citizens. Ancient Greek education in general was “intended to influence both the body and the soul to develop citizens capable of participating in Greek society and worthy of receiving its benefits” (Mark and Gary 5). Plato himself thought that the role of music teachers was to “instill self-control and deter the young from evil-doing” (9). The same attitude prevailed about writing: in ancient Athens, “writing for civic and educational purposes was important,” and writing instruction “was wide-ranging in practice as a response to an array of socially determined needs” (Enos 3). In his works, Quintilian implies that the true *vir bonus dicendi peritus* (“good man speaking well”) has knowledge of both writing and music—he even recommends music education to student orators (Mark 16). In contrast to what we see later, neither writing nor music in the Classical Age struggled to justify themselves; both were seen as useful, practical studies that contributed to creating a morally healthy citizenry.

This concern with good citizenship continued into the beginnings of American history, when both writing and music were taught under the watch of strict puritanism. Music education in the colonies was cultivated by religious leaders like Cotton Mather, who, like the Greeks and Romans, believed it was essential for moral development (Mark 17), although he limited that

belief to singing—instrumentation would be called “the work of the devil” in music instruction until the early 19th century (Keene 9). Singing schools opened in the early 18th century to provide instruction in psalmody; not surprisingly, this instruction was extremely strict and prescriptive. Students were to sing songs note-for-note; improvisation, ornamentation, and excess embellishment were considered a corruption (12). Meanwhile, in writing, the puritan plain style, as the name implies, limited writing to mostly simple, direct, true statements, and embellishing one’s language was, to the puritans, not only gaudy but dishonest. As late as the early 18th century, American grammar schools taught students by rote: “The pedagogy was catechetical, calling for students to memorize and recite answers to standard questions” (Schultz 12). Rollo Lyman called it “slavish memorizing, nothing more nor less” (qtd. in Schultz 13). The grammar schools lacked “any form of interactive learning; students were rewarded not for problem solving or for original thinking but for accurate memory” (13). In both activities, then, we see a puritan insistence on adherence to expectations and a shunning of creativity, originality, and deviation. Conformity was the mark of a good, upstanding citizen.

Following on the heels of the good citizenship concern, the mid-18th and early 19th centuries saw a rising concern with cultivating good taste in the populace, and it is here that the self-proclaimed “arbiters of good taste” (Keene 62) such as David Hume and Hugh Blair emerge. In *Of the Standard of Taste*, Hume proclaims, “Amidst all the variety and caprice of taste, there are certain general principles of approbation or blame, whose influence a careful eye may trace in all operations of the mind” (214), naming himself one of the few worldly enough to distinguish the good from the bad. Blair, a pioneer of the belles lettres movement that endures in many American high school English classes today, wrote his *Lectures on Rhetoric and Belles Lettres* to anyone “studying to cultivate their taste, to form their style, or to prepare themselves

for public speaking or composition” (iv-v). Here, it seems, part of being a good citizen meant being able to recognize, appreciate, and perhaps eventually create fine art.

Along with this concern with taste came a pedagogical interest in models. The figureheads of rhetorical thought in the Scottish schools, including George Campbell and Richard Whately, wrote instructive texts designed to allow students to follow the lead of the greats who came before them, such as Cicero and Quintilian. Their texts seem to try to dissect and analyze the habits of these giants in attempt to get rhetoric down to a science which could be followed by any student. In music, teachers taught using tune books, which had “a theoretical introduction to the reading and performance of music” on the first few pages, followed by pages of example notation (Keene 35). Originality was more welcome than it had been under the puritans, but students were still encouraged to avoid it, “as such enterprises as improvisation and embellishment required examples and a good ear” (39). In other words, it seems students were taught to avoid a deviation unless an expert—one with the good taste and good ear to determine what counts as a worthwhile deviation—had already done it. Daniel Wilfred McCormick, Isaac Woodbury, William Bradbury, and others attempted to define good taste in music, often looking to European models and scorning “that which was homegrown” (62). Thus, in both fields, we see early efforts to create a working canon, a storehouse of exceptional models for students to follow as they worked toward becoming discriminators of taste themselves.

Industry, Utility, Practicality

In the mid-to-late 19th century, as the Industrial Revolution took hold in the United States, both writing and music education took a correspondingly utilitarian turn. Mechanical correctness in writing became the priority as educators felt a need to make all writing uniform and replicable, and writing instruction came to embody what James Berlin appropriately called

the “assembly line” of education (Varnum 43). In an increasingly industrialized nation, the goal of writing education was to “prepare students for the transformation of agrarian workers into factory laborers” (Schultz 28). The Classical rhetorical canon of invention fell by the wayside as many teachers did not, in fact, trust their students to be capable of original thought (146), and large classes meant that instruction had to be one-size-fits-all rather than individualized for each student. Operating on Herbert Spencer’s idea of “economy of style,” students were to write perspicuously and clearly, and the objective of writing was a utilitarian one: to be understood.

But to say *all* writing education looked this mechanical during the 19th century is an overgeneralization. Lucille Schultz points out that while the traditional formalistic model did dominate in the teaching of writing, many composition historians are guilty of oversimplifying this period. She points out that criticism of rote learning in fact became more common during this period, and in many schools, students began producing their own original compositions for practice more often (22). Enlightenment thinkers like Locke and Rousseau, in addition to educators like Friedrich Fröbel, Johann Heinrich Pestalozzi, and Johann Friedrich Herbart, put forth that “children are developmentally different from adults...children learn—and need to be taught—in ways consistent with their abilities” (25). These figures brought increased scrutiny into the way people actually learn, scrutiny that influenced the pedagogy of a number of disciplines. More specifically, they began turning educators’ focus toward the individual, leading them to—if only momentarily—question the assembly line methods they were accustomed to. It is here where we first see the influence of progressive education start to take root.

Similar developments were happening in music at the same time; with the Industrial Revolution came an increased interest in the utility and practicality of music. Like writing instruction, music instruction was primarily devoted to a combination of learning conceptual

knowledge—in this case, music theory—and doing drills (Keene 192). Unlike writing, however, music had a harder time justifying its existence in a curriculum increasingly concerned with mechanical efficiency. Spencer, while admitting that music and the other arts give life “half its charm,” relegated music to “those miscellaneous activities which make up the leisure part of life, devoted to the gratification of the tastes and feelings” (26). For Spencer and many others, music was a frill, an interesting but unnecessary supplement to real subjects like math and the sciences. Despite its popularity with students, music struggled to gain acceptance as a legitimate school subject. In response to mounting pressure to justify themselves, music educators such as Lowell Mason sought to convince policymakers that music could meet the “triple standard” of the Boston School Committee by benefitting students intellectually, morally, and physically. In 1837, the Committee found these arguments convincing, calling music “the great handmaid of civilization” (60). Clearly, the “good citizenship” argument struck a chord with the Committee, but importantly, its report marks one of the first times music is recognized as a legitimate *intellectual* study: “Memory, comparison, attention, intellectual facilities all of them, are quickened by the study of its principles. It is not ornamental merely” (55). Although this would not be the last time music education would need to prove its worth, the “triple standard” argument at least temporarily placated concerns that the subject had no value in an industrialized nation.

Pestalozzi was among the most influential figures in the teaching of both writing and music. Pestalozzi’s was “a pedagogy that emphasized experience not memorization” (Schultz 56). An early advocate of allowing students to teach themselves, Pestalozzi called on educators to “let the child not only be acted upon but let him be an agent in intellectual education” (qtd. in Schultz 58). Central to Pestalozzi’s pedagogy was *anschauung*, “the notion that learning is based

on observation and experience and, hence, occurs naturally when students have direct contact with the material being studied” (63). He contended that students should have the opportunity to learn “the thing before the sign” (Keene 231); in other words, students should first be allowed to experience a concept before learning the theory, terminology, and other conceptual knowledge behind it. To Pestalozzi, dissecting and labeling a concept before giving students hands-on experience with that concept not only made the concept less interesting to them but also contradicted the way people actually learn—through experience. We in composition might call Pestalozzi the first true expressivist, as he called on teachers to “bring [the student] to express himself on the subject...the teacher merely watches lest any external force might hinder or disturb the order of Nature in the development of the individual powers” (qtd. in Keene 88). While Pestalozzian ideals were more in vogue in music education than in most other fields (thanks primarily to Lowell Mason, who worked to bring them into the United States), we can see them seeping into some 19th century composition classrooms, too, as “Pestalozzi’s criticism of rule-based learning and his emphasis on learning from direct experience affected composition instruction in the schools” (Schultz 9). Although Pestalozzi’s influence in composition was largely drowned out by the more convenient formalistic model, it nonetheless set the stage for progressivism, which would return with a vengeance at the turn of the century.

Progressivism Takes Hold

In the early 20th century, something changed. Perhaps as a sharp response to the formal drill-obsessed pedagogy of the prior century, educators in both composition and music began to embrace the ideals of what we now call progressive education, the ideals of figures such as Pestalozzi and John Dewey. James Keene argues that “the work of John Dewey probably had a wider effect on educational theory than that of any other” (239). Dewey held that experience was

the greatest (perhaps the only) teacher; he argued that “one learns by doing, to swim by swimming, to talk by talking to people, and to think by attempting to solve real problems and not by memorizing mere formal exercises” (qtd. in Keene 239). For Dewey, drill exercises fail because, first, they are not relevant to students’ interests and therefore hold no intrinsic value to them, and second, they do not force students to *synthesize*, or use their prior experiences to solve new, challenging problems; ideally, “What he [the student] has learned in the way of knowledge and skill in one situation becomes an instrument of understanding and dealing effectively with the situations which follow” (*Experience and Education* 44). Learning, in the Deweyan sense, could only occur if the student were given ample opportunities not only to have experiences but to then use those experiences to solve future problems. Any efforts to pass knowledge from teacher to student “like bricks” (*Democracy and Education* 5) would fail because the student’s chief concern would be “to accommodate himself to what the teacher expects of him, rather than to devote himself energetically to the problems of subject-matter” (*How We Think* 45).

Influenced by figures like Dewey and Pestalozzi, many teachers came to see writing as an art rather than simply a utilitarian skill. In composition classrooms in the years following World War I, “the most notable turn was the concern for the unique individuality and creative potential for each student...Each and every individual was seen to possess creative potential, a potential the proper classroom environment could unlock and promote” (Gold, Hobbs, and Berlin 242). This marked the beginnings of the paradigm shift we most often assign to the 1960s: an interest in every student’s individual “voice,” an appreciation for the artistic, creative side of writing, and the notion that good writing is not simply a product of natural talent but can be achieved by anyone under the proper learning conditions. Though it seems he is rarely credited for it, Dewey

played a significant role in setting composition on its trajectory toward expressivism and a focus on the individual student.

Dewey had a similar effect on music education. He argued that it was teachers' responsibility to understand their students well, to identify their strengths and weaknesses, to cultivate in students a mind that is "individualized, initiating, adventuring, experimenting, dissolving" (*Experience and Nature* 245). As Dewey's ideals gained more prominence in music education, new movements in the field emerged which emphasized creativity and improvisation over rote memorization and drill. Emile Jaques-Dalcroze, for example, introduced his *eurhythmics* method in response to his grievance that traditional music education "emphasized technical excellence...but demonstrated little regard for musical expression, rhythmic vitality, or aural understanding" (Mark and Madura 98). Eurhythmics also encouraged improvisation, inviting students to "fearlessly and expressively experiment with musical concepts, techniques, experiences, understandings, and ideas of their own devising" (102). Carl Orff, who pioneered the still-popular Orff Method, agreed, stating that music was "natural and capable of development through exploration and experience" (104). Other music educators whose methods are still used, such as Zoltan Kodály and Shinichi Suzuki, likewise prioritized expression and artistic appreciation over rote memorization and drill. In 1947, music educator Hazel Hohavec Morgan wrote, "Education fails of its cultural objectives unless it brings to every child the consciousness that his own spirit may find satisfying expression through the arts" (75). Drill and memorization were steadily falling out of favor as music educators became increasingly concerned with producing creative, expressive student musicians.

At this point, both composition pedagogy and music education were on the verge of major paradigm shifts from formalism to expressivism. Those shifts would come in the middle of

the 20th century, when both disciplines would need to quickly and strongly justify themselves as legitimate areas of study again. Perhaps no single historical event has done more to determine the trajectories of these two disciplines than the 1957 launching of the Soviet satellite Sputnik 1. This symbolic event marked the beginning of a prevailing national ethos of competition between the United States and the Soviet Union, and it didn't take long for this fervor to trickle down into the public education system. Determined to find every little advantage over the Soviets, the American populace demanded an education system capable of producing students who could compete on a global scale. Thus, we see a repeat of the post-industrialization call for justification: the disciplines had to prove their utilitarian worth not only to the government but to the American public.

This time, however, not even composition was spared; conservative critics argued that the schools were failing “to provide the educated experts needed for a strong economy and a strong nation” and that classes should be “subject-centered, not student-centered” (Gold, Hobbs, and Berlin 247). The National Council of Teachers of English's response, ironically, was not to play up the discipline's utilitarian value but rather to embrace the progressive ideals that could potentially set it apart from other subjects, recommending “a cultural traditions ideal organized around language, literature, and composition” (248). Darsie Bowden offers a possible explanation for why the NCTE chose this route: “Progressivism has parallels to Romanticism, promoting, albeit from a different angle, attention to personality and self-expression. Generally most proponents of progressivism professed an interest in the kind of development of the individual student that would *help him function in his social contexts*” (51, emphasis mine). By focusing on the individualization component of progressive education, English teachers could

claim the good citizenship angle, arguing that the subject taught the individual how to “function in,” and contribute to, his society.

Music education took a similar tack as concerns arose that music was not practical enough for combating the Soviets. In response to these criticisms, music educators asked themselves what music could do that other subjects could not. They chose to emphasize the aesthetic side of the subject, arguing that music was central to the “human experience.” The music educators who forged this aesthetic movement saw their duty as cultivating students’ appreciation of music and their emotional responses to it: “Aesthetic education is the process that enables man to develop his capacity for expression in the arts” (Mark 127). In an effort to capture students’ interest and foster their musical appreciation, the canon of music education grew beyond its classical roots to include popular music genres (Keene 397), and it also expanded beyond the white European men previous generations had studied. The Civil Rights Era encouraged a national interest in multiculturalism in both music (Mark and Madura xviii) and in composition. In general, the study of music became less about technical correctness and more about what the subject can tell us about ourselves, about the human experience. This concern with the aesthetics of music endures as the prevailing approach to most American music education today.

Even with this increased interest in progressivism, however, it’s important to note that there has been resistance to these paradigm shifts in both fields, and as I mentioned earlier in this chapter, it is misguided to assume that pedagogy behaves monolithically, as if educators simply reach a unanimous consensus on how and what to teach. In composition, expressivist writing enjoyed wide praise at first but later came under attack, particularly in the 1980s, by educators who felt it was “tied to the ideal of the isolated writer” (Fishman and McCarthy 647) and

therefore ignored the rhetorical matters of audience and genre. Patricia Bizzell, for one, wrote that by encouraging students to write in a personal, relatively informal style, expressivism disadvantaged students when it came time to adapt to the discourses of college writing (648). Along the same lines, C. H. Knoblauch warned that expressivist writing assignments encouraged students to “cultivate notions of self-actualization and personal freedom of choice” that any other context—educational or not—would likely deem “impractical,” “sentimental,” or even “dangerous” (133). These compositionists feared that expressivist writing was not real writing—at least not the type of writing students would be expected to do in their future courses or beyond—and that encouraging students to find their own voice came at the cost of helping them find all the other voices they would need for other rhetorical contexts and discourse communities.

Likewise, in music education, several figures criticized aestheticism for not doing enough to teach students critical listening skills. In 1968, Paul A. Haack argued that many music teachers who encouraged an aesthetic response from their students had a misunderstanding of “that marvelously elusive and somewhat nebulous vocable” (52) and therefore lacked specific, practical strategies for improving students’ skills. Haack took issue with what he called “uninterrupted and consequently undirected listening” (53), which, he said, was the result of teachers not wanting to detract from or infringe upon students’ individual responses to the pieces. E. Thayer Gaston similarly lambasted these “pseudomusical activities,” contending that they “not only greatly impede the growth of musical sensitivity, they distort and obscure the goals of musical development” (64). Like the expressivist movement in composition, the aesthetic movement in music was charged with elevating the individual student’s response to and experience with the discipline above the tangible skills the student supposedly needed to achieve

fluency in the discipline. The assumption made in this dichotomy, of course, is that the two are mutually exclusive: educators can either encourage their students to appreciate the beauty and breadth of the subject matter *or* hand down to them the practical skills they need to succeed. As we saw earlier, many educators in both disciplines were able to successfully defend their pedagogy by attacking this false dichotomy, by arguing, for example, that appreciating the beauty and breadth of the subject matter *was* a practical skill for students to have. The fact that educators by and large chose to double down on these approaches in light of the “practicality” criticism rather than back away from them suggests that most writing and music educators embraced these paradigm shifts, shifts that would leave a lasting impact on both disciplines.

Advances in Cognitive Psychology

In addition to these paradigm shifts occurring within the disciplines, the mid-20th century saw numerous breakthroughs in cognitive psychology which would inform the teaching of writing and music. In 1950, Jean Piaget and Bärbel Inhelder published *The Psychology of the Child*, a landmark text in which the authors stress that “biological maturation” is not the only factor in determining the psychological development of a human being; equally important are “exercise or acquired experience as well as social life in general” (viii). This emphasis on experience forced educators to revisit the idea of natural talent and accept that, as Dewey had said decades ago, experience was just as (if not more) essential as innate ability in the development of a skill. In his 1960 *The Process of Education*, Jerome Bruner, in similar Deweyan fashion, emphasized learning as a process of discovery, arguing that “students learned the structure of a discipline through engaging in research as a practitioner of the discipline” (Gold, Hobbs, and Berlin 248). In 1968, William Perry released his report “Patterns of Development in Thought and Values of Students in a Liberal Arts College,” in which he defines

his model—now simply called the Perry Scheme—for understanding how college students think and reason about their own beliefs. This surge in cognitive research led educators to reevaluate their priorities and to question whether their practices aligned with the modern scientific understanding of how people actually learn.

In composition, the Dartmouth Conference of 1966 initiated the “process movement” and a corresponding interest in the cognition of writing. In 1981, Flower and Hayes used think-aloud protocols, a research tool with origins in psychology, to determine what really goes on in expert writers’ heads. They found, first, that writing is not the linear, homogenized process many curricula taught it to be; rather, it is a convoluted, hierarchical activity that differs significantly from writer to writer and from one rhetorical context to another. They also concluded that writing is a “goal-directed thinking process” (366) and that the most proficient writers are those who are able to set realistic goals, develop strategies for reaching them, and revise or abandon strategies which are not working. Expert writers are governed by a *monitor*, an inner “writing strategist which determines when the writer moves from one process to the next” (374). In 1986, Christopher Burnham used Perry’s scheme to explain why some students write better than others, arguing that “When we teach students in the lower stages of the Perry Scheme, we need first to help them become aware of their absolutes, then the sources and the evidence or lack of evidence upon which they are based” (156). He even invokes Deweyan synthesis by arguing that “learning is growth resulting from an individual’s ability to integrate previous experience with new experience, synthesize existing beliefs with new contents” (153). Clearly, much of the composition scholarship of the mid-to-late 20th century was responding directly to the breakthrough work in cognitive psychology being done.

At the same time, music education likewise concerned itself with the cognitive research of figures such as Piaget and Bruner. Lending additional credence to Pestalozzi's "thing before the sign," Bruner argued that "it is only when...basic ideas are put in formalized terms as equations or elaborated verbal concepts that they are out of reach of the young child, if he has not first understood them intuitively and *had a chance to try them out on his own*" (qtd. in Mark and Madura 56, emphasis mine). In response to numerous findings from cognitive psychology that students learn better if they are intrinsically rather than extrinsically motivated, music educators began to question how they could foster in students intrinsic motivation, as "interest in the material to be learned is the best stimulus to learning rather than external goals like grades or later competitive advantage" (Mark and Madura 56). Music educators also latched onto Howard Gardner's theory of multiple intelligences, which posited that instead of a single, monolithic intelligence, human beings actually have at least seven different "types" of intelligence: linguistic, musical, logical-mathematical, spatial, bodily kinesthetic, interpersonal, and intrapersonal (59). If the "good citizenship" argument were not enough, Gardner's theory gave music education another arrow in its self-justification quiver: "Studies in cognitive psychology affirm that musical intelligence affords a view of the world and a way of knowing that are not experienced through other subjects" (61). Like composition pedagogy, music education embraced the cognitive psychology of the time, using it to reconsider how it conceived of the learning process and whether its methods were truly in alignment with best practices.

But despite composition's heightened interest in cognition around this time, the field's relationship with cognitive research was far more tumultuous than music's. In 1982, James Berlin included the research of "cognitivists," such as James Moffett, Linda Flower, Andrea Lunsford, and Barry Kroll, in what he called the "New Rhetoric," where "knowledge is not

simply a static entity available for retrieval” but “the result of a process involving the interaction of opposing elements” (“Perspectives” 17). Strongly approving of this approach, Berlin boldly writes, “I am convinced that the pedagogical approach of the New Rhetoricians is the most intelligent and most practical alternative available, serving in every way the best interests of our students” (10). However, Berlin seems to have changed his mind over the next six years; in a 1988 article, he criticizes cognitivist approaches for overemphasizing individualism and treating writing as a solitary act as opposed to a communal one—for, ultimately, being too concerned with capitalistic practicality: “This focus on the professional activity of experts is always conceived in personal and managerial terms” (“Ideology” 481). The approach, Berlin contests, is consistent with “the modern college’s commitment to preparing students for the world of corporate capitalism” (482); it is too focused on giving students practice solving real-world writing problems, on presenting students with a certain reality rather than letting them discover or create it themselves. Given Berlin’s eminence in composition scholarship, it seems likely that his change of heart about cognitivism may have influenced the discipline’s attitudes as a whole. And it is indeed around the 1990s when composition’s interest in cognitive research seems to wane—though other factors were certainly also in play, as we’ll see in the next section.

Attitudes about Empiricism

Perhaps as a result of embracing cognitive psychology, it is also around the mid-20th century that both fields embraced the scientific method, designing empirical studies to gauge how students in the respective disciplines cognitively approached their subject matter. In the 1960s, Edwin Gordon conducted a study which found that music aptitude became “stabilized” (19) by about age nine. By “music aptitude,” Gordon meant *audiation*, his word for the ability to detect differences in “the four aspects of the sound wave: pitch, loudness, time, and timbre” (17),

not general music talent, which he agreed with most music researchers and psychologists was “a product of both nature and nurture” (18). Similarly pursuing the nature-versus-nurture question, Anthony E. Kemp conducted a study in 1971 to determine the personality differences between players of various instruments, concluding (cautiously) that “introversion may be generally linked with the development of instrumental skills” (36). Also in the early 1970s, William T. Young developed a study to gauge the effectiveness of Arnold Bentley’s “measures of musical abilities,” a battery Bentley developed in 1966 to test children’s pitch discrimination, tonal memory, chord analysis, and rhythmic memory. Young found that although the battery was developed with elementary school-aged students in mind, it possessed “moderately high validity” (79) when delivered to junior high students, as well. The fact that such studies coincided with research in cognitive psychology about where exactly talent comes from—nature or nurture, intrinsic or environmental factors—suggests that music researchers were embracing scientific rigor as a means of confirming or rejecting those findings within the context of their own discipline. In other words, they saw empiricism as a way to see for themselves where musical talent came from.

Of course, this is also when a number of scholars in composition studies began conducting their own empirical studies into the cognition of writing. In Janet Emig’s famous 1971 case study of eight twelfth graders, she concluded that the students “engaged in both reflexive and extensive writing, which were characterized by different lengths and clusterings of components” (Lauer and Asher 32). Her research introduced the case study as a method for investigating the writing process and paved the way for other compositionists to employ it. In the following two years, Donald Graves conducted his own case study to research the writing processes of seven-year-olds, establishing important findings about the influence of learning

environments and developmental factors on writers' behavior. And the aforementioned study by Flower and Hayes in 1981 was perhaps the earliest major study in composition to make use of *protocol analysis* as a means of data collection: subjects thought aloud as they composed, allowing Flower and Hayes to more accurately analyze what actually goes on in writers' heads as they compose. The common thread among these studies is that, like music researchers during the same time period, the compositionists "looked at individual writers and examined precisely what they did as they were engaged in the act of writing" (Perl xi). It's not by coincidence, I think, that this increased interest in such studies corresponded with the more general research going on in cognitive psychology at this time: scholars wanted to see whether and how those findings manifested in their own particular disciplines.

Empirical research into music cognition is still fairly common; for example, in 2005, Roger Chaffin and Mary Crawford published the findings from their case study of Gabriela Imreh, an expert pianist, as well as from interviews with various other expert musicians. Chaffin and Crawford state in their preface that the purpose of their study was to in large part answer the question, "What does the performer think about as the fingers fly across the keyboard?" (xi), similar to Flower and Hayes' quest to "lay groundwork for more detailed study of thinking processes in writing" (366). Chaffin and Crawford's research tells much about how expert musicians actually go about the act of practicing and performing—not just how we *think* they do, and their findings receive quite a bit of attention in other music cognition research (and in this dissertation). In 2007, perhaps motivated by this research, Nancy Barry conducted a field study to observe teacher-student interactions in music studios, addressing such questions as what practice techniques teachers recommended to students, what teaching styles were used to deliver those techniques, and how students actually practiced during their sessions (58). Well into the

21st century, music cognitivists and educators continue to use empiricism as a means to study the thoughts and behaviors of actual practicing musicians; in fact, Peter Miksza wrote as recently as 2011 that “the body of research literature related to practicing has grown tremendously in both quantity and sophistication over the past 30 years” (51).

But composition studies seems to have resisted empiricism to a much greater degree, possibly due to several reasons. One reason may be that it is simply difficult to do such research in the discipline: writing is an activity infinitely bound by the context in which it occurs as well as the sum of an individual’s knowledge and experiences. How does a researcher control for individual writers’ approaches to, and attitudes about, the writing process? How can she account for the plethora of different ways to write, and how does she distinguish between the effective ways and the ineffective ways? Gesa Kirsch and Patricia A. Sullivan raise some similar questions in their 1992 book *Methods and Methodology in Composition Research*: “What degree of objectivity can and should the composition researcher maintain?...How do assumptions about gender, race, and class inform the observations of the researcher and the perceptions of participants in the study?” (3). In short, the composition researcher faces the challenge of wrangling an activity that by its very nature resists control, and this makes it very difficult (if not impossible) to completely eliminate bias. Indeed, in his response to Flower and Hayes’ study, Don Pierstorff questions the validity of their protocol analysis method, suggesting that the subjects might have been “affected in as yet unidentified ways when they were being observed in the act of composing” (217). In other words, knowing that they were being observed, or perhaps just being in a laboratory setting, may have colored the subjects’ responses and made a truly accurate glimpse into the cognition of writers impossible.

And then there's the problem of quantification: "What information is relevant and what is irrelevant? Who decides on the relevance of data?" (Kirsch and Sullivan 3). After all, cognitive composition research is rarely as interested in matters of correct versus incorrect, yes versus no, as it is in observing different writers' varying strategies for solving writing problems, and such data is hard to quantify. Lauer and Asher explain that what relatively little quantitative research has been done in composition has tended to be descriptive rather than experimental "because no control groups are created and no treatments are given" (82), and in these studies, the distinction between independent and dependent variables "is rather imprecise" (86). In part because of the previously mentioned difficulty (impossibility?) of controlling for contextual influences, quantitative research "is usually inadequate to show cause-and-effect relationships among variables" (102). For instance, in her 1981 study of community college writers, Sharon Pianko identified her independent variables as instructional class type (remedial or traditional), age (under 21 or over 21), and gender, while her dependent variables included such things as how long each writer took to prewrite, how many times they revised, and "degree of satisfaction" with their writing (Lauer and Asher 87). However, any of those independent variables could have influenced writers' behavior—and likely did. For example, simply knowing that they were in a "remedial" course may have colored those students' attitudes and behaviors in ways that Pianko was not prepared to account for.

Finally, there may be an element of distrust at play: Lauer and Asher preface their book on composition research by bluntly stating that many compositionists have outright dismissed empiricism, perhaps because the designs of empirical study "often become obstacles to understanding for the humanist" (ix). In some cases, a compositionist might detect problems or research questions but "not know how to formulate them into research designs" (8). Because

empiricism was largely foreign to writing educators for most of its long history, there may be a general anxiety about it in the discipline: it's different, and therefore, it's intimidating. It may also be that the discipline's growing emphasis on expressivism came with a movement away from empiricism: if we begin with the premise that writing is a highly individual activity whose goal is to allow each student to discover his particular voice, it becomes easy to criticize empiricism as too cold, too analytical, too researcher-oriented rather than student-oriented. From this perspective, attempts to collect and sort any kind of "data" from writers could ruin the majestic malleability and artistic richness of the skill.

An Early Departure

I argue that composition's resistance to empirical research into how writers write, paired with criticisms from lofty figures such as James Berlin, created a loss of interest in the cognition of writing in general around the late 20th century. Ever since the spike of cognitive composition research in the mid-20th century, it seems that such research has begun to dry up, along with what was once a fervent interest in determining what goes on in writers' heads. That is not to say that it is not being done at all; for example, as recently as 2015, Paul Anderson, Chris Anson, Robert Gonyea, and Charles Paine designed a study using confirmatory factor analysis and regression analyses "for examining writing's relationship to learning and development" (199). But despite this and other similar recent studies, our field does not seem to have the same interest in the cognition of writing as it once did.

In contrast, music education has continued to embrace research into the way musicians learn, practice, and think. It is here, I argue, that composition pedagogy has the most to learn from its sister discipline. Music education has embraced what cognitive psychology teaches us about how people learn in ways that our own field has not—yet. Maybe because music is more

readily seen as a practice-able, improvable skill, music education has for the most part been quicker than composition pedagogy to adopt the principles of effective learning, such as Pestalozzi and Dewey's insistence on experience rather than rote memorization, the nurturing of intrinsic rather than extrinsic motivation, and seeing oneself as a learner-in-progress. Again, it's not that we have completely ignored these principles (Peter Elbow's "teacherless classroom," for example, largely follows these principles), but I contend that we have not given them the attention they deserve. Additionally, because music education has continued to conduct and embrace empirical studies into the cognition and behavior of students of a wide range of skill levels, they have been better able to apply the findings of cognitive psychology to their own discipline and reform their teaching practices accordingly. Composition's moving away from this kind of research may constitute an unfortunate missed opportunity.

Most importantly, I argue that we have not given enough attention to the Pestalozzian and Deweyan mantra of *doing* and acknowledged that the best way to learn how to write is to write. Ericsson famously wrote that it takes about ten thousand hours of deliberate practice to achieve mastery in a skill (394) but with the crucial caveat that *deliberate* practice is an "effortful activity" that requires motivation, appropriate challenge, conducive feedback, and, of course, repetition (367). As I wrote in the dissertation's introduction, the term "practice" seems to be most commonly applied to music and sports. But as long as these conditions for deliberate practice are met, there should be no reason that students could not improve in writing just as they could in any other skill. Unfortunately, as I also wrote in the introduction, many student writers (and perhaps even some writing teachers) do not see writing as a learnable skill but as a mysterious talent possessed only by those lucky enough to be born with it (Elbow 12). More fully considering the findings of cognitive psychology—and more actively conducting our own

research into the working minds of writers—may help us counter this dangerous myth of natural talent and motivate our students to make the effort to improve.

Along the same lines, music education can teach us much about how to *intrinsically* motivate our student writers to improve. Because many writing students come from educational backgrounds in which writing was compulsory and their writing abilities were frequently assessed, these students may carry with them to college an attitude toward writing that is apathetic at best and antagonistic at worst. They may see writing as something to be done because it *has* to be done rather than as an activity worth doing for its own sake. Perhaps we can follow in the footsteps of the late 19th century’s “playground movement” of music education, in which “the emphasis was not placed on formal drill but on the more modern concepts of free rhythmic movement” (Keene 367). Although our pedagogy has certainly moved away from the current-traditional rhetoric’s emphasis on form and correctness, many students still preoccupy themselves with these features, sometimes to the point of paralysis: in his study of writer’s block, Mike Rose found that over-concern with the so-called “rules” of writing kept some writers from “toying with ideas on paper, from the kind of linguistic play that often frees up the flow of prose” (90), even though—as we’ll see in Chapter II—it is this kind of “linguistic play” that allows for improvement. Music education may be able to teach us some strategies for getting writing students comfortable with the idea of experimenting and trying new things, which could in turn instill in them both confidence and motivation.

Finally, music education seems to have more fully embraced cognitive psychologists’ conclusion that one of the most important characteristics of expertise in any skill, if not *the* most important, is the individual’s ability to recognize, analyze, and evaluate her own strategies—Flavell’s concept of metacognition. As I will argue in the next chapter, this may be the single

most important component of effective practice, as it is a necessary part of all the *other* components of effective practice: all stages of practice require that the learner investigate why she does what she does, how (specifically) she does it, and how well it ultimately serves her. While composition studies appears to be increasingly recognizing the importance of metacognition as it applies to writing, we are far behind music education, and we can learn much from how music educators attempt to instill successful metacognitive habits in their students.

Where Are We Going?

In the 21st century, the ideals of progressive education endure in many composition and music classrooms; however, the disciplines still occasionally face the task of justifying themselves to their stakeholders. With the advent of No Child Left Behind in 2001 and the Common Core State Standards Initiative in 2009, public education rekindled its interest in the practical ends of subjects; Mark claims that once again, “the curriculum of American schools is justified in largely utilitarian terms” (309). This is better news for writing than it is for music, which is still often relegated to the fringe position of elective. However, writing’s position of privilege is a double-edged sword, as teachers of college composition must now more than ever work to convince their students that writing is more than just a functional skill, and they must also work to undo the negative associations many students have about writing thanks to constant standardized testing and similar extrinsic motivators. Again, we might learn a thing or two from music education about how to counter these associations.

Many compositionists continue to embrace the tenets of expressivism. Calling it a “tacit tradition,” Eli Goldblatt writes that although expressivism “lost status and respect in composition and rhetoric during the 1990s” (438), it remains a guiding pedagogy for many composition curricula in the new millennium. In fact, Goldblatt criticizes the “writing about writing”

approach for perhaps focusing too heavily on placating practicality concerns from state legislatures, academic administrators, and the public (441). He argues that such a focus detracts from two of the primary concerns of expressivist writing: “the desire to speak out of your most intimate experiences and to connect with communities in need” (442). Goldblatt concludes that many compositionists, while they may not outright claim to be expressivists, continue to follow the expressivist notion of *experiencing* writing rather than just studying it (461), and that “the insights from this movement are integrated into our research and teaching” (460). However, just as the expressivist tradition lives on, if only tacitly, so do its criticisms. The social constructionists’ qualms still apply just as much now as they did in the 1980s: expressivism emphasizes the individual over the community, and in so doing, it risks underestimating the importance of social context on the writing process. Even Peter Elbow reflects in a 2007 article that although the term “voice” has become ubiquitous in both composition research and teaching, the term itself is problematically vague: many teachers (and students) recognize the importance of having a voice in one’s writing, but they struggle to define exactly what they mean by that word. Elbow quotes Darsie Bowden, who writes that “the term invariably emerges, often sheepishly from one of my students and, more frequently than I’d like to admit, from me as I stumble over my own ability to describe what I mean” (qtd. in Elbow, “Voice” 170). Social constructivist critics, as Elbow acknowledges, argue that a writer never really has his own voice; rather, “We are socially constructed, and what we mistake for a self is a subject position that changes as we are differentially interpellated from one social context of our life to another” (168). Ultimately, Elbow calls for a compromise, a movement away from the false dichotomy of *either* embracing attention to voice *or* avoiding it altogether: on the one hand, a textual voice is “interesting, central, and powerful,” but on the other hand, “a textual voice gives no window at

all onto the real character of the author” (173). Perhaps composition pedagogy in general would benefit from avoiding the trap of either-or thinking, from pigeonholing certain ideologies into “approaches” that dare not overlap.

The aesthetic movement in music education also continues to receive criticism, interestingly enough, for similar reasons as expressivism in composition. The so-called praxial perspective emerged in the late 20th century as a response to the aesthetic movement, which critics argued was perhaps too focused on individual response and too distanced from studying music in terms of the sociocultural context in which it is created. Marie McCarthy and J. Scott Goble write, “Praxial philosophies of music education focus on involving students in the musical practices of different cultural groups and helping them to understand the intentions of those who undertake them, as well as the social, historical, and cultural conditions in which they originate, exist, and have meaning” (21). Scholars embracing the praxial perspective advocate against treating music as “works” or objects, the traditional Western view and the view that an aesthetics-based pedagogy would naturally gravitate toward, and for treating it as an essential human *activity* embodying different cultural traditions (25). McCarthy and Goble conclude, “A debate between the philosophers holding to aesthetic philosophy and those holding different praxial conceptions has continued to the end of the twentieth century and remains alive in the twenty-first” (24). Music education, then, like composition pedagogy, seems to be exploring the tension between a more individual-focused pedagogy and a more sociocultural, community-focused pedagogy, as well as the potential compromises that could be borne from that tension.

While it is impossible to determine just where composition pedagogy and music education will go as we enter into a future that promises to be especially politically volatile, one way to prepare for the future is to study the past. By synthesizing these two disciplines, I hope to

do more than just point out some interesting overlap; I hope to illustrate how historical context informs what we teach and how we teach it. Knowing this may better prepare us for adapting to the historical changes that yet await us. More importantly, though, understanding how one of our sister humanities has responded to advances in cognitive psychology can offer insight into how we might use those advances to our own advantage. Composition has always, I think, occupied a somewhat liminal space in which we're not quite sure whether we're doing the right thing for our students. Ours is a discipline in which there are rarely right or wrong answers, and it is a discipline constantly being shaped and reshaped by its social, cultural, and political context. But to our advantage, writing is a skill, and cognitive research reassures us that skills *are* teachable and learnable. I therefore recommend that we follow in the footsteps of music education by giving more attention to this research into how people learn.

At the same time, I also recognize the limitations of equating composition pedagogy and music education in this way. Writing and music are both skills, but they are different skills, and to say they are learned in the exact same way is a dangerous oversimplification. For one, most people begin their writing education far earlier than they do music education. Just as acquiring one's primary language has its own "critical period," research suggests that music learning also displays "a common sequence of stages and typical ages at which specific abilities are displayed" (Lehmann, Sloboda, and Woody 32). Music learners who start later in life may struggle to acquire the "language" of music, whereas writing in one's native language may come more naturally. Also, because writing in public schools is typically compulsory while music is optional, students may be more likely to harbor feelings of resentment toward writing. They may come to see writing as a necessary evil or an irritating means to an end—as Milka Mustenikova Mosley observes, "High school students typically write mainly to conform" (59). Meanwhile,

because of its perhaps glamorous status as an elective, students may be more likely to pursue music education on intrinsic rather than extrinsic grounds. Finally, although it may be more optimistic for educators to take the nurture side in the nature-versus-nurture debate of where talent comes from, we must still acknowledge that part of a writer or a musician's skill comes from the cultivation of certain innate "gifts" (Gagné 1), and students of each discipline will benefit from different gifts. For example, the gift of physical dexterity would probably be of more benefit to the learning instrumentalist than to the learning writer; conversely, a penchant for remembering the meanings of words would likely better serve the learning writer. We overgeneralize matters if we assume that student writers and student musicians start their developmental journeys with the same sorts of advantages and disadvantages. If we as compositionists seek to take advantage of the overlap in how these skills are learned (and how our understanding of how they are learned has changed over the centuries), we must also recognize where the comparison may fall short.

But despite these limitations, I reiterate my belief that one of our field's defining characteristics is its ability to learn from other disciplines. While we have, to be sure, come a long way in adapting our pedagogies to advances in cognition, music education shows us that there is still a great deal of untapped potential in this area. If we want to explore this potential, perhaps the best way to do so is to start thinking about writing more like music educators think about music: as a practice-able activity that can be learned by following certain principles.

Conclusion

In this chapter, I have shown that music education and composition pedagogy have developed along tellingly similar trajectories, but the more telling matter is when, how, and why

they diverged. More specifically, I have tried to argue that composition's seeming departure from its interest in the findings of cognitive psychology—as well as its interest in producing original research into the cognition behind writing—may have been premature, and there may be pedagogical value in pursuing those findings further. Particularly, returning to these interests may inform us how to help novice writers—including those we teach in first-year college composition courses—to conceive of writing as a practice-able skill, just as music educators appear to have more successfully done with their own students.

In the following chapter, I get more specific with what I mean by “practice.” After all, as I wrote earlier in this chapter, cognitivists like Ericsson are careful to distinguish the *deliberate practice* that actually leads to improvement from ineffective practice where the learner simply spins his wheels. Therefore, before going any further, it's essential to define what exactly constitutes deliberate practice, what separates effective practice from mere going through the motions. Chapter II outlines and describes what I term the five “elements” of effective practice, discussing what cognitive psychology emphasizes about each one, how music education has successfully embraced each one, and where composition pedagogy might be able to make similar strides.

Chapter II: The Elements of Effective Practice

This chapter elaborates on the specific elements of effective practice: (1) setting effective goals, (2) maintaining appropriate challenge, (3) appreciating error and failure as a learning opportunity rather than something to be avoided, (4) evaluating feedback, and (5) developing metacognitive awareness of one's own problem solving strategies. For each element, I first explain what the element entails and why cognitive psychology has determined it to be essential to effective practice. I then give examples of how music educators have historically incorporated the element into their own curricula. Finally, I discuss what has been done in composition pedagogy to incorporate the element, ultimately arguing that there remains a great deal of potential for including the five elements of effective practice in a college writing curriculum. As I concluded in the previous chapter, while music education has largely embraced the elements, composition pedagogy has merely dabbled in them ever since its departure from cognitive research. But what if, like music education, we had stuck with them? Did our field abandon its alliance with cognitive psychology prematurely? This chapter illustrates what exactly makes these elements so important to successful practice and suggests how they *might* play out in a composition context in preparation for the latter chapters, which discuss how they *did* play out in one.

Setting Effective Goals

Effective practice begins with setting effective goals, whether those are what Flower and Hayes continuously refer to as “operational” goals (379)—goals specific to the current writing problem (e.g., “My goal in this persuasive essay is to persuade my audience to ___”) or longer-term, more general goals (e.g., “My goal is to improve my vocabulary”). In “The Role of Deliberate Practice,” Ericsson, Krampe, and Tesch-Römer differentiate between *deliberate*

practice and the kind of mindless, repetitive doing that some are wont to call “practice.” Deliberate practice is “a highly structured activity, the explicit goal of which is to improve performance. *Specific tasks are invented to overcome weaknesses*, and performance is carefully monitored to provide cues for ways to improve it further” (368, emphasis mine). In other words, practice is not very effective if it only rehashes what one already knows how to do well; such practice may be good for brushing up on one’s technique or re-familiarizing oneself after an extended break, but the best practice is that which aims toward improvement. To that end, effective practicers set goals designed to address their specific weaknesses. This gives their practice a sense of direction and allows them to use their practice time more effectively.

Another benefit of goal setting is that it increases the likelihood of intrinsic motivation, which “arises when the student perceives a situation as problematic” (Kurfiss 47) and worth solving. Psychologist Mihaly Csikszentmihalyi introduced the idea of *flow*, a condition in which an activity becomes so enjoyable that the learner feels they are “being carried away by a current” (132)—it’s the oft-called “time flies” phenomenon. He argues that flow occurs when the learner has clear goals, useful feedback, and appropriate challenge (132). In a flow state, the learner is purely intrinsically motivated to pursue the task for its own sake; there is no expectation of reward or punishment—doing the activity is reward enough. Learners who are intrinsically motivated rather than extrinsically motivated tend to be more likely to develop what music psychologists Lehmann, Sloboda, and Woody call a “mastery orientation,” and “those with a mastery orientation are willing to expend the effort needed to achieve and tend to set specific goals for themselves, which makes practice activities more efficient, productive, and rewarding” (46). However, effort itself must be tempered wisely; as Ericsson notes, deliberate, goal-directed practice is an exhausting activity “that can be sustained only for a limited time each day” (369).

Efforts to force oneself to practice for hours at a time often result in “staleness, overtraining, and eventually burnout” (371), extinguishing the learner’s intrinsic motivation and turning practice into a chore. Ironically, it seems many people imagine effective practicers locking themselves in their room and practicing for hours on end, but research shows that *quality* vastly outweighs *quantity* when it comes to effective practice. Therefore, it’s far more valuable for a learner to spend thirty minutes in goal-directed practice than four hours in scattered, unorganized “practice.”

But what, exactly, makes an *effective* goal? According to music educator Steve Oare, effective goals are clear, challenging, and proximal (44). They are, first and foremost, specific to the needs and interests of the learner; learners are likely to abandon their goals if they don’t perceive their value. Learners must therefore have the ability to pursue goals of their own choosing: “Research suggests that freedom and choice are conditions that maintain and enhance intrinsic motivation” (Lehmann, Sloboda, and Woody 48). Effective goals must also be appropriately challenging; goals that are too easily achieved are unlikely to give a sense of accomplishment and stimulate the creation of new goals, but goals that are too lofty are likely to cause the learner frustration and, eventually, apathy. To find this middle ground, it’s important for the learner to assess his specific strengths and weaknesses in the skill, to determine what he can already do effectively and what needs improvement. Working on things which the learner has already mastered is mostly a waste of time. The learner must make a conscious effort to design goals with his *weaknesses* in mind, which itself requires a good deal of metacognitive awareness. In a 2001 study, Susan Hallam concluded that expert musicians used metacognitive strategies to, among other things, “identify personal strengths and weaknesses” (Benton 23),

whereas novices did not pause to consider these things. The novices were therefore less able to set specific, realistic goals designed to help them overcome their weaknesses.

Many in music education emphasize both operational goal setting and longer-term goal setting as the first components of effective practice. Douglas Hill advises, “Each successful practice session needs a solid and well-conceived plan—an intelligently designed goal or set of goals” (63), and he stresses that students should set their own goals: “Of course, all students need goals and structure, but such important conclusions should be planned for and decided upon by the students themselves” (95). Hill prompts his students to prepare examples of various musical pieces, which they later perform in front of him. Afterward, Hill discusses with the student what transpired during the preparation and performance, assessing the strengths and weaknesses the student displayed. Then, using these strengths and weaknesses as a starting point, Hill works with the student to formulate specific short-term and long-term goals for addressing the weaknesses (96). One of the advantages of Hill’s approach is that it casts him more as a mentor rather than an ultimate authority figure. Adopting such a relationship with his students is likely to bolster the students’ intrinsic motivation to improve: Milka Mustenikova Mosley argues that “once the students see the teacher as a fellow learner, they care more about their work and try harder” (64). Another advantage is that it *shows* rather than *tells* the student what goals to pursue; the student can see for himself where his weaknesses lie and what he needs to do to improve. This should likewise increase the student’s intrinsic motivation, as he will understand the exigence—the usefulness—of his goals.

But beyond the more immediate goals that students should set for each assignment, they also need to set longer-term goals, things they want to accomplish across the span of the course and beyond. Music educator Carol Benton advocates journaling for helping music students set

effective longer-term goals: “Keeping a journal helps learners to become more self-aware regarding their own thinking processes and allows them to set goals and devise their own strategies for learning” (62). She recommends prompting students with fill-in-the-blank statements like “My greatest strength/weakness is...” or “I am preparing for ___ by...” (65). Completing these prompts forces students to evaluate their own areas for improvement, which in turn helps them set specific, relevant goals for themselves. Turning the control back to the students helps undo the passive role many of them are perhaps accustomed to assuming, in which they sit and wait for the instructor to tell them what their goals should be. Such a dynamic is, as we’ve seen, likely to diminish students’ intrinsic motivation and possibly lead them to resent the subject matter. Establishing more of a mentor dynamic by working *with* students to set their goals allows instructors to encourage intrinsic motivation and autonomy.

Compositionists have worked with goal setting, but generally not with the same richness and enthusiasm as music educators. Of course, Flower and Hayes confirmed that expert writers, like expert musicians, do set effective goals, but they don’t offer any advice on how to instill that same practice habit in novice writers. Maxine Hairston similarly notes that novice and expert writers have profound differences in such things as how long they take to prepare to write and how often they reformulate their goals (86), but like Flower and Hayes, she stops short of outlining any practical way to accustom the novices to the experts’ strategies. I’m reminded of a conversation I had with a fellow resonator guitar player: he had just returned from a workshop where he had taken several classes taught by high-profile players. He recounted how, in one class taught by perhaps the greatest player in the world, the instructor was attempting to teach the students a particular technique called the chop. After modeling it a few times, he had the students try it for themselves. He seemed to get frustrated when the students struggled with the technique.

To the instructor, an expert who had been “chopping” on the instrument for most of his life, it was simply a matter of “do what I do”; he seemed to have forgotten *his* days of learning the chop, of struggling with it, perhaps of even hating it. In short, he had fallen victim to the expert’s paradox. I believe we in composition have been guilty of the same, particularly when it comes to introducing our students to concepts like setting effective writing goals. Mina Shaughnessy puts it well: “Text writers and teachers, who have spent years acquiring the language of their professions, tend, like most people who have mastered a skill, not to see the water they swim in” (217). For expert writers, practice habits like setting goals are a matter of course and require little (if any) conscious effort—they just happen. Simply *telling* novice writers to set goals is just as inadequate as simply telling novice resonator guitar players to chop: the novices need to know what exactly goes into setting effective goals—how, specifically, they should practice that particular skill and *why* they should do it that way.

This is where I argue composition can make gains: we know that setting goals is a habit of expert writers, but we have not thoroughly explored the avenues by which our students might actually acquire that habit themselves. Elbow provides a start when he calls on writing teachers to “let the class invent its own assignments” (*Method* 116). He reflects that his efforts to exemplify real assignments like writing letters to a newspaper fell flat because they seemed artificial to students; they came to resemble what Elizabeth Wardle calls “mutt genres,” assignments whose “purposes and audiences are vague or even contradictory” (774). Such assignments fail to motivate students because they present artificial problems that lack exigence to the students; they force students to set goals that are not relevant to their interests. The teacher cannot create interest from the outside—as Dewey puts it, a problem that “belongs to the school but not to life outside the school” (“Need for a Philosophy” 11) has no applicability to the

“continuum of experiences” that each student brings with him to class, and it’s therefore less likely to motivate him to solve it. Elbow’s suggestion to give students a hand in shaping the course’s assignments and direction allows students to decide for themselves what they want from the course. Then, says Elbow, “The role of the teacher will be to help students achieve the goal they specified and to help students discover why some things worked and others did not” (116). Students themselves become the judges of effective versus ineffective writing, which, as Elbow says, has the bonus of increasing their confidence: “The procedure should prevent a common dilemma in which the student becomes completely disoriented; he feels he’s lost all idea of what is good and what is bad; he loses all confidence in his powers of responding validly to the quality of writing” (117). Elbow’s use of diction like “disoriented” and “lost” echoes Lunsford’s and Shaughnessy’s findings that inexperienced writers often feel a sense of helplessness and confusion about the writing “process” at large: lacking the confidence to evaluate writing themselves, they rely on those arbiters of good taste (i.e., teachers) to do it for them. Giving students the power to set their own goals may reduce the anxiety that many of them have about writing in general, as well as the confusion that those students in William Perry’s third position have about “what They want” from them (*Patterns* 29), where “They” includes teachers and anyone else evaluating their writing.

Maintaining Appropriate Challenge

Another element of deliberate practice, according to Ericsson, is that it offers the learner an appropriate challenge: it “should take into account the preexisting knowledge of the learners” (367). As we’ve seen, practicing what one can already do is limited in its usefulness; effective practice means trying to do what one *cannot* yet do. Effective practice must therefore be challenging—perhaps the cliché “no pain, no gain” applies. But the operative word in this

element is *appropriate*: as Susan O’Neill and Gary McPherson warn, “If an activity is too easy and skill levels are high, boredom will develop; if an activity is too difficult and skill levels are low, anxiety will result” (35). Practice must therefore strike a balance between offering the learner too little challenge and too much challenge—it must occupy Lev Vygotsky’s *zone of proximal development* (ZPD), which he defines as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (86). Joanne Kurfiss puts it differently: “Developmentally effective instruction *challenges* students to confront the indeterminacy of knowledge at the level just beyond their present understanding and *supports* them by affirming what they have already achieved” (vii, emphasis in original). Perhaps the most effective way to envision the ZPD is as a series of concentric circles, each of which represents a step of the learner’s skill level, as shown in Figure 1.

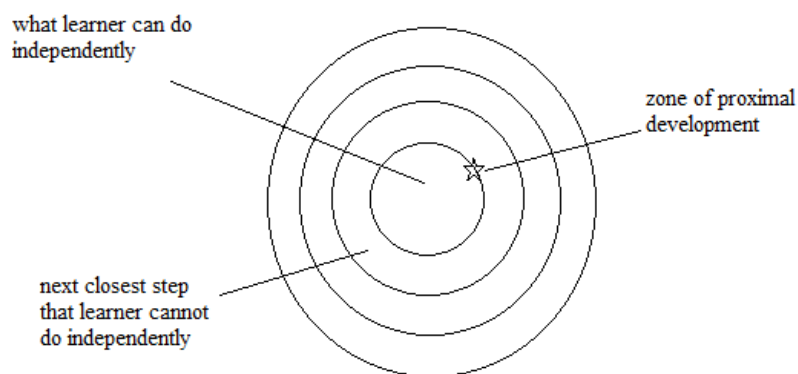


Figure 1: Vygotsky’s “Zone of Proximal Development” Illustrated

The ZPD, then, is the space in between what the learner has already learned and the next closest thing that he has *not* learned. Of course, skills are not so monolithic; one does not simply improve at music or writing in a neat, wholesale fashion. In reality, a practitioner will have a different ZPD for all the various sub-skills of the skill (e.g., a musician will have a ZPD for intonation, for accuracy, for note reading, etc.; a writer will have a ZPD for grammar, for style, for organization, etc.). Each of these sub-skills will need to be practiced and improved for the learner to move from novice to intermediate to expert skill levels. The learner's objective is to always be practicing in such a way that will lead to expanding his circle of mastery to the *next closest* circle. Practicing only what he already knows will never grow the circle; on the other hand, trying to practice beyond the next closest circle (in other words, trying to skip a step) is likely to lead to repeated failure and, eventually, burnout.

A limitation of this visual is that it implies that there is in fact an outer circle, which would represent an end to learning, a stage at which the learner has nothing left to learn. This is false, of course, and experts—even those many would think have capped out their talent—consistently remark on how much they have yet to learn. As Dewey makes clear with his *continuum of experience*, every “end” to learning is also a beginning to learning: “A post is not a goal in itself, but becomes a goal in relation to a runner and his race” (*Experience and Nature* 112). As a learner advances his ZPD to the next circle, there is always another circle on the horizon, and experts are constantly working toward that next circle. To that end, it is perhaps useful to move away from thinking of and teaching skills as “masterable,” as it is impossible to say with any kind of objectivity at what point one has truly “mastered” a skill.

Many music educators recognize that maintaining appropriate challenge goes hand-in-hand with effective goal setting. Hill, for instance, sounds quite Deweyan when he writes that

“concepts and goals should be thought of as directions rather than actual destinations” (64), and in their study of expert musicians, Chaffin and Crawford found that those experts’ practice tends to be a matter of solving a continuous (endless?) chain of new problems, never getting complacent with where one is at in the ZPD: deliberate practice “involves a continual search for better ways to do things” (91). To maintain challenge, the learner must know how to effectively update her goals—both operational and longer-term—in response to her changing level of expertise. Experts are willing and able to modify or outright replace their goals as the need arises (Chaffin, Imreh, and Crawford 72). Most often, this means moving from what compositionists, especially writing center theorists, have come to call “lower-order concerns” to what they term “higher-order concerns.” John C. Bean defines lower-order concerns as sentence-level matters like style, grammar, and mechanics—matters that only distort meaning in severe cases—whereas he considers higher-order concerns to be things like “the early concerns of ideas, organization, and overall logic and development” (“Distinguish Between Early, Higher-Order Concerns and Later, Lower-Order Concerns”)—the concepts that are more likely to significantly affect a text’s overall meaning. Music makes a similar distinction: lower-order concerns in music might be fundamentals such as fingerings (for certain instruments), intonation, and timing, whereas higher-order concerns tend to be more abstract, expressive concepts like vibrato, phrasing, and dynamics. It may be useful to think of the lower-order concerns as the lines and the higher-order concerns as the colors. Expert musicians, like experts in other skills, know when it’s time to move from the lower-order concerns to the higher-order concerns; for example, an expert musician might start a practice session with the goal of learning the basic melody of a new song (lower-order). Once she accomplishes that, she might set a new goal of embellishing the melody with various flourishes (higher-order). Gerald Klickstein emphasizes this balance between lower-

order and higher-order concerns as he advises learning musicians, “You need to gather insight into the expressive language of music while you also amass technical skills” (4). He recommends musicians use drill-like exercises to practice technical concepts like scales and arpeggios, but he says to infuse them with something expressive. For example, a musician can practice the major scale in more ways than just do-re-mi-sol-fa-la-ti-do; the musician might play the notes in an unusual rhythm, vary the dynamics for each note, or add different levels of vibrato to each note. This allows the musician to learn these fundamental technical concepts in the context of the higher-order expressive concepts. It also encourages the musician to be playful with their practice, and “when you’re being playful, you take whatever creative risks you please” (312). Getting outside one’s comfort zone goes hand-in-hand with maintaining challenge. As that comfort zone gets larger and larger, the learner will need to find more creative ways to keep things challenging.

Even less has been done in composition pedagogy with this element than with goal setting, perhaps because—as we’ll see later—it may be the most difficult element to incorporate into the typical college classroom. This is probably because it demands an especially individualistic approach: as Hill writes, the instructor’s job is to “be aware of where the student is at any one time in order to motivate him or her to fulfill the proper sequence of needs” (77). It may be possible to achieve this level of awareness with just a handful of students, but most first-year composition classes enroll a large enough number that this becomes very challenging if not all but impossible. Still, the fact remains that successfully incorporating this element is a matter of meeting individual students where they are, rather than assuming they all require the same level of challenge. In Sondra Perl’s study of what she calls “unskilled” writers, she found that, as in music, novice writers differed from experts largely in how well they were able to transition

from lower-order concerns to higher-order concerns (or if they were even able to at all). She notes that even novice writers follow highly logical, consistent strategies, just like the experts. However, what separates them from the experts is a greater concern for correctness, an understanding of revision as making changes at the word level and nothing more. This process of editing “intrudes so often and to such a degree that it breaks down the rhythms generated by thinking and writing” (57). Novice writers are often so concerned with getting the words right that they are paralyzed from moving onto the higher-order concerns—in other words, they lack the experts’ ability to challenge *themselves* and recognize when it’s time to set loftier goals. Perl, like Shaughnessy, argues for a more individualistic touch: using an example of one of her students named Tony, who she argues has a “highly consistent and deeply embedded recursive process” (50), Perl concludes that he needs “teachers who can interpret that process for him...and who can intervene in such a way that untangling his composing process leads him to create better prose” (50-1). By “intervene,” I believe Perl means that students like Tony need instructors who will challenge them to keep setting new, higher goals, goals that will gradually lead to “better prose.” Ideally, the students eventually develop automaticity with this element and are able to recognize challenge and set higher goals on their own.

Of course, writing center theorists have also long espoused the benefits of individualized writing instruction. Stephen North claims that “any plan of action the [writing] tutor follows...is going to be student-centered in the strictest sense of that term” (439), and Muriel Harris acknowledges that one-on-one conferencing allows the instructor to “help *each* writer move through draft after draft of the writing and focus on his or her *unique* questions and problems” (5-6, emphasis mine). The one-on-one dynamic of tutoring (and conferencing) allows for closer attention to the goals and challenges each individual student brings with him to the meeting,

which also allows for greater consideration of each student's ZPD. By the same token, though, writing center theorists are cautious about generalizing what works in these contexts to the context of a typical classroom; Harris, for instance, acknowledges that many teachers find one-on-one instruction "time-consuming or anxiety-producing" (4). Meeting with students outside of regularly-scheduled class time can be logistically difficult to implement, and successful meetings rely significantly on students' coming to the meetings prepared (e.g., by bringing a draft with them). Therefore, it seems that most of our field's focus on this element of effective practice has taken place in the very specific context of writing center work and similar one-on-one teaching scenarios rather than at the classroom level. Certainly, this seems to be the optimal setting for individualized instruction, but is it possible for an instructor of twenty or more novice writers to achieve the same (or a similar) level of individualization?

Appreciating Error/Failure

As the previous section makes clear, educators must make sure their students are constantly being challenged. But this is easier said than done, considering many students have grown accustomed to avoiding the inevitable risk of failure that comes with challenge. Shaughnessy, for example, found that basic writers are truly "inhibited by their fear of error" (7) and therefore reluctant to take chances with their writing. Extrinsicly motivated students tend to "feel that the situation is out of their control" and "tend to avoid further challenges" (O'Neill and McPherson 38); intimidated by the prospect of failure, these students prefer to fall back on the same strategies that have always worked for them. "Better safe than sorry," these students think, and their practice strategies reflect this aversion to risk. Unfortunately for these students, risk is an essential component of effective practice; as Dewey writes, "One of the essential traits of the artist is that he is born an experimenter" (*Art as Experience* 149). Without risk, there is no

chance of moving up to the next circle in the ZPD model—there is no chance of improving. Therefore, these students must learn to accept the inevitability of failure that comes with effective practice.

Psychology emphasizes risk-taking as an essential element of effective practice and of cognitive growth in general. Perry writes that moving up the positions in his scheme entails two landmark “points of crisis” (*Patterns* 122), specifically, the transition from dualistic to relativistic thinking—in which the learner recognizes that there are often multiple valid perspectives on an issue—and the transition from relativism to commitment in relativism—in which the learner formally “commits” to a perspective based on “his own values and decisions” (36). Perry argues that moving up the scheme is difficult because it requires learners to take risks that they have never had to take before. First, in the transition from dualism to multiplism, learners must radically change their view of authority and reality, moving beyond the dualistic lens of right versus wrong and the idea that the truth can only be possessed and handed down by certain authorities. The risk here is that learners must leave the “comfort of home” and move away from their reliance on those arbiters of truth, some of which they may have relied upon for quite some time. Later, in the transition from relativism to commitment, learners must stake their territory by actually committing to certain perspectives rather than just standing on the relativistic sidelines, even though doing so requires them to close off other options, risking personal cognitive dissonance or even tension with friends and family. In short, at these points of crisis, learners have to get outside of their comfort zones: they have to at least *attempt* to move to the next ZPD rather than languish where they are.

Other psychologists agree that learning is in large part a matter of taking risks in the face of potential error or failure. David Yun Dai, for example, differentiates between “task-oriented”

learners, who pursue a task for its own sake and welcome the possibility of failure, and “ego-oriented” learners, who are extrinsically motivated to pursue a task either because of the promise of reward or the threat of punishment. Dai concludes that “students who are task-oriented seek challenges even though that implies risking failure; students who are preoccupied with doing better than others or not doing worse than others show less willingness to risk failure in the learning process and a greater tendency to give up in the face of learning difficulties” (316). Valerie Shute uses different terminology but gets at the same argument: “A *learning orientation* is characterized by a desire to increase one’s competence by developing new skills and mastering new situations with the belief that intelligence is malleable. In contrast, *performance orientation* reflects a desire to demonstrate one’s competence to others and to be positively evaluated by others, with the belief that intelligence is innate” (162, emphasis in original). Dai’s and Shute’s findings illustrate the cyclical relationship between maintaining appropriate challenge and appreciating error and failure: to improve, the learner must practice at a level above his current skill level, but this will inevitably result in failure. What the learner does with that failure determines the effectiveness of his practice: task-oriented (or learning-oriented) learners will not be deterred by that failure—or may even be further motivated by it—and will continue to pursue appropriately challenging tasks; however, ego-oriented or performance oriented learners (as Shaughnessy argues many basic writers are) will likely treat the failure as a brick wall, as a sign that they will *never* reach the next ZPD. In short, effective practitioners use their failures as opportunities for improvement, as tools to help them achieve the next highest difficulty, and they recognize that the only true failure is to give up completely.

Music education has enthusiastically embraced this element. In his music classes, Peter Boonshaft urges students to take risks, explaining to students that “the joy of making mistakes is

in learning from them, growing as a result of information gained from those mistakes” (172). But merely telling students that it’s okay to make mistakes means nothing if the instructor’s grading habits don’t reflect that idea. As soon as students get back their first assignment with criticisms for breaking the rules, the game is up, and the students will go back to their safe, tried-and-true strategies. To that end, Boonshaft attempts to foster a learning environment in which risk-taking is rewarded rather than punished. In rehearsals, he encourages the occasional deviation from the standard routine in order to keep students from playing “on autopilot” (146). Boonshaft’s methods harken back to the “playground movement” of late 19th century music education, in which figures like Dalcroze and Orff emphasized “free rhythmic movement” (Keene 367) and expression.

Music education in general has gradually emphasized expression over technical correctness. Madeline Bruser asserts that playing perfectly doesn’t necessarily mean playing well: “You can’t express yourself genuinely if you’re trying too hard not to make mistakes” (21). Bruser stresses that an aversion to risk-taking can make a musician sound mechanical and uninspiring. Klickstein adds that a reduced concern for technical flawlessness may also ward off the perfectionist attitudes that often lead to self-defeating habits, such as low self-esteem and reduced intrinsic motivation (110). Speaking from experience, I can say that obsessively worrying about error often leads me to commit *more* errors. But concentrating on higher-order expressive concerns relegates technical foibles like missing a string or hitting the wrong note to the back of my mind, and those errors seem less likely to occur (or if they do occur, I’m less upset about them). Accepting error is therefore necessary to develop the “mindful ‘letting go’” (qtd. in Pressing 139) essential to effective improvisation: “All motor organization functions can be handled automatically (without conscious attention) and the performer attends almost

exclusively to a higher level of emergent expressive control parameters” (139). Trusting the technical aspects of playing to automaticity allows the practicing/performing musician to devote her attention to the higher-order skills that can make the difference between a *good enough* performance (a “B” performance, as Lynn Bloom would say) and an excellent performance.

In contrast to the previous two elements, appreciating error and failure has received considerable attention in composition pedagogy. Perhaps more so than in most academic disciplines, error carries particularly negative connotations in composition. Peter Elbow writes, “Schooling makes us obsessed with the ‘mistakes’ we make in writing” (5), and in his study of writer’s block, Mike Rose concludes that struggling writers are often restricted by outcome-oriented factors such as “anxiety, fear of evaluation, insecurity, etc.” (85). And as Shaughnessy and Lunsford illustrate in their studies of basic writers, novice writers are essentially paralyzed by their fear of error. Anne Gere, Leila Christenbury, and Kelly Sassi suggest that this paralyzing effect may originate in part from writing’s close relationship with high-stakes testing, in which students typically have limited time to write fully-developed essays, are often presented with unclear or uninteresting prompts, and receive vague, nonconstructive feedback. The authors argue that these tests’ “focus on the *product* of writing leads to inarticulate and terrified student writers” (31), and “terrified” writers will understandably be disinclined to take any more risks than they have to.

So, we acknowledge that students need to reconceive of their notions of error and failure, to recognize them as essential tools for success rather than anathemas to be avoided at all costs. But how do we get them to make that change? Composition scholars like David Bartholomae, Barry Kroll, and John Schafer argue for incorporating a tool from linguistics called *error analysis*, which posits that speakers’ and writers’ errors are not haphazard mistakes but rather

representative of consistent, predictable, and logical strategies for solving linguistic problems. Kroll and Schafer call errors “windows into the mind” of a writer (243) and argue that composition pedagogy has traditionally focused on the *what* of error (i.e., what kind of error occurred) rather than the *why* of error (i.e., why the student committed the error). Error analysis encourages both teacher and students to see error as “not evidence of arrested cognitive development, arrested language development, or unruly or unpredictable language use” (Bartholomae 254) but as “systematic, coherent, rule-governed behavior” (256-7). The fact that most student error is not random but rather highly consistent and logical is evidence that novice writers *do* have strategies for solving writing problems, even if those strategies are misguided. The instructor’s job is to help students discover their own errors and, more important for guiding metacognitive thinking, *why* the students commit those errors—in other words, help the students discover *what they are trying to do* with their errors. In this way, the students turn their errors to their own advantage, using them to learn more about themselves as writers.

There has also been some work done in our field to steer students away from the good vs. bad, right vs. wrong dichotomies that seem especially common in writing, and this could be another key to encouraging students to take more risks with their writing. In “The Epistemic Approach,” Kenneth Dowst frequently returns to a passage written by a student whom he calls “powerless” and “a victim” (70), echoing the “helpless” language Lunsford and Shaughnessy use to discuss the basic writers of their own studies. Dowst claims that the passage fails not because of formalistic faults or rhetorical ignorance *per se* but rather because the writer has not “come to ‘see’ reality in new and better ways” (71). The solution, then, is to empower students by inviting them to see connections between writing and how they operate in the world—a task that will probably be new to them and therefore demand that they take chances. Dowst argues that

fostering this kind of educational environment requires giving students the chance to play or experiment with language, and the sample assignments Dowst suggests invite students to explore alternative options, address what-would-you-do-type situations, question the rules of what makes good writing, ask themselves why they are in the course, and engage in metacognitive reflection on what they have written. The success of the epistemic course, Dowst says, ultimately depends on how well students “[manage] to teach themselves about writing” (84), resonating with Dewey’s and other educators’ claim that the teacher’s job is to, essentially, become obsolete. The assignments in Downs and Wardle’s textbook *Writing About Writing* similarly call on students to question their preconceptions of what makes good writing: they write in the textbook’s introduction that “rules are actually conventions, agreements between groups of readers and writers that can differ by situation, and getting them right or wrong has different consequences in each situation” (5). Stressing to students that the so-called rules of writing are more flexible than they might have thought could motivate them to be more playful with their language, to engage in the same kind of “mindful letting go” that expert musicians display when they improvise.

Evaluating Feedback

This element requires a little more explanation because it first requires *receiving* feedback that is useful, a step outside of the learner’s control. Ericsson writes that deliberate practice also requires “immediate informative feedback and knowledge of results of their performance” (367). Csikszentmihalyi likewise identifies useful feedback as a requisite of the flow experience. But what counts as *useful* feedback? Useful feedback is, first of all, constructive. Because the self-perceived gap between where a student is and where that student wants to be can be intimidating, feedback should attempt to, as Shute puts it, “close the gap” (157); it should always serve in some way to get the student closer to her goals. Useful feedback

is also specific to the needs of the learner: “Feedback is significantly more effective when it provides details of how to improve...rather than just indicating whether the student’s work is correct or not” (157). But *specific* does not necessarily mean long, and in fact, Shute explains that longer feedback tends to more often go ignored or increase students’ “cognitive load” (159), the mental energy they must expend to engage in deliberate practice. Feedback should “describe the what, how, and why of a given problem” (177), but it should also be simple and focused, generating “only enough information to help students and not more” (177). Shute explains that feedback tailored to the individual goals of each student may help foster a learning orientation, in which learners are motivated to increase their competence for their own benefit rather than to demonstrate their competence to others (162). By being goal-directed, feedback can help instill this learning orientation in students by “helping [them] see that (a) ability and skill can be developed through practice, (b) effort is critical to increasing this skill, and (c) mistakes are part of the skill-acquisition process” (162). In other words, effective feedback gives students a roadmap for improving their performance rather than just serving to evaluate their performance—it may help students see themselves as learners-in-progress and prevent the negative feelings many students associate with error.

But receiving useful feedback is only half of the element: truly effective practice means thoughtfully *evaluating* that feedback—determining how it applies to one’s goals and how (or whether) to incorporate it into the next attempt. Mika LaVaque-Manty and E. Margaret Evans write that improvement requires “[evaluating] how one did, particularly in light of external feedback on the execution, and what one learned from the execution and the feedback” (137). Simply receiving feedback is not enough; moving up to the next ZPD requires careful consideration of how the learner might use that feedback to her advantage. Once again, it

becomes clear how this element relates to the previous one: it is not necessarily how many or what types of errors the learner makes that marks him as either a novice or an expert; rather, it's what the learner chooses to *do* with the feedback received from those errors. In his examination of what constitutes a creative "genius," Dean Simonton argues that a key characteristic of these experts is that "they are persistent in the face of obstacles and disappointments, but at the same time they are flexible enough to alter strategies and tactics when repeated failure so dictates" (87-8). A learner might continue to challenge himself appropriately—operate in his ZPD—and welcome the possibility of failure that comes with doing so, but the learner is unlikely to move up to the next ZPD if he does not (or cannot) productively use the feedback from his failures to assess how, exactly, he needs to refine his "strategies and tactics." Effective practice means applying that feedback to one's individual strengths and weaknesses, using it to identify specific opportunities for improvement on the next attempt.

Music educators have much to say about what constitutes useful feedback. Lehmann, Sloboda, and Woody argue that feedback must be specific and individualized to the students; it must motivate the students toward self-evaluation so that they can eventually become their own teachers (191). Hill likewise endorses feedback which encourages self-evaluation: "Help them find their own way... It is up to us, the teachers, to create an environment during each lesson for students to somehow find those characteristic problem-solving powers within themselves" (88-9). For these music educators, feedback should form the bridge between where students are and where they want to be—it should be specific and relevant to their goals. But it should also be appropriate to their current ZPD: feedback which tells the student what she already knows is rarely useful, as is feedback which asks the student to do something far beyond her current ability. Feedback should aim to get the student to the *very next* step. This seems to be a

commonly shared sentiment among music educators; Boonshaft, for instance, encourages teachers to “praise approximation: to applaud the steps along the way to the goal, no matter how small they may be” (38). And Hill calls on teachers to “be ready to celebrate with them when they have finally arrived at their own solution, no matter how partial that solution might be” (88). Music educators seem to recognize that improvement usually happens in a very piecemeal, incremental fashion, contrary to the overnight chump-to-champ transition common in media portrayals of practice. In fact, this distortion of how quickly one can achieve expertise may contribute to some students’ belief in the myth of natural talent. Simonton notes that “there exists a strong tendency to idolize historic creators, to see them as infallible in their capacity to generate one magnum opus after another, to deem them all perfectionists” (157). If students exclusively compare themselves to experts and hold themselves to unrealistic standards, they may attempt to over-challenge themselves and give up out of frustration when they inevitably fail to reach their own impossible expectations. Music educators acknowledge that proper feedback can also become a motivational device for warding off burnout: encouraged by this sense of reward, even for having accomplished fairly minor things, students may become more intrinsically motivated to pursue the task.

But again, all this only pertains to the *giving* of feedback, not the evaluating of it. However, music educators also embrace strategies for having students thoughtfully reflect on the feedback they receive. As Lehmann, Sloboda, Woody, and Hill make clear, giving students practice with evaluating feedback serves the primary purpose of helping them “find their own way”—ideally, the students become their *own* sources of feedback. Given enough opportunities to receive feedback and metacognitively determine how to use that feedback, students may reach a point at which they can both give themselves specific, relevant feedback and then use that

feedback to, as Simonton puts it, “alter strategies and tactics” they use for the next attempt. In fact, with enough practice, evaluating feedback could itself reach a state of automaticity, at which point “the execution of the skill requires little conscious effort, freeing up the performer’s cognitive resources to deal with other matters” (Lehmann, Sloboda, and Woody 79). Benton recommends that music educators “resist the temptation to always ‘fix’ mistakes for students” and instead “ask students to identify a mistake...to solve problems independently” (29). She implies that by gradually weaning students off of the instructor as the sole source of feedback, instructors can encourage students to practice becoming their own sources of feedback: their own evaluators, critics, and coaches. Having them self-assess their work, perhaps by listening to recordings of their playing and identifying particularly strong or weak spots, provides them experience with giving *themselves* feedback and making productive use of it. Similarly, Oare argues that “self-assessment is a key component of independent learning because it provides students with feedback that spurs new goals” (46). Like Dewey, Oare seems to believe that the primary job of the instructor is to advance students to the point at which they no longer need that external guidance: “A key goal for music teachers is to develop literate musicians who no longer need us. For this to occur, they must become independent learners” (41). Becoming an independent learner, of course, requires an ability to become one’s own critic—but still a good critic: Chaffin and Crawford note that “one characteristic that undoubtedly characterizes effective practice is diligent monitoring of the performance quality” (158). And while different experts have different approaches to this skill of self-assessment, what remains consistent is that their feedback is highly specific and relevant to their goals—these experts have developed the ability to “find their own way.”

In composition pedagogy, quite a bit of attention has been devoted to the *giving* of feedback, possibly because ours is a field in which students rely especially heavily on qualitative feedback to improve. Compositionists seem to agree with music educators (and psychologists) that feedback should align with students' goals and needs; in their criticism of "big rubrics," Chris Anson et al. argue that effective feedback must follow psychologist John Biggs' concept of *constructive alignment*, "which refers to the relationship between specific learning goals, the methods of achieving those goals, and the assessment criteria used to judge the success with which they have been achieved." Likewise, Nancy Sommers notes that students tend to most value feedback that looks toward the future (253-4), comments that in some way "resonate with some aspect of their writing that our students are already thinking about" (250). In short, good feedback is that which speaks to the goals and needs of each student directly. Compositionists also seem to agree with music educators that valuable feedback can double as a motivating device: it presents writing to students as "something under their control, not random and outside of themselves" (Sommers 253). Even criticism, as long as it is specific and relevant to students, can motivate students to improve. Summer Smith rightly notes that comments from teachers can be intimidating to students—especially in writing, a subject that many students have come to associate with constant evaluation and critique. To help reduce this intimidation, Smith suggests that feedback comments should not *tell* students to do something but rather explain the potential benefits of doing it in a way that presents the instructor as a fellow writer rather than an ultimate authority figure (e.g., instead of "Come see me," write, "We could work together to...") (260-1). In keeping with the mentor-mentee dynamic espoused by music educators like Hill and Benton, Smith argues that feedback can be a way to defy the traditionally sharp power differential

between instructors and their students, perhaps reducing the anxiety many students have about receiving criticism of their work.

But while composition pedagogy has focused extensively on what constitutes effective feedback from the teacher, not much has been done to have students evaluate that feedback. There has, however, been some talk of how to give students feedback that encourages self-assessment. For example, in “The Genre of the End Comment,” Smith implies that the optimal approach is to emphasize “reader response” feedback, which allows the instructor to describe the effect a student’s decision had on the teacher (e.g., “This confused me,” “I see your point here”). Such comments ask students to consider for *themselves* the rhetorical weight of their writing strategies, similar to how Benton’s reflective exercises have her music students evaluate their own performance. Reader response comments can also offer “questions for further thought, attempts to push the student to think more deeply about a subject” (260). Putting feedback in the interrogative (e.g., “How else could you say this?”) asks students to respond to their own writing in a way that declarative comments (e.g., “You could say this differently”) do not. Along the same lines, Richard Straub encourages writing educators to “adopt styles [of response] that allow students to retain greater responsibility over their writing” (223), and he reiterates Smith’s findings that reader-response-style comments tend to “initiate a more active response from the student and place greater responsibility on her to come up with her own ideas and revisions” (234). Gere, Christenbury, and Sassi advocate teaching novice writers a process model of writing over a product model because it “discourages student dependence on the teacher for response and guidance and encourages students to be autonomous and effective” (37). What all of these authors share is a concern for having students become more independent thinkers and writers; they would seem to agree with Oare’s assessment that the duty of the instructor is to give

students experiences that allow them to practice self-evaluation so that they can ultimately become their own sources of feedback.

But this advice is still focused on what the *instructors* can do, and the issue of student accountability remains: teachers can give the best feedback in the world, but that means little if the students don't do their part to evaluate that feedback and use it to refine their strategies. What, specifically, can students do in the writing classroom to hone this element of effective practice? How can teachers hold them accountable for reading, understanding, and responding to the feedback they receive? We seem to know what we the teachers should be doing, but in focusing so much on our own duties—that is, our *giving* of feedback, we seem to neglect the other, perhaps even more important, side of the element: our students' *evaluating* of it.

Thinking Metacognitively

Metacognition is the “umbrella” element of effective practice because it plays an integral role in all the other elements: setting effective goals means knowing why one has set those goals, why those goals are important to the learner, and how those goals will help the learner improve upon the skill. Likewise, maintaining appropriate challenge means knowing what qualifies as too easy or too challenging; it requires that the learner accurately assess where his ZPD falls.

Learning from error requires that the learner understand why he committed a certain error and what he needs to do to avoid it in the future. And if a learner is to benefit from feedback, he needs to be aware of how that feedback applies to his specific goals. Therefore, to truly be able to take advantage of these elements of effective practice, learners need an acute awareness of what they do when they practice a skill and why they do it—they need metacognition.

But metacognition itself is a skill that needs practice. We must not assume that students, particularly first-year writing students, already know how to reflect on their own strategies.

Again, we must avoid falling victim to the expert's paradox, where we assume that what comes easily to us as experts of the skill must also come easily to novices. Cognitive psychology suggests that for experts in a skill, metacognition has itself become nearly automatic: "Use of these cognitive processes [by experts] is so automatic that they may be unaware of the skill that underlies their performance" (Kurfiss vi). Additionally, as Donovan et al. assert, metacognition is not a skill that can be practiced independent of subject matter. Trying to teach metacognition in isolation from subject matter can lead to "failure of transfer," as the "strategies are not generic across subjects" (15). In other words, while the same fundamental elements of metacognition—again, Gregory Schraw defined the three main "skills" of metacognition to be planning, monitoring, and revising (Kaplan et al. 10)—apply across skills, those elements must be applied differently across skills (e.g., planning for a writing project is not done in the same way as planning for a musical performance). A curriculum devoted solely to teaching students metacognition is therefore unlikely to work; metacognition needs to be practiced *in the context of* another skill, such as music or writing.

Psychologists often equate metacognition with problem solving skills, arguing that sophisticated metacognitive thinkers are able not only to define the problem before them with precision but also to formulate potential solutions, to weigh the possible outcomes of each one, to use this information to choose the best one, and finally to reflect on how successfully the solution proved to be. Dewey contends that successful problem solvers follow a five-step pattern: 1) a difficulty is felt—the exigency to solve the problem emerges ("Why is this troubling me?"), 2) the problem is defined ("What exactly is troubling me?"), 3) potential solutions are hypothesized ("What *could* I do to solve this?"), 4) consequences of those potential solutions are considered ("What would happen if I tried x?"), and 5) a solution is selected and implemented

(“In light of my answer to 4, what would be the *best* solution?”) (qtd. in Reybrouck 53). Strong metacognitive thinkers have practiced these five stages to the point of automaticity; when confronted with a new problem, they follow these steps as a matter of course, perhaps without even needing to consciously think about them. Cognitive psychologists seem to agree that effective problem solving goes hand-in-hand with mature metacognitive ability: Karen Strohm Kitchener and Patricia King conclude their discussion of their reflective judgment model, “What emerges in the higher stages [of the model]...is an ability to consciously reflect upon one’s own problem solving...the ability to step back and evaluate one’s own solutions to problems” (“Concepts” 101). Similarly, Donovan et al. remark that experts have a richer framework of “meaningful patterns” that they draw upon to solve novel problems (2), and Lois Broder Greenfield determined in a 1950 study that there were four areas in which problem solving differed between successful and unsuccessful students: “understanding the requirements of the problem, understanding the ideas contained in the problem, general approach to the solution of problems, and personal factors in the solution of problems” (14). Put simply, metacognition means knowing what one is doing and why one is doing it.

Therefore, it seems that the best way to engage students in metacognition is to help them conceive of the primary skill as a *problem solving* activity. Many in music education have used problem solving language as a launching pad for giving students practice with metacognitive thinking. Klickstein invokes Dewey’s five-step model when he writes that “problem solving has three main parts: (1) recognizing when a problem exists; (2) isolating and defining the problem; (3) applying problem-solving tactics” (55). And although he never uses the word “metacognition,” he describes it when he concludes, “Throughout the learning process...one aptitude surpasses all others in importance: self-evaluation” (202). In Klickstein’s view, to be an

expert, a musician must be able to “see how [they’re] doing” (202), to reflect on the successes and shortcomings of their strategies. Along the same lines, in *Thinking About Thinking: Metacognition for Music Learning*, Benton incorporates assignments that engage students in the three stages of metacognition outlined by Schraw: planning for a task, monitoring the thought processes during that task, and evaluating the outcome of the task. Among the activities Benton uses are self-evaluations which, in addition to having students give quantitative responses (e.g., evaluate themselves in terms of sight singing ability on a scale from 0-3), also ask students to respond to open-ended questions such as “What is your greatest current strength in sight-singing?” (88). These and other assignments, such as practice logs, align with Benton’s argument that “the success of music learners on all levels from beginner through professional is built on self-regulation” (35)—the ability to *monitor* their own strategies.

Metacognition has gained increased attention in composition studies, as well. Of course, Flower and Hayes were perhaps the earliest composition scholars to closely study the cognitive differences between novice and expert writers, and they even use the same “problem solving” language cognitive psychologists equate with metacognitive thinking. In “The Cognition of Discovery,” they explain that the most proficient writers are those who can most articulately define “with detail and specificity” (100) the rhetorical problem they face in any given writing situation. They conclude that article by encouraging writing teachers to incorporate class activities that give students practice identifying writing problems and generating solutions to those problems, similar to how Gere, Christenbury, and Sassi advocate for having students explicitly explain how they’re thinking about or going about solving a writing problem (e.g., a prompt that might appear on a high-stakes test). Shaughnessy also speaks in terms of problems and solutions when advising teachers of basic writers; for instance, she writes that “a [student’s]

vigorous argument with a teacher or a classmate over a point of grammar may be a surer mark of progress than a perfect score...for it suggests that the student has invested the best energies of his mind in a problem he would once have been unable to notice or define, let alone solve” (159). To Shaughnessy, it is perhaps more important that a student be able to define a new problem before him than to solve it flawlessly on the first attempt, an argument many cognitive psychologists would agree with: in Greenfield’s study, for one, she found that “the successful and unsuccessful students differed in their ability both to *understand what they were supposed to do* and to keep this in mind as they worked toward a solution” (14, emphasis mine). Sophisticated metacognitive thinking—and therefore sophisticated problem solving—requires an ability to understand a given problem in the first place (step two of Dewey’s model). Indeed, Shaughnessy asserts the straightforward but important idea that “the beginning writer does not know how writers behave” (79), hearkening to Flower and Hayes’ conclusion that novice and expert writers are, quite simply, solving different problems. Novice writers tend to, as Patricia Bizzell argues, define and attempt to solve problems of “correctness”—“how they’re saying it, not what they say” (294), problems of adhering to discourse forms or genres (295), and problems of cognitive dysfunctions—for instance, a lack of confidence or a perceived inability to “think the way the teacher wants” (296). Lacking the ability to transition to or perhaps even understand the higher-order concerns of the skill, novices dwell on the lower-order concerns, often to the point of paralysis, as Rose found. In contrast, experts have long since overcome these struggles and tend to focus on larger, more global problems—problems that demand intense metacognition, such as how to ensure their prose has its intended outcome on its intended audience or how to choose language that will best amplify some rhetorical effect they are going for.

But even though we in composition sometimes use the same problem solving language of cognitive psychology and music, there seems to be a shortage of ideas on how to have students actually practice and refine their abilities to define and solve writing problems. This is an issue similar to the one we saw with goal setting: we seem to agree that the element is an important distinguisher between novices and experts in the skill, but it's another matter to identify *how* students might improve with it. Again, perhaps the expert's paradox is to blame: as highly-experienced writers and metacognitive thinkers ourselves, it may be difficult to return to a time when we, too, dwelled on the lower-order problems of writing because we didn't yet know how to make the move toward the higher-order problems. But any curriculum intent on having students practice the subject matter rather than just learn about it must acknowledge that metacognition *itself* needs practice—and a great deal of it.

Conclusion

This chapter has shown how music education has fully pursued what cognitive psychology claims to be the foundation of effective practice habits, and it has also illustrated the pedagogical benefits that field has seen from doing so. What I'm implying is that composition pedagogy could likewise benefit from more fully considering the elements: doing so could help writing teachers break their students of the myth of natural talent and also motivate students to treat writing as a practice-able, learnable activity, just like music. However, despite the crossover between the disciplines we saw in the previous chapter, music and writing are different skills, and it would be irresponsible to conclude that just because the elements work well in a music context they would work equally well in a composition context.

Hence "Perfect Practice and Writing," my attempt to observe *in practice* the successes and shortcomings of centering a first-year college composition course on these five elements. It's

one thing to theorize about how such a course might play out; it's an entirely different thing to actually put it into practice. In designing and teaching this course, I aimed to do just that: I wanted a practical answer to the question, "Is it possible to teach writing as a practice-able skill?" Or perhaps a better question might be, "Is it *wise* to?" In other words, this study aimed to determine if centering the curriculum on this idea of practicing writing produced actual, observable, valuable changes in students' perceptions of and responses to the activity of writing. The next chapter details how I designed the course: what I wanted to emphasize, what I wanted students to take away from the course, and how I crafted the course's activities and assignments to align with these objectives.

Chapter III: Methodology

This chapter describes my methodology for answering this research question: How well do the elements of effective practice fit into a first-year college composition course? The chapter first describes the teacher-research and case study methodological approaches I used and why I used them. It then discusses the course design and curriculum of “Perfect Practice and Writing,” the course I created and taught in order to answer the research question, as well as my methods of data collection. The chapter concludes by explaining the coding process I used to interpret that data in preparation for the latter chapters of the dissertation.

Methodological Approaches

The purpose of “Perfect Practice” as a research tool was to assess the strengths, weaknesses, and opportunities of teaching a first-year college composition course based on the five elements of effective practice outlined in the previous chapter. Therefore, rather than using a strict experimental design, this study followed a teacher-research model, in which the researcher—as instructor—pursues a particular research question with the goal of improving pedagogy in the discipline. In this case, the research question was whether (and to what extent) certain teaching methods based on the elements of effective practice could be useful in a college writing course. The teacher-research model works well for addressing this question because it acknowledges the inevitability of certain instructor biases (e.g., knowing the true identity of students, knowing students’ standing in the course, having taught some students in a previous semester). In fact, these biases contribute to the collaborative nature of the instructor-student relationship on which teacher-research relies. Although critics of teacher-research may argue that it “creates a tension in the classroom between researching and teaching” (Ray 184), making it impossible for the instructor to behave as both a nonbiased researcher and an effective instructor,

Ruth Ray counters that this critique “assumes that research and teaching are mutually exclusive, or even competing, enterprises” when in fact, they can be interactive, forming a “dialectic relationship in which they continually inform each other” (184). Teacher-research capitalizes on *praxis*, “a continuing transaction between thought and action in the classroom” (Fecho et al. 110), and so teacher-researchers rely in part on their interactions with students as *instructors* to interpret the data they gather as *researchers*. On that note, the teacher-research approach aligns well with the ethos of “Perfect Practice”: Ray points out that, in teacher-research, “Students are not merely subjects whom the teacher-researcher instructs and assesses; they are *co-researchers*, sources of knowledge whose insights help focus and provide new directions for the study” (175-6, emphasis mine). Treating students as collaborators in the study allowed me to foster the type of power dynamic I wanted for the course, and it also seemed to make some students more enthusiastic about or appreciative of the course in general—for example, one student indicated that an important theme of the course was that “we’re working together toward our goals.” From the beginning of the course, students knew that they were indeed helping me with one of *my* goals (completing a study), establishing a sense of mutual benefit that appeared to increase their motivation.

Coined by British educator Lawrence Stenhouse in the 1960s (Ray 173), teacher-research has been used with some frequency in composition studies. For example, in his 1992 “On the Move in Pittsburgh: When Students and Teacher Share Research,” Jeffrey Schwartz explains how he used the teacher-research method to analyze the successes and shortcomings of an electronic writing community. Schwartz writes that as a result of his approach, some of his students were often able to find information Schwartz had not, putting them in the position of “teacher” and Schwartz in the position of “learner.” He notes that he and his students “all learned

about language together” (154) and that the teacher-research approach put more of a burden on his students to be “responsible for their own learning” (166). This last comment is especially relevant to my own study, which aimed to instill in students the metacognitive abilities they needed to eventually take charge of their own practice—to become their own teachers. Schwartz also concludes that his teacher-research method “redistribute[d] the power of the class” (166) such that the relationship between students and instructor was one marked by collaboration and the exchange of ideas. In a similar study the same year, Art Young had his students collaborate to produce a manual for a computer system and wrote about the discourse community that emerged in the class. Young notes that a particular response from one of his students about the value of “storytelling and collaboration” led him to dramatically change the direction of his research (qtd. in Ray 178). More recently, Patricia Lambert Stock recounts her success with having her student Gordon, a car enthusiast, teach her how to read the magazine *Car and Driver*. Stock argues in true Deweyan fashion that “tapping into students’ prior experiences, knowledge, and interests positions students to invest themselves in their learning” and that “students who are invested in their learning are often successful learners” (102). Stock’s findings are particularly important for this study because they suggest that teacher-research may be an ideal method for teasing out students’ already-present metacognitive abilities and for improving those abilities further. As Ray makes clear, the common thread running through successful teacher-research is that the instructors “[give] up their attempts to control students’ learning” and in the process learned from their students how to “see, think, respond, and even write in different ways” (178). Likewise, I wanted to design my study in such a way that I had just as much (if not more) to learn from my students as they had to learn from me. As I’ll reiterate in future chapters, my research question—how well the elements of effective practice could fit into a composition

course—was not one that could be answered with research from cognitive psychology alone. The question needed to be put into practice, and answering it relied on *listening* critically to the responses from my students. In short, the study rested on praxis, that junction between thought and action—and the teacher-research method helped me establish that connection.

In addition to this teacher-researcher approach, the course also entailed a case study approach, described by Janice Lauer and J. William Asher as a type of *qualitative descriptive research*, which, “by close observation of natural conditions, helps the researcher to identify new variables and questions for further research” (23). In the case study, the researcher examines a small number of subjects in their natural context (e.g., the classroom) in order to “seek to identify the important aspects or variables of any phenomenon to be studied” (23). Perhaps the most well-known case study in composition scholarship is Janet Emig’s 1971 study of the writing processes of eight twelfth graders, which I mentioned in Chapter I. Beginning with a larger pool of eight students, Emig narrowed her focus to just four interviewees and finally to just one profiled student, Lynn—a strategy which inspired my own motivation to narrow my focus from thirty-eight to six and finally to just two students. A more recent example is Stephen Fishman and Lucille McCarthy’s experimental Deweyan philosophy class, the results of which they discuss in a 1996 article titled “Teaching for Student Change: A Deweyan Alternative to Radical Pedagogy.” In that study, McCarthy collected data from Fishman’s class of nineteen students via interviews, classroom observations, videos, and student writing (348), concluding that the Deweyan principles of “politeness, cooperation, and conflict in the Deweyan spirit” promoted changes in students’ preexisting attitudes and beliefs (364). This study is particularly relevant to my own because of its emphasis on Deweyan “cooperative inquiry” (363), which provides a good model for the instructor-student dynamic in both teacher-research and case-

study contexts. Dewey himself writes, “When education is based upon experience and educative experience is seen to be a social process...the teacher loses the position of external boss or dictator but takes on that of leader of group activities” (*Experience and Education* 59). Getting students to see themselves as co-investigators or co-researchers may help diminish the stark and oppressive power differential associated with the “master-apprentice” dynamic, a “one-way” (Lehmann, Sloboda, and Woody 187) model that allows for little (if any) student input on the direction of the study.

These studies benefitted from a case study approach because such an approach lends itself well to the analysis of qualitative data. As Lauer and Asher explain, researchers conducting a case study “analyze the communication data, notice patterns, identify and operationally define variables, and relate them to one another” (27) in a process called *content analysis*. In other words, case studies allow researchers to make sense out of the noise that comes with the kind of qualitative data abundant in humanities such as composition studies. Similarly, in my own study, I used students’ interview responses and written work to notice patterns in how students perceived the course design, logistics, and instruction, as well as in how they wrote in the course and pursued the elements of effective practice. These patterns made it easier for me to analyze the strengths and weaknesses of the course and propose ideas for improving the course, all of which are topics I discuss in Chapter VII.

However, Stephen North claims that the advantage of case studies lies “not in producing generalizable conclusions” but in “their capacity for detailed and individuated accounts of writers writing” (qtd. in Newkirk 132). The purpose of case studies, North argues, is to provide narrow, context-specific glimpses into writers’ behavior, not to then use those glimpses to generalize about how *all* writers behave. Lauer and Asher agree that the case study—and

qualitative writing research at large—“attempts to give a rich account of the complexity of writing behavior, a complexity that controlled experiments generally cannot capture” (45). While it’s true that it is difficult (if not impossible) to accurately generalize about writers’ behavior, it’s interesting to note that many case studies in composition do, in fact, at least hint toward generalizing in their conclusions. For instance, in her case study of Dave, a junior who struggled to adapt to the various demands of foreign discourse communities, Lucille McCarthy concludes that her study has several implications for “our understanding of writing development” and “for the teaching of writing” (260-1). Likewise, in her 2004 study of a computer support specialist named Alan and his struggle to adapt to the writing conventions of an unfamiliar discourse community, Elizabeth Wardle generalizes that “Alan’s example illustrates that learning to write in new discourse communities entails more than learning discrete sets of skills or improving cognitive abilities.” Therefore, it seems—at least in composition studies—that generalization is a desirable but nonetheless questionable extension of the individualized focus case studies offer. While researchers want to be able to apply their findings to a broader context, to make a larger statement about the field, doing so could be seen as fallacious.

It’s for this reason, I argue, that the case study method can complement the teacher-research method. First, the broader scope of teacher-research allows the teacher-researcher to more effectively get to know his students, putting him in a more advantageous position to select students for case studies who might better represent the entire class (or, conversely, who had particularly atypical or interesting responses). That broader scope also allows the teacher-researcher to more effectively understand the case studies in the *context* of the entire class and its curriculum, making it safer to generalize from those individual cases. In my study, I wanted to both individualize *and* generalize: I wanted to examine the specific ways certain students

responded to my curriculum, but I also wanted to be able to make a larger statement about the successes, shortcomings, and challenges of that curriculum. With a hybrid approach incorporating both the teacher-research and case study methods, I was in a better position to use my case study results to generalize about those successes, shortcomings, and challenges—in other words, I was better equipped to use my case study data to successfully answer my research question, rather than simply provide interesting reports on a couple of my students.

Creating “Perfect Practice”

In July 2016, I submitted a proposal to the University of Arkansas’s Office of Rhetoric and Composition to teach a “special topics” version of Composition II called “Perfect Practice and Writing” during the Spring 2017 semester. The office accepted my proposal, and I drafted my course documents. I began teaching the course on January 18, 2017, and the last class meeting was on May 3, 2017.

I taught two sections of the course, each of which had nineteen students. Of the thirty-eight total students, thirty-five were freshmen, two were sophomores, and one was a junior (a particularly interesting student who will be discussed at length in Chapter VI). Both sections met for fifty minutes on Monday, Wednesday, and Friday. Eighteen of the students were enrolled in the Walton College of Business, thirteen were in the Fulbright College of Arts and Sciences, five were in the College of Education and Health Professions, and two were in the Bumpers College of Agricultural, Food, and Life Sciences.

Simply put, “Perfect Practice” was a first-year composition course with the goal of getting students to think of writing as a practice-able skill. More specifically, the course emphasized the five elements of effective practice delineated by Ericsson and other cognitive psychologists: setting effective goals, maintaining appropriate challenge, appreciating error and

failure, evaluating feedback, and developing metacognition. Since metacognition is the umbrella concept that encompasses the other four elements, it was the central theme of the course, and the course's primary goal was to give students practice with thinking about how they approach the act of writing. As such, every question asked in the course was followed by another question: "Why?" Students had to move beyond simply describing their writing strategies; they had to begin theorizing about the reasons behind those strategies.

In order to incorporate these five elements of effective practice, the course operated on six guiding assumptions: (1) that *doing* an activity is more valuable to students than learning about an activity and that students should therefore write often, (2) that students' errors are valuable learning tools rather than undesired mistakes, (3) that because errors are allowable, students should feel comfortable experimenting and taking risks, (4) that students benefit from frequent, consistent, and individualized feedback, (5) that individual students should have the opportunity to learn what they *want* to learn, and (6) most importantly, that the key to improving in a skill is to develop an ability to see the skill as an act of invention, or problem solving.

First, "Perfect Practice and Writing" was premised on the idea that students should *do* writing rather than simply learn about it. Cognitive psychologists distinguish between conceptual knowledge—knowing *that*—and procedural knowledge—knowing *how*. To Michael Carter, the difference is between handing down to students "the particular knowledge base of the discipline," such as grammar rules or rhetorical concepts, versus showing students that writing itself is a "way of knowing in a discipline" (387). Music educator Robert A. Duke laments that too many educators in his own discipline overemphasize conceptual knowledge at the expense of procedural knowledge; he counters, "Student learning is not a result of what teachers say, but a result of what teachers have students do" (103). Students in "Perfect Practice" wrote daily—

sometimes multiple times a day—and received a steady stream of feedback on their writing from their instructor. The idea was that the more opportunities students had to write, the more comfortable they would likely be taking chances with their writing, which leads to the second and third guiding assumptions.

Second, in order to get the most out of their practice, students need to reconceive of errors as useful learning tools, not shameful mistakes. As Duke puts it, “All intelligent, skillful professionals recognize that error is an inevitable, necessary, and even productive part of thinking and learning” (85). Nor is this idea foreign to our own discipline: David Bartholomae explains that error “is not evidence of arrested cognitive development, arrested language development, or unruly or unpredictable language use” (254); rather, “it is, finally, evidence of an individual using language to make and transcribe meaning” (255). In other words, “Perfect Practice” tried to show students that they needed to embrace errors rather than shun them, for it is through errors that they learn what works and what doesn’t work in their writing. In true metacognitive fashion, students should concern themselves with *why* they commit certain errors. Where did they learn them? What is the logic behind them? Correcting errors is a matter of problem solving, and students are more likely to solve their own problems if they can better understand what causes them in the first place. My job as instructor was to help students identify the errors they wanted to correct, help students understand where those errors came from, and guide students toward discovering their own solutions to those errors.

Similar to the second guiding assumption, the third guiding assumption was that students learn best when they are occasionally allowed to engage in risk-free experimentation—what music educators might call improvisation. Psychologist E. Paul Torrance, though he writes from the very different pedagogical landscape of 1966, rightly argues that valuing originality allows

educators to nurture their students' talents, and he suggests that educational environments should give students the opportunity to innovate risk-free. In advocating "unevaluated practice and experimentation," Torrance suggests that students who do not fear evaluation are more likely to respond to prompts in innovative ways, ways that "[apply] course content to the solution of personal and professional problems" (172). When students feel the hot breath of grades and criticism breathing down their neck, they may be wary of straying too far from safe territory. Therefore, most writing in the course was ungraded so as to encourage students to play with their language. As Kenneth Dowst puts it, the success of any epistemic writing course ultimately depends on how well students teach *themselves* about writing (84) through playing with language, exploring possibilities, and reflecting on what they have written. Of course, these metacognitive goals can only be pursued under a curriculum that encourages students to pursue them. Elbow posits that many students who despair that they "can't write" have been convinced of such through years of evaluation and criticism; they have come to associate writing with the critique of and potential punishment for their mistakes ("Method" 5). They have operated in environments un conducive to exploration and experimentation. "Perfect Practice and Writing" aimed to be a course where students felt at ease to try new things.

Fourth, effective practice requires that the instructor give frequent, consistent, and—most importantly—individualized feedback. Everything students wrote, even short ungraded assignments, was read and responded to by me, the instructor, if only in a brief sentence or two. First, this provided an added sense of accountability for students: knowing that their work would actually be read might have made them take it more seriously. More importantly, though, getting constant feedback from the instructor allowed students to view the instructor-student relationship as something similar to what Lehmann, Sloboda, and Woody call a "mentor-friend" dynamic, a

“relationship marked by mutual respect and exchange of ideas” (186), rather than a “master-apprentice” dynamic, where knowledge is passed down wholesale from expert to novices. This was particularly important in “Perfect Practice,” where I had to make a conscious effort not to endorse my own writing practices as the *best* writing practices. The course’s curriculum insisted that the instructor play the part of a more experienced writer but not necessarily a *better* writer: one important tenet of the course, particularly in its second unit, was that different writing strategies worked well for different writers and that there was no single correct way to write. As the most experienced writer, I was in a position to guide students toward metacognitively understanding their own strategies and to help them form new strategies for solving the course’s writing problems; while I often shared my own strategies with the students, I wanted to avoid imposing those strategies on them. But on some occasions, I wanted an even more balanced power differential than is implied by “mentor-friend”: there were times when I also wanted students to see me as a collaborator or what Douglas Vipond and James Reither call a “co-researcher” (863), particularly when discussing my study with them. The co-researcher dynamic aligned well with the teacher-research methodology I followed, which, as Ray argues, is “a response to a conformist educational system based on a strong belief in the separation of powers” (173). Frequent feedback, one-on-one conferencing, and other ways of diminishing the “separation of powers” between instructor and students helped establish for the course the ethos it needed to operate. This is not to say that I relinquished all authority—there was, of course, an occasional need for direct instruction or intervention, such as when introducing students to the next major paper assignment. Elbow himself clarifies that his “teacherless” classroom does not necessarily mean that the class has no teacher; rather, he attempts to “adopt more the role of a learner and less the role of a teacher” (“Writing Without Teachers” vii). There are times when

the instructor's authority is advantageous or even necessary to instilling effective practice habits. But in general, I wanted students to come to see me in part as a mentor genuinely interested in helping them set and reach their goals and in part as a co-researcher collaborating with them on a potentially useful academic study. Either role was preferable to the "master-apprentice" dynamic, in which the instructor is the sole dispenser of knowledge and the students are merely passive recipients.

The fifth guiding assumption for the course was that individual students should be able to learn what they *want* to learn. Research in both cognitive psychology and music education consistently reports that this is key to fostering intrinsic motivation in students; for example, Dewey writes that effort is "the result of interest, and indicates the persistent outgo of activities in attaining an end felt as valuable" ("Training of the Will" 269). And Joanne Kurfiss writes that "intrinsic motivation arises when the student perceives a situation as problematic" (47). Similarly, music educator Hill argues that students' goals "should be planned for and decided upon by the students themselves" (95). Students are more likely to put in *genuine* effort when they have interest in the subject matter, and they only have interest in the subject matter when they perceive, first, its exigence—why it should matter to them, and, second, how it fits into what Dewey calls their "continuum of experiences"—what they have *already* learned. However, this does not mean that the students in "Perfect Practice" were free to wing the course; on the contrary, from the first unit, students were required to identify specific, realistic, practical goals for themselves. Their success in the course was determined in large part by how diligently they pursued those goals, not necessarily by whether or not they ultimately met them. And beyond that, each of the major course assignments still had a set of expectations, or "learning goals," according to which students were evaluated. These learning goals appeared at the end of each

assignment description, which I explain in more detail in the next section of this chapter.

Therefore, there were some instructor-identified criteria that students were expected to follow.

However, ideally, students came to see these not as arbitrary standards but as guides to help them create a successful artifact, an artifact that they recognized as having real, substantial importance.

Finally, the sixth guiding assumption—the metacognitive one that served as the basis for all the others—was that the key to improving in a skill is to understand that skill as an act of problem solving. Flower and Hayes put forth that “discovery is an act of making meaning, not finding it, in response to a *self-defined problem* or goal” (“Problem” 23, emphasis in original). In their research, they observed that the best writers are those who are most fluently able to articulate to themselves such features as who constitutes their audience (26), “how they [want] to affect a reader” (27), the voice they wish to project (28), and what their goals are for solving their writing problems. Not by coincidence, similar problem-solving language appears in music education: “Optimizing practice is mainly achieved through self-regulation. This means that a person can select appropriate strategies, plan, monitor the outcome, and revise according to the difficulties encountered” (Lehmann, Sloboda, and Woody 78). Literature from both disciplines suggests that experts do not spontaneously generate masterpieces, contrary to the notion of the musical prodigy or the natural-born writer; rather, they have honed the ability to identify their problems, employ possible solutions for those problems, and revise those solutions which do not work. “Perfect Practice” encouraged students to think about their writing assignments, even small ones like daily journal entries, as problems to solve.

Course Structure and Data Collection

Prior to beginning the course, I received approval from the University of Arkansas’ Institutional Review Board (see Appendix A) to collect data in two ways: (1) by collecting

copies of all students' written work (the course's four major writing assignments, two-page "Meta-Analyses" which accompanied each major assignment, and daily journal entries) and (2) by conducting one-on-one end-of-semester interviews with six potential case study students, three from each section. On the first day of class, I distributed an Informed Consent Form to all students in both sections (see Appendix B). Students who signed the form agreed to allow me to collect their written work throughout the semester and to be considered for an end-of-semester interview. In Chapters IV through VI, I highlight particularly interesting student responses to generalize about the results of the course, and in Chapter VII, I use those responses to assess the methods used in teaching "Perfect Practice," including the course's successes, shortcomings, and opportunities for improvement.

The course was divided into four units, the first three of which followed a future-present-past motif. On the first day of class, students received a course syllabus which introduced them to these unit divisions and what topics would be covered under each (see Appendix C). Unit 1 was called "How do you WANT to write—and why?" and asked students to think critically about the kind of writer they wanted to eventually become. Of course, doing this required them to think critically about several other useful questions along the way, such as, "What do I consider the hallmarks of a good writer?" "What are my current strengths and weaknesses as a writer?" "Who are the kinds of writers I admire most?" The purpose of this introductory unit was to have students establish specific and useful goals for themselves, both short and long-term goals that they (and I as the instructor) could return to throughout the course.

On that note, the first major assignment, the Goal Inventory (see Appendix D), required students to create an artifact through which they expressed to the instructor and to their classmates the kind of writer they wanted to be. Students produced a poster consisting of both

images and text that reflected the short-term and long-term goals they wanted to reach. Ideally, the posters also explained *why* those goals were important to the student and presented a few writers and texts that the student particularly admired (and an explanation as to why). On one class day called a “Poster Day,” these posters were displayed around the classroom, and students went around the room to look at their classmates’ work. This publicizing had two purposes: first, it added an additional sense of accountability; students may have been more willing to pursue their goals if they were put in writing and openly shared with their fellow writers—this constitutes a sort of contract to themselves, their classmates, and the instructor. Second, it required students to be specific with their goals: they had to be able to articulate their goals so that not just their instructor and their classmates but they themselves understood them clearly.

Unit 2 was called “How DO you write—and why?” and turned the focus to the present: now that students had discovered what they think to be the markers of good writing, they had to evaluate how they *currently* approached writing problems. In keeping with Flower and Hayes’ findings, this unit aimed to show students that the so-called “writing process” is not the linear, step-by-step formula that it is often thought to be; rather, writing is a hierarchical, recursive activity involving multiple thinking processes which writers “orchestrate or organize during the act of composing” (“Process Theory” 366). Another goal was to show students that there is no single right way to write and that writers use different strategies to solve writing problems. Students needed to be able to articulate the particular strategies *they* used and why they used them.

The second major assignment, the Writing Profile (see Appendix E), was a collaborative research paper that had students not only reflectively examine how they write but compare their own writing practices with those of other writers. Groups of three students compared their own

writing practices, but they also conducted primary research in the form of polls, surveys, and interviews in order to compare their writing practices with other writers. These “other writers” ideally represented a diversity of skill level; some participants should have been relatively inexperienced (e.g., fellow first-year college students) while others should have been relatively experienced (e.g., upper-level students, graduate students, or even faculty). But groups had to go beyond merely showing that similarities and differences exist; they needed to attempt to explain *why* they exist. Why, for example, does an experienced writer write differently from a novice writer? The goal of this assignment was to put each student’s own writing practices in conversation with those of other writers, not only making students more aware of their own practices (and the reasons behind them) but more aware of other practices that writers use to varying degrees of success.

Unit 3 was called “How DID you learn to write—and why?” and finally shifted attention to the past. Students learned about Deborah Brandt’s concept of literacy sponsors and began to think about all the literacy sponsors that informed (and continue to inform) their writing strategies. To learn how other writers acquired literacy, students read texts such as Malcolm X’s “Learning to Read,” Sherman Alexie’s “The Joy of Reading and Writing: Superman and Me,” and excerpts from *Narrative of the Life of Frederick Douglass*. These readings gave students an idea of how one’s writing strategies can come from a vast number and type of sources. Additionally, students may have been able to see some overlap with their own histories as developing writers, allowing them to put their strategies into conversation with these monumental figures. Even those students who lamented that they “just can’t write” may have felt encouraged when they saw that they have more in common with experienced writers than they initially thought.

The third major assignment was the Writing Biography (see Appendix F), which required students to create a visual/textual artifact that traced the history behind their own writing practices. Students examined their own experiences as writers/readers to determine which literacy sponsors—be they people, places, or objects—most strongly influenced the way they write. As with the Goal Inventory, students needed to articulate their Writing Biographies to their classmates on another Poster Day, using a combination of relevant visuals and textual explanations to make the artifacts rhetorically effective. Beyond simply listing each literacy sponsor they could think of, students needed to be able to explain *how* the sponsor affected their writing practices. Was it for better or worse? Was it temporary or permanent? How did that sponsor shape the student’s conception of good writing? Is this sponsor similar to or different from any of the sponsors of one of the writers we read, such as Malcolm X or Sherman Alexie? The purpose of this assignment was to bring students’ literacy sponsors to the surface and to show students that their writing practices did not just pop out of thin air; rather, they were shaped (and continue to be shaped) by their environments, whether those environments were explicitly educational in purpose or not. Therefore, the assignment may have further reinforced to students that nature is not the most meaningful influence on one’s writing strategies.

Unit 4, the final unit, was called “How would you tell OTHER people to write—and why?” and required students to draw on all the metacognitive knowledge they had accumulated in order to form a cogent answer to the question put forth at the beginning of the course: “What makes good writing?” Whereas most students likely entered the class with an intangible know-it-when-I-see-it answer, most were now better able to point to the particular features they ascribed to good writing, whatever that meant for them. The student who has acquired the ability to judge the quality of writing based on a concrete, informed set of criteria is the student who has begun

thinking about writing in a truly metacognitive way: the student knows to recognize writing as an act of problem solving, knows what constitutes attainable solutions (operational goals) in response to the problem, and knows how to evaluate the effectiveness of solutions that writers—including themselves—are trying to use. To use the words of Chaffin and Crawford, the student begins to have a good idea of what they want to accomplish in their work (160).

The final major assignment was the Writing Guide (see Appendix G), a collaborative project in which students articulated their strategies for practicing one of their writing goals to an audience of future composition students with that same goal. Students worked together in groups of two or three to determine what strategies to provide a student wanting to work toward their goal. The Writing Guide was not meant to be a prescriptive rulebook; rather, it was a compilation of writing strategies that the readers *might* use to practice that goal. Still, each group ultimately needed to come to a consensus on what went into the guide versus what got scrapped, how to design the guide (creativity was encouraged), and how to organize the guide (e.g., what features did they consider more important than others?). By design, the assignment required students to draw on all the metacognitive thinking they had done about writing throughout the course in order to produce a tangible resource that would hopefully encourage other writers to think metacognitively about their work. Essentially, in this assignment, the students became the teachers, and their job was to share their newfound metacognitive awareness with people who could pragmatically benefit from it. Near the end of the course, groups presented their guides to the rest of the class, and I assured them that I would be sharing their Writing Guides with my future students who shared their goals. Knowing their projects had an actual, practical purpose made at least some students appreciate them more, a phenomenon to be explored further in later chapters.

I also collected students' Meta-Analyses, two-page papers accompanying each of the course's four major assignments in which students explained step-by-step how they completed the assignment. The guidelines for completing the Meta-Analyses appeared on each assignment's description (see Appendices D—G). The guidelines were more detailed on the first assignment's description because that was students' first exposure to the Meta-Analyses; on future assignments, students simply received a brief reminder to complete the Meta-Analysis in addition to the main assignment. Ideally, in writing these Meta-Analyses, students started with invention, detailing how they generated their ideas and conceived of the big picture for their project, and then described every process up to and including revision and editing. Nothing was too small to leave out, and I encouraged students not to feel embarrassed by their writing strategies. The purpose of these Meta-Analyses was, once again, to have students reflect on their own writing strategies by at least attempting to explain the reasons behind their strategies, even if those attempts were rough (and they were, at least at first). Since the whole purpose of the course was to improve students' ability to approach their writing from a metacognitive angle, these short papers gave students additional practice articulating what they did, how they did it, and why.

The last type of written document I collected from students was their daily journal entries. At least once each class meeting, students completed a brief journal entry in response to an open-ended question from me. This question was usually relevant to the class meeting's subject matter; for example, when the class discussion was about writing failures, I asked students to respond to this question: "When was a time you felt like you failed at writing, and how did you respond?" At the end of each class, I took up these entries, read them, and responded to each one in two or three sentences. At the beginning of the next class, I returned the

journal entries to their writers. By the end of the semester, students could (but were not required to) join these entries into a comprehensive journal that they could refer to long after the course was over. These journal entries were particularly useful because they satisfied several of the five elements of effective practice the course pursued. First, since the journal entries were graded for completion rather than quality, they did not need to be especially formal, and students should not have been afraid to experiment with different writing strategies in order to complete them (some students' entries were occasionally accompanied by drawings, for instance). This made the journal entries perfect opportunities for students to try new things with their writing, even at the risk of failure. Also, the journal entries allowed me to respond frequently and specifically to each individual student, and they gave students ample opportunities to reflect on this feedback. After students turned in their Goal Inventory, I knew exactly how to tailor my feedback to each student (e.g., if a student listed "improving grammar" as one of his goals, I could specifically model corrections of grammatical errors in my responses to the student's journal entries). Finally, since every prompt was followed by the all-important "why?" question, students were doing at least some metacognitive thinking every day. Metacognition must *itself* be practiced like any other skill, and so students need frequent opportunities to engage with it. As Donovan et al. argue, with enough practice, metacognition itself reaches a state of automaticity at which the student employs it as a matter of course when solving writing problems: "Ultimately, students are able to prompt themselves and monitor their own comprehension without teacher support" (14). While I didn't expect all students to become sophisticated metacognitive thinkers by the end of "Perfect Practice," I wanted them to have enough opportunities to practice the skill (and its associated sub-skills) as much as our time together allowed.

In addition to collecting these written documents, I also conducted, recorded, and transcribed end-of-semester interviews with six students. More specifically, I selected three students from each section to participate in a thirty-minute interview about their experience in the course, asking:

1. What stood out in your mind about this course?
2. Did anything surprise you about this course? If so, what was it?
3. Was this course different from previous writing courses you've taken? If so, how?
4. Has this course changed the way you think about your writing? If so, how?
5. What suggestions or recommendations do you have for this course?

While all of these questions are fairly open-ended so as to allow students more freedom in how they answered, I wanted to begin with an especially open-ended question so that the students themselves could determine the interview's trajectory. Like Perry, I wanted to conduct the interviews "in as open-ended a way as possible so as to avoid dictating the structure of a student's thought by the structure of our questions" (*Forms 7*). I also wanted to ask questions that presented me as a co-researcher, someone with things to learn from my students. In *Interviewing for Journalists*, Sally Adams writes that "the most useful characteristic for an all-round interviewer is to be likeable, the sort of person who can get on with almost anybody and *is interested in everybody* (5, emphasis mine). I was afraid that my students might see the interview process as too scientific and formal, inhibiting them from giving sincere responses. Thus, I modeled both my questions and my demeanor during the interviews (e.g., sitting in a comfortable position, facing the students, matching my expressions to their responses) in such a way as to show genuine interest in the students, to encourage students to be comfortable (and therefore hopefully more forthcoming) in their answers to my questions. I may have followed up

any of these questions by inviting the student to provide an example from his or her own work during the course, similar to how Perry's interviewers often followed up on a student's general response in his study's interviews with a question like, "As you speak of that, do any particular instances come to mind?" (7). For example, if a student said in response to question 4 that she shifted to a new strategy for proofreading, I might ask if she could explain how she applied that new strategy in one of her four major assignments. The goal of this follow-up question was to not only collect more specific data for my own benefit but to also further encourage the students themselves to think more critically about the "why?" and the "how?" behind their responses—to give them more practice with metacognition.

Based on students' responses to the above questions, I may have also asked any number of the following more specific questions:

1. Did this course change your mind about something? If so, how did you change your mind?
2. Did feedback from the instructor and other students play a role in your writing? If so, in what ways?
3. Did this course affect your ability to set goals as a writer? If so, how?
4. Did this course change the way you think about error and failure? If so, how?
5. Do you feel that the amount of actual writing done in class was too much, too little, or just right? Why?

Again, one purpose of these follow-up questions was to get students to delve more deeply into their ideas and provide a more specific response. But these questions also speak directly to the five elements of effective practice which I set out to observe: the first question speaks to metacognition, the second to evaluating feedback, the third to setting effective goals, the fourth

to appreciating error and failure, and the fifth to maintaining appropriate challenge. As it happened, different students steered the interview in different directions; for example, Elian's interview centered largely on goal setting, while Ace's responses focused mainly on metacognition—more specifically, how the course had led him to start thinking about how to bring certain metacognitive strategies which he already used in practicing basketball to practicing writing. Instead of trying to lead all six students to discuss all five elements, I thought it more effective to allow the students *themselves* to lead the conversation and decide which element they wanted to give the bulk of their attention. This strategy, I believe, provided me with deeper, more useful responses (and ultimately more interesting responses) than if I had self-interestedly led students to give shorter, more surface-level commentary on all five of the elements.

In selecting the six students for the interviews, I planned to choose two students from this pool of six on whom to write more fully developed case studies, which appear in Chapters V and VI. I chose both students who seemed to buy into the course and students who, in some way, seemed to resist or challenge the course (or my teaching of it). As a teacher-researcher, I wanted *authentic* responses that were as representative as possible of all of my students' attitudes toward the course. Selecting only “buy-in” students would increase the odds that I received only positive responses; on the other hand, selecting only “resisting” students would skew the responses negative. Again, I wanted to use these responses as evidence of the successes *and* shortcomings of the course—I didn't want to stack the deck in one direction or the other. I also wanted to use these six students, along with some of the other thirty-two students, to generalize about students' responses to the course; I cite their responses—as well as some from other students outside the pool of six—in Chapter IV. Of course, ideally, I would have been able to give this sort of

attention to all thirty-eight students in the course, but as I discuss later, balancing individualization with practicality is a challenge in itself. Selecting these six students at least allowed me to closely analyze a variety of students and a variety of student responses, placing me in a better position not only to describe and analyze two case study students in detail but also to make some generalizations about the students as a whole. I chose an even mix of male and female students, and I ensured that the students I chose represented a diversity of academic majors and relative skill levels. In brief, I wanted to ensure—as much as possible—that these six students' responses reflected both sections' overall perception of the course and of my teaching methods. Ultimately, I selected the following six students, all of whom have been given pseudonyms: (1) Erica, a female freshman business major who consistently received high scores on major assignments and regularly contributed to class discussions, (2) Giovanni, a male sophomore business major who made mostly high grades on major assignments and enthusiastically responded to the course's critique of natural talent, (3) Elian, a male sophomore pre-law major who earned high grades and participated somewhat often in class discussions, (4) Delilah, a female freshman agriculture major who generally performed well in the course but often received reduced grades due to her tendency to submit work late, (5) Ace, a male freshman business major who showed marked improvement as a writer and metacognitive thinker over the course of the semester, and (6) L.A., a female junior music education major who displayed the most advanced metacognitive skills of all thirty-eight students and who also frequently pushed back against the course's curriculum. Chapter IV references the work and responses of all six of these students (among other students outside this pool of six), but Chapters V and VI feature the case studies of Giovanni and L.A., both of whom I argue provide especially valuable insight into how the elements of effective practice might play out in a college writing course.

I used these two means of data collection—collecting students’ written work and interviewing six students at the end of the course—so that I was in a better position to triangulate my data, a process which Todd Jick defines as “the use of multiple methods to examine the same dimension of a research problem” (602). Jick argues that “multiple and independent measures, if they reach the same conclusions, provide a more certain portrayal of the...phenomenon” (602), and John Creswell similarly claims that the validity of a study can be bolstered “if themes are established based on converging several sources of data or perspectives from participants” (201). Collecting data from multiple sources not only supplied me with more data, it also served as a sort of check on the instructor bias inherent to the teacher-research method: if the same categories of responses—“themes,” as Creswell calls them—continued to show up across students’ work, then it was more likely that I was looking at genuine recurrent patterns rather than seeing patterns where I wanted or expected to see them. If, for example, a student commented on what she perceived to be a lack of challenge offered by the course not just in her journal entries but in her end-of-semester interview as well, I was more justified in arguing with confidence that the student’s responses reflected her genuine attitude toward the course.

Data Coding

During the summer of 2017, after I had finished submitting students’ final grades, I designed a guide for coding the six selected students’ written work and interview transcripts (see Appendix H). Keith Grant-Davie defines coding as “the process of identifying units of analysis and classifying each unit according to the categories in a coding system—either a preexisting system or one developed for the data in question” (272). Coding, then, like triangulation, is a means of both organizing the qualitative data common in humanities research and providing a check on the instructor bias inherent to the teacher-research and case study methods. For my

purposes, I recruited a second coder in an attempt to get the perspective of someone whose reading of the students' responses would not be colored by the same bias I inevitably had as the course's instructor. As Lauer and Asher point out, coding is typically used in qualitative descriptive research to "create and test schemas that will account for and explain the strips of writing behavior in context" (43)—in other words, to establish (as much as is possible) an empirical model for identifying the variables in a set of qualitative data. In short, as a teacher-researcher, I wanted to determine whether my interpretation of my results allowed for an accurate and therefore useful pedagogical discussion. Rebecca Moore Howard reiterates this advantage of coding: "Coding pushes the researcher away from confirmation bias, beyond grasping at bright shiny objects in an impressionistic reading of text...[it] impedes the researcher's impulse to notice only the passages that support his or her preliminary hypotheses" (79). Like triangulation, coding my data kept me from seeing patterns that I *wanted* to see but weren't actually there—it improved the validity of how I interpreted the data and how I later wrote about it in the three "results" chapters which follow. Chapter IV, which examines the results in a more holistic manner, looks at responses from all six of the selected students whose work was coded, as well as other students in the course who were not selected for interviews. I do not explicitly refer to the coding in that chapter since the chapter cites a mix of coded and non-coded responses; however, Chapters V and VI narrow the focus to the two students I chose for case studies, and it is in those chapters that I make explicit reference to the coding.

In my study, the second coder was a Ph.D. student majoring in American literature who had experience teaching the University of Arkansas' first-year composition courses, Composition I and Composition II, comparable to my own experience. The specific documents that the second coder and I coded included: (1) daily journal entries, (2) the first major

assignment—the Goal Inventory, (3) the Meta-Analyses which accompanied each major assignment, and (4) transcripts of the students’ end-of-semester interviews. We used different colors to highlight sentences or passages in these documents which reflected the five elements of effective practice. I divided the first element, “Setting Effective Goals,” into two separate learning objectives, “Setting Effective Short-Term and Long-Term Goals” and “Setting Effective Operational Goals,” because I wanted to evaluate students’ response to them separately. Next to each highlighted sentence or passage, we wrote the corresponding learning objective’s abbreviation (e.g., MAC for “Maintaining Appropriate Challenge”). Figure 1 shows a few examples of how we coded students’ responses:

From Delilah’s end-of-semester interview: Especially with my first paper, it was really beneficial—some of the things that maybe weren’t necessary that some of the other students were like, “Hey, I think you’re repeating yourself here” or “This is something you do well.” That sort of thing. Some of the comments that I got back in our first workshop were beneficial. EF

(The passage indicates that Delilah received feedback from her peers and evaluated how that feedback could play into her revision.)

From Ace’s Assignment 1 Meta-Analysis: I then re-read my essay several times. I did this so that I could find points that I could improve or lengthen so that I could reach the length I wanted the paper. I then made my goals better while also lengthening my essay. This is also what I consider my revision process and so it is at this time that I finished my essay. I read through it one last time. My last read through was to make sure that I was happy with what I presented for this assignment. TM

(Ace explains the “why?” and the “how?” behind his revision strategy, but he doesn’t comment on how effective it proved to be for him.)

From Elian’s Goal Inventory: When it comes to my long term goal, it is one created specifically to help me in my career path, unlike my short term goals which help in both basic everyday writing, and my career path. My long term goal of mastering argumentative writing will really only benefit me in law school. Obviously arguing and being a lawyer go hand in hand so if I gain the skill of mastering argumentative writing not only will I be ahead in law school I will also have an already developed skill for when I enter the workforce. SEG

(Elian sets a long-term goal that is specific and realistic enough to be useful to him, as well as relevant to his interests.)

Figure 1: Example Coded Passages

The second coder and I met at a local coffee shop every day for one week to code the responses; however, while we were in physical proximity with each other, we coded the students’ responses individually. It was important that we code in physical proximity, for several reasons. First, doing so allowed me to more effectively train the second coder on the process by using a sample response from another student in the course who was not among the six chosen for interviews. It also allowed for instant and efficient communication between us in the event that the second coder had a question about the process. Third, coding in the same place ensured

that we were coding documents in the same order and at relatively the same pace, which similarly proved useful in case questions or confusion arose. Likewise, another advantage to coding in close proximity was that it ensured that we were—as much as possible—following consistent procedures in coding students’ responses, and finally, it controlled for the setting, as we were both subject to the same environmental conditions. However, while the second coder and I worked in close proximity and occasionally discussed the coding process at large, we did not discuss *how* we coded each student’s responses until after we had both completed coding that student’s responses (i.e., we did not show each other our highlights while one or both of us were still coding that student’s responses).

After both of us had finished coding a student’s responses, we paused before moving onto the next student to discuss our highlights, taking note of any significant disagreement. A “significant disagreement” was any case in which:

1. we both coded a response as “SEG,” “SOG,” or “TM” (the three “ranked” learning objectives) but our highlighting was separated by two or more colors (e.g., the second coder and I both coded a response as “TM” but I highlighted it pink while the second coder highlighted it green),
2. we both coded a response as “MAC,” “AEF,” or “EF” (the three “un-ranked” learning objectives) but our highlighting differed at all,
3. we coded a response as two entirely different learning objectives (e.g., I coded a response as “TM” but the second coder coded the same response as “EF”), or
4. the second coder coded a response as evidence of a learning objective but I did not, or vice-versa (e.g., I coded a response as “AEF” but the second coder did not code it as anything).

If a significant disagreement occurred, we explained our reasoning for coding the response the way we did and reached a formal agreement (i.e., in cases 1 and 2, we agreed on what color to highlight the response; in case 3, we agreed on which learning objective to classify the response as; in case 4, we agreed whether the response was in fact evidence of the learning objective in question). Here is an example of the first case, from Ace's Assignment 1 Meta-Analysis:

I eventually sat down and thought of the things I was worst at in my writing. Once I did that everything else seemed to follow. I thought of the skills I was worst at because it is practical for this essay as well as an actual need for improvement for my writing skill set.

I coded the response as "TM, blue" because I considered this strategy to only include the sentence "I eventually sat down and thought of the things I was worst at in my writing," a statement which says *what* Ace did but not why he did it, how he did it, or how well it served him. The second coder coded the response as "TM, pink" because he considered this strategy to include all three sentences, resulting in a passage that at least answers the "why?" and "how well?" questions. The disagreement, then, concerned the scope of Ace's response: at what point had he stopped discussing one strategy and begun discussing another? We agreed to code the response as "TM, yellow" because even when the passage is taken as a whole, Ace still lacks a specific answer to the "how?" question.

Here is an example of the second case, from one of Elian's journal entries:

A failure for me in writing was my first research project. I thought I did good on it but when I got it back my professor had wrote that writing was a weakness. He gave me a high B but it still was a terrible paper in my opinion.

I coded the response as "AEF, green" because I didn't see evidence of Elian reflecting on the value of this particular writing failure. The second coder coded it as "AEF, yellow" because he believed Elian had evaluated the failure as expressly *not valuable* to his improvement. Upon

discussion, the second coder acknowledged that there was no real value judgment in Elian's response, and we agreed to code it as "AEF, green."

Here is an example of the third case, from Erica's Assignment 4 Meta-Analysis (it is written in the plural since the assignment was collaborative; however, Erica later indicated that she had written this passage):

The first thing we did was looked at our journal entries from April 10th when Professor Green told us to list all the ideas that we had that would help us add creativity to one's writing. When the time got closer to actually doing the assignment, we then narrowed it down to four or five strategies that we thought would be best. We did this by thinking which ways would be most beneficial to us as students because we want it to be beneficial for Professor Green's upcoming students he plans to share this with next semester.

I coded the response as "TM, yellow" because I initially thought Erica was reflecting on one of her group's writing strategies. The second coder coded it as "EF, pink" because he saw it as evidence that the group had thoughtfully evaluated the benefit of incorporating the instructor's feedback. Upon discussion, we agreed that the response was more indicative of evaluating feedback than it was of thinking metacognitively, and we agreed to code it as "EF, pink."

Finally, here is an example of the fourth case of significant disagreement, from one of Delilah's journal entries:

I write similarly to many of the styles of writing I most prefer to read.

The second coder coded the response as "TM, blue," reading it as evidence of Delilah reflecting on one of her writing strategies, while I didn't initially read the statement as evidence of a learning objective. However, upon discussion, I agreed that the statement indicated a very limited amount of self-reflection (hence the blue highlighting—Delilah explains what she does but not why or how she does it, nor how well it works for her), and we agreed to code the response as "TM, blue."

Another advantage of pausing between each student's responses is that it gave the second coder and me the opportunity to make sure we were coding the responses consistently. The third case of disagreement was especially common early in the coding process: while the second coder and I were fairly consistently highlighting the same responses in the same (or adjacent) colors, we sometimes labeled them as evidence of entirely different learning objectives. For example, the second coder sometimes identified responses as evidence of "Setting Effective Operational Goals" while I identified them as evidence of "Thinking Metacognitively." Upon discussion, we discovered that the second coder had a different understanding of what exactly constituted an operational goal than I did. We used that opportunity to reach an agreement on how to define "operational goal," as well as an agreement on how to code the response in question. More specifically, we agreed that an operational goal was a strategy that students formulated *in preparation* for completing a particular assignment, whereas thinking metacognitively occurred when students reflected on what strategies they had used for the assignment (or what strategies they tended to follow when writing in general). Therefore, since we resolved all instances of significant disagreement, there was a high level of agreement between the coders. In fact, the only case of minimal disagreement was when we both coded a response as SEG, SOG, or TM but our colors were only separated by one. When discussing students' responses in Chapters V and VI of this dissertation, the two case study chapters, I sometimes explicitly state how the second coder and I coded a particular response for rhetorical purposes; however, if I do *not* explicitly refer to the coding, the reader can still assume complete agreement or minimal disagreement between the coders. I also occasionally refer to passages that do not show evidence of any of the learning objectives but are still interesting or important for other reasons; in these

cases, the reader can assume that both coders agreed that the passage was not evidence of a learning objective.

In addition to explaining the coding process itself, I'm compelled to explain my reasons for designing the coding guide as I did. In general, I wanted to avoid presenting the guide as an evaluative document. My goal was not to rank students according to how well I felt they adapted to the elements; rather, I simply wanted to examine how they responded to the assignments. That said, some of the elements did have an evaluative aspect, as I also wanted to assess how students' attitudes about the elements changed (or did not change) across the semester. For both "Setting Effective Goals" learning objectives and "Thinking Metacognitively," a pink highlight represented perhaps the most "sophisticated" type of response a student could give, while a blue highlight represented a rather unsophisticated or lacking response. But having a wealth of pink or yellow highlights was not necessarily indicative of a high grade in the course, nor was having an abundance of green or blue highlights indicative of a low grade in the course. On that note, it's also important to recognize that not all data sources were evaluated for a grade in the course (students received full credit for doing the journal entries, and the interviews did not affect students' grades). To an extent, an abundance of certain color highlights on the Meta-Analyses and the single coded major assignment (the Goal Inventory) may have correlated with high or low grades on those particular assignments, but that was not always the case. I selected the Goal Inventory as the only major assignment to code because it was the only major assignment that I anticipated showing explicit evidence of any of these learning objectives (particularly, "Setting Effective Short-Term and Long-Term Goals"). The other major assignments (the Writing Profile, Writing Biography, and Writing Guide), while providing opportunities for students to employ the objectives, did not explicitly require students to respond in ways that would expose these

learning objectives, and so I excluded them from the coding process. For example, while a student may have used the element “Evaluating Feedback” to help her write her Writing Biography, the assignment did not require her to explicitly describe how she used that element. The coding process did, however, include the Meta-Analyses for all four major assignments, as they were prime opportunities for students to show evidence of all six learning objectives.

Conclusion

As Lauer and Asher make clear, it is notoriously difficult to analyze data in composition, which, as we saw in Chapter I, may be one reason that a significant portion of the field has historically resisted it. Writing is infinitely context-bound and therefore all but impossible to completely control for; for one, all writers bring with them unique personalities, attitudes, and experiences, all of which color their strategies for solving writing problems. But a study like this invites an empirical approach; after all, it is one thing to sing the praises of cognitive psychology and call on instructors to capitalize on its findings, but it is another thing to actually incorporate those findings into a real classroom. Taking a closer look at how students—real students in a real classroom—responded to a writing curriculum centered on the idea of effective practice helps us understand both the advantages and challenges of such a course in a way that simple conjecture cannot. I may have *felt* that the course was going well when my students did not, or vice-versa, and their responses provide another lens through which to reflect on the course. Triangulating and coding the students’ responses allows us to see for ourselves how they actually responded to the elements, not how I expected or wanted them to respond.

The next three chapters turn the focus away from the design of the course and my teaching of it and toward the students themselves: how *did* they respond to the elements of effective practice? How did their understanding of the individual elements, as well as their larger

understanding of how writing can be practiced and improved upon, change across the course's four units—or did it change at all? Chapter IV takes a more holistic look at the course, discussing students' written work and verbal comments from across the two sections and generalizing about how students responded to the elements. Chapters V and VI then narrow the focus even further to two students in particular—Giovanni and L.A., respectively, both of whom had especially interesting and informative responses to the curriculum.

Chapter IV: How Students Responded to the Elements of Effective Practice

Whereas Chapter II considered how the elements of effective practice might be incorporated into a first-year college composition course, this chapter observes how the students in one such course actually did respond to my attempts to incorporate those elements. Using quotations gathered from students' daily journal entries, major paper assignments, and end-of-semester interviews, I discuss how students reacted to and navigated this approach. But first, a distinction: this chapter interprets the results of the course in general, drawing on the data collected from *all* students in the course. The following two chapters examine two students in particular—Giovanni and L.A.—in order to draw further conclusions about how the elements played out. While I include a few responses from Giovanni and L.A. in this chapter, I will be taking a much closer look at those two students in Chapters V and VI.

Setting Effective Goals

As discussed in Chapter II, an “effective” goal is one that is clear, challenging, and proximal (Oare 44). The goal must be specific to the student's individual interests and current level of expertise, and it must be realistically achievable. It's also important to differentiate between the “operational goals” that Flower and Hayes discuss, which are goals specific to the present writing problem (such as an assignment), and longer-term goals, which apply to multiple (or perhaps all) writing problems the student expects to face. The first major assignment in “Perfect Practice and Writing,” the Goal Inventory, required students to set what I called short-term writing goals and long-term writing goals for themselves. By short-term goals, I meant goals that the students could realistically achieve during the sixteen-week semester. I anticipated these goals involving lower-order concerns, such as mastering certain grammatical or mechanical concepts or expanding one's vocabulary. By long-term goals, I meant goals that would likely

take students longer than the semester to achieve (in some cases, much longer), such as finding greater motivation to write or mastering certain elements of style like diction and figurative language. These goals could reflect global or higher-order concerns in writing like organization, or they could reflect goals that had more to do with making a change to the writer's attitude toward or overall approach to writing, such as eliminating procrastination habits or writing more often for pleasure.

However, my distinction between short-term and long-term was entirely my own, and indeed, many students labeled a goal short-term whereas I would have called it long-term, and vice-versa. My distinction between the two categories is not as important as each student's distinction; indeed, the fact that students were able to even make the distinction suggests an early start toward thinking metacognitively about *why* they felt some goals were more proximal than others. Students also showed some metacognition by thinking about how the short-term goals could potentially advance them toward one or more long-term goals, engaging in a form of Deweyan synthesis. One student, Elian, demonstrated this ability in his first assignment, the Goal Inventory, as he connected one of his short-term goals, broadening his vocabulary, to his long-term goal of improving his argumentative writing:

I believe that when it comes to writing and even speaking that if one has a larger vocabulary that it automatically makes whatever you are saying or writing more compelling to those receiving. Also once in law school, a good vocabulary will allow me to make my papers have more depth, as well as, sound and flow better... This goal of gaining a larger vocabulary, is truly one that will benefit me in my future career path, and I think I already have a way to achieve it.

Here, Elian shows evidence of thinking metacognitively in that he does not just make a laundry list of his short and long-term goals; rather, he is already thinking about the connections between the goals he can achieve in a few months and the goals that will require years of study. As Douglas Hill saw with his music students, being able to make these connections—being able to

see the potential payoff of the short-term goals—may further motivate Elian to pursue the short-term goals. Carol Benton writes, “Self-reflective learners acknowledge mistakes and remember important points in their learning experiences, and they make connections among past learning experiences, current learning experiences, and *possibilities for future learning*” (55, emphasis mine). Elian’s linking his short-term goals to his long-term goals represents a form of Deweyan synthesis by which he potentially gains a greater appreciation for the effort required to reach those short-term goals.

Once I received students’ Goal Inventories, I compiled a list of all short and long-term goals set by the students. The goals students set appear in Table 1, along with the number of students who set that goal, out of thirty-eight total students (including both sections of the course)*.

Table 1: Student Goals

Goal	Number of students
Improving grammar/mechanics	21
Improving at discipline-specific writing	17
Broadening vocabulary	15
Enjoying writing/feeling more confident about writing	12
Avoiding procrastination	11
Writing with greater emotion/style/creativity	10
Eliminating repetition/rambling	9
Improving spelling	8

Table 1 (Cont.)

Goal	Number of students
Writing better introductions and/or conclusions	7
Improving organization and transitioning	7
Improving revision/editing/proofreading	7
Reading more/more effectively	4
Improving research/citation methods	4
Adding sentence variety	4
Putting thoughts into words more effectively	4
Starting a blog, vlog, journal, etc.	4
Publishing a book, article, etc.	3
Finding motivation to write	2
Controlling tone	2
Planning to write more effectively	2
Improving handwriting	1
Seeking out help more often	1

*I have taken some liberties with labeling these goals; for example, if a student set the goal of “grabbing readers’ attention,” I labeled it as “writing with greater emotion/style/creativity.” This list also omits goals that, while important, are not explicitly writing goals, such as “paying attention in class.”

Based on this list, there seem to be three major categories of goals: formal goals (those related to sentence-level issues such as grammar and mechanics, spelling, and vocabulary), big-

picture/global goals (those related to larger considerations in writing, such as organization and tone, as well as goals involving discipline-specific writing), and attitudinal goals (those related more to the writer's personality or attitude toward writing rather than the writing process itself, such as finding motivation, avoiding procrastination, and seeking help). Interestingly, most students set goals from all three categories, suggesting they were thinking critically about the kinds of goals that would not only improve their writing *per se* but also genuinely make them better *writers*; in other words, most students wanted to change something about their approach to writing (by which I mean how they went about solving writing problems) rather than just focusing on low-hanging formalist fruit. The Goal Inventory made them think about themselves in a way that, according to many of their responses, they had not done so before, priming them from the beginning for metacognitive thinking.

But besides forcing students to think metacognitively about their writing and their writing selves, the Goal Inventory gave students an added sense of control in that they were able to significantly determine the trajectory of the course for themselves. In her Meta-Analysis, one student wrote,

I was very happy with what I wrote down because I truly felt that the goals I wrote down were things I really wanted to work on and in the end would improve my writing by miles...I didn't want to treat this paper like an assignment but more like something for my personal benefit.

The fact that this student prefers to think of the Goal Inventory not as a class assignment but as something that could potentially benefit her suggests she has found intrinsic motivation in doing the task. Another student wrote in his Assignment 1 Meta-Analysis,

I feel like this assignment really helped to discover and focus on things that I would like to see myself improve on in my writings; especially since before being assigned this assignment, I had never really thought about long-term and short-term goals for improving my writing. It also helped me to realize how big of an impact writing can and will have on my future career and how it can help me to succeed in the things that I plan

to accomplish later on in my life. Lastly, this assignment gave me something to motivate me to become a better writer and made some goals for me to set out to accomplish as we move along throughout this year in English. I look forward to being able to see myself progress in all these goals that I have set.

He reiterates this point in the Goal Inventory itself:

Being a better business writer will help me to become a better businessman and to be able to expand my business's horizons. Knowing how to communicate is a major key in the business world and very important to running a successful business. Pretty much every aspect of business calls for you to be able to communicate, whether it be purchasing inventory, promoting your business, or selling your product; so, knowing how to be a great business writer will help to give me an advantage in the business world.

Like the previous student, this student is thinking in terms of how the Goal Inventory can benefit *him* rather than how the instructor will receive it. He recognizes that achieving his long-term *career* goal of becoming a successful business professional rests in part on his long-term *writing* goal of mastering business writing. The student sets his goals in a way that aligns with Dewey's concept of the "experiential continuum" ("Logical Conditions" 33): experiences must be valued according to how they fit into a continuum of other experiences, how they help the learner build a storehouse of experiences to draw upon when solving future problems. This student recognizes that becoming a better problem solver when it comes to business writing could help prepare him to become a better problem solver when it comes to business in general. Along the same lines, Benton writes that self-reflective learners "make connections among past learning experiences, current learning experiences, and possibilities for future learning" (55). By asking students to put their goals in conversation with each other and see how practicing writing also means practicing something larger, the Goal Inventory gave the course a greater sense of exigence for students; the students were largely motivated to pursue the goals they set forth. To reiterate Dewey, "Every experience, of slight or tremendous import, begins with an impulsion, rather *as* an impulsion" (*Art as Experience* 60). The Goal Inventory provided students with that impulsion, that impetus

toward further learning that seems to have kept at least most of their interest throughout the sixteen-week semester.

Another benefit of the Goal Inventory is that it gave students practice with setting effective goals, a skill which they will need to employ independently if they are to continue practicing their writing. In his interview, Giovanni responded,

I think this really helped me develop myself as a writer and also the ability to set realistic goals, set attainable goals, and kind of see the process through. The hardest thing I see, I think, about the actual goal setting is the entire process. To be able to see it through an entire semester was beautiful. Made me really stick to it.

The Goal Inventory also encouraged several students to keep pursuing their goals throughout the semester. In other words, the assignment had staying power: it remained relevant for the students throughout the course. In his interview, Elian explained how he always had his goals of enhancing his vocabulary, improving his grammar, and developing his argumentative writing skills in mind as he wrote future assignments for the course:

I'll go and make sure that I'm—you know, since I set the goal for vocabulary and the big goal for argumentative writing, I will start thinking about using what you taught me or using words, you know, to broaden my vocabulary or to make sure that I'm using correct grammar. Because previously in my writing I would just type it, check on—send it through a paper grader, and then whatever grammar mistakes it (unintelligible) up there that's what I would do. And now I try to catch the ones that won't be caught by those programs. So I think being in this class has made me dive a little deeper in my writing rather than just trying to write it and then just turn it in.

By “dive a little deeper in my writing,” Elian probably means that the class has helped give him more direction in his writing; whereas he may have previously been motivated to submit “correct” work that would earn a good grade, he seems more motivated now to write according to his own standards and in pursuit of his own goals, not his teachers'. My objective in assigning the Goal Inventory was to give students an artifact—not just an assignment—that could follow

them throughout the class and even beyond, something that would remind them *why* they write, and it was largely successful in this regard.

Overall, students responded favorably to Unit 1's focus on goal setting and to the Goal Inventory itself. Their comments later in the semester (such as in the interviews) suggest that for most of them, the unit served as a useful foundation for the rest of the course and gave them a sense of direction as they pursued the future assignments. Such a response is encouraging from a pedagogical standpoint, as Shaughnessy and Lunsford frequently use "lost" or "wandering" language to describe basic writers' attitudes; Shaughnessy, for instance, writes, "He [the basic writer] is aware that he leaves a trail of errors behind him when he writes...But he doesn't know what to do about it" (7). And Lunsford asserts that basic writers "most often presented themselves as more or less helpless victims" (279-80). By taking time at the beginning of the course to set their own goals, goals that are relevant to their needs and interests, students avoid this feeling of aimlessness: the course has a purpose, and that purpose is not just clear to them but also important to them. And the literature in music education reiterates the distinction between goal-directed, deliberate practice and aimless goofing off; in their study of expert pianist Gabriela Imreh, Chaffin and Crawford put it simply: "She generally had a clear idea of what she wanted to accomplish" (160). Beginning this composition course with goal setting ensured that students knew what they wanted to do with their writing in the short and long term, and it also ensured that they knew what they *needed* to do on each subsequent assignment in order to keep pursuing those goals.

Maintaining Appropriate Challenge

This element of effective practice requires that each student constantly operate in her individual zone of proximal development (ZPD), which means the student should consistently

practice writing problems that are challenging but still possible for her. The ZPD represents the sweet spot between what a student can do independently and what she can only do with additional instruction or assistance; according to Vygotsky, learning takes place when learners deliberately practice toward the *next closest* difficulty level (see Chapter II). Set the difficulty level too low or too high and the student will likely lose interest in her practice, whether because she gets complacent with her current skill level or because the challenge is too far beyond her current skill level. In the context of college writing, Patrick Slattery puts forth that “students need to be challenged, since it is when they are confronted with experiences they cannot conceptualize that they develop more complex types of thinking” (334). At the same time, though, Slattery remarks that without enough support to confront those experiences, students “can become overwhelmed by the painful and risky process of intellectual growth” (334). Therefore, simply setting the difficulty level high and trusting students to rise to the occasion is a recipe for frustration, pushback, and eventually burnout; the student must work in that sweet spot Vygotsky describes between tasks that are too easy (and hence worthless other than for maintaining skill level) and tasks that are too hard (and hence paralyzing).

Students responded to this element in diverse ways. A number of students in the course expressed that certain aspects of the class were quite difficult, particularly those that required them to think metacognitively early in the course. Several students commented that they had never thought about their own writing process in that way, so the Meta-Analyses that accompanied each paper, especially the first one, posed a lofty challenge. In his Goal Inventory Meta-Analysis, one student wrote:

When I first was told of this assignment on goal inventory by you, I was kind of nervous at first because I was not exactly sure of what all I would write about and if I would have enough to write about. Also, hearing of having to write the meta-analysis worried me a little because I have never written one before and did not know exactly how I was going

to explain my thought process in writing my goal inventory. I thought on it for a little bit as you were explaining it to us in class and thought of a few things I could write about, but felt that I did not really come up with anything of much importance or significance.

Another student wrote this in his Goal Inventory Meta-Analysis:

At first I was confused and didn't really know how to approach this essay. I have never written an essay like the assignment so it took me a bit to wrap my head around this new concept. I knew I had the interview coming up so I really was running out of time to think. I eventually sat down and thought of the things I was worst at in my writing. Once I did that everything else seemed to follow.

These students seemed to struggle primarily with the novelty of the assignments; many had never written such “meta” papers in English or any other class, so the idea of analyzing their own writing goals and processes was foreign to them. But the fact that many students initially struggled with these assignments is a promising sign: it shows that the class was challenging students in a way that their previous writing classes had not. The class was asking them to do new things and stretch beyond their current skill level. Music educator Margaret Berg observes that novice musicians tend to avoid challenges altogether, in contrast to expert musicians, who often set their own challenges, such as varying the tempo of a piece they are practicing (46-7). For students not yet advanced to set their own challenges as the experts do, the instructor and curriculum must get them accustomed to facing challenges in the first place. As the students in “Perfect Practice” became more accustomed to facing novel and perhaps daunting writing problems, many of them actively sought out their own challenge later in the semester by trying new strategies to solving those problems—I discuss a few examples in the next section. Plus, as the students practiced the metacognitive thinking required of them by the initially difficult Meta-Analyses and other assignments, most of them seemed to gradually become more comfortable with it and required less external prompting to answer the “why?” and “how?” questions about

their writing strategies, a phenomenon I discuss further under the “Thinking Metacognitively” heading of this chapter.

In general, most students responded to the course’s assignments in a way that suggested they found the assignments challenging in a healthy way—by which I mean they felt the demands of each assignment were rigorous but not completely out of reach. Echoing Vygotsky, Dewey writes, “The best thinking occurs when the easy and the difficult are duly proportioned to each other...Too much that is easy gives no ground for inquiry; too much of the hard renders inquiry hopeless” (*How We Think* 206). The ideal scenario in my mind was that students were initially intimidated by the prospect of doing something new and foreign (an intimidating prospect for *anyone*) but that after contemplating how their prior experiences and knowledge could help them broach the challenge, they were both surprised and encouraged by their ability to solve the new problem. This reaction, I hoped, would further motivate the student to continue seeking new challenges and testing new strategies. As Kathleen McCormick puts it, “They [students] feel greater motivation if they believe that they are being challenged at an appropriate level” (214). One student’s response in his Assignment 3 Meta-Analysis encapsulates such a reaction:

Because of the fact that I thought this assignment was going to be difficult, when you first explained it to us, I did not pay it too much attention and proceeded to just put it off for as long as I possibly could so that I would not have to think on or stress about it. It was not until the beginning of last week that I actually decided to pull up the prompt and truly look over it and focus on what it was saying and asking. I knew that we were going to be having a peer review day so I wanted to at least have started my paper so that I could get some good feedback from some of my classmates. At first I began to think too hard and could not think of any of my writing sponsors, but as I began to relax and just let it come to me, I realized it was not as difficult as I thought it would be.

The student’s initial response was to shut down in the face of challenge: he “put it off” to avoid the stress of having to do something difficult. Then, he seems to have undergone what Dewey

calls an interval, a liminal moment “of pause and rest; of completions that become the initial points of new processes of development” (*Art as Experience* 24). Some cognitive psychologists call this strategy *incubation* (e.g., Simonton 33), a sort of putting off or setting aside a problem which often results in seemingly inexplicable “eureka” moments when everything just clicks for the learner. Suddenly, once this student relaxed and let it “come” to him, he found a solution to the novel problem before him. Many expert musicians attest to using the strategy of incubation; for example, pianist Misha Dichter says, “I (prefer to allow)...a period of at least three months from the first reading of a piece. I leave it and go back to other things, or learn new things” (qtd. in Chaffin, Imreh, and Crawford 53). In fact, Flower and Hayes discuss incubation in a writing context, particularly when discussing the invention of new ideas: “Let your unfinished business simmer *actively* in the back of your mind and return to it from time to time (“Problem-Solving Strategies” 455, emphasis in original). Perhaps similar to how muscles grow during rest periods rather than during the process of weightlifting itself, there must be periods of incubation in which the right kind of Deweyan synthesis occurs to lead the learner to find an appropriate solution.

Some students, however, commented that the course did not challenge them enough; one student bluntly wrote in her journal near the end of the semester that she had learned nothing new in the class, and another, L.A., had this to say in her end-of-semester interview:

I tried to make the writing as in depth as possible, and sometimes that was a little bit hard to do just depending on the prompt. And sometimes I definitely feel like I went away from the prompt to, like, just kind of did my own thing because that’s creatively what I needed to do, I guess (laughs). I guess maybe that’s the artist in me (laughs).

L.A. comments that it was “a little bit hard” to respond to some of the prompts, but ironically, based on her response, it appears that those prompts were actually too *easy* for L.A.—or, put another way, she found them too oversimplified to invite what she felt was an adequately

thoughtful response. Here's an example of L.A. "doing her own thing" in one of her journal entries for which I asked students to describe what "talent" meant to them:

(I have lots of thoughts today) ...I don't think you "get talented" at anything. You have natural abilities that allow things to come easily to you, but you have to work hard to become better...Talent is the wrong word in my opinion...Talent and musical success are irrelevant. Desire is why people continue to strive for higher things. If a child is "good at" flute having never touched it, but they want to play trombone...they should play trombone.

Although our class conversation wasn't explicitly centered on talent as it applies to music, L.A. went in this direction presumably because it touched on her interest in music education. It seems that L.A. took this opportunity to find her *own* challenge; by "doing her own thing," she appears to mean that she reinterpreted this prompt (among others) in a way that allowed for a more thoughtful response from her. Finding "What is talent?" a too vague and impractical question, she contrived a different—albeit related—question that upped the challenge level: "Is talent important, and if so, how important?" Chapter VI examines L.A.'s strategies for setting her own challenges in greater detail.

It's also worth remembering that one factor of deliberate practice, according to Ericsson, is that it does not just retread familiar territory. For any task one does as practice, Ericsson says, the task "should take into account the preexisting knowledge of the learners" (367). On the one hand, this means that the task shouldn't require the learner to draw upon knowledge he doesn't yet have; for example, it is useless to ask a student to play an arpeggio before the student even knows what an arpeggio is. On the other hand, the task also should not focus entirely on developing mastery of a concept the learner has already mastered; arpeggio drills aren't particularly useful (unless as a warm-up activity) to the student who has already perfected arpeggios. For students like L.A., who may have found the course too simple at times, the root cause is probably that the course's practice tasks (such as journal entries and assignments) often

required them to do nothing more than the already familiar. If they went into a prompt asking “What is talent?” already having strong, well-researched opinions on what talent is, they may find little value in contemplating the question and even—as L.A. did—redefine the question in a more challenging, useful way. While it is probably wiser from a curricular standpoint to underestimate students’ mastery of course tasks rather than overestimate it, educators must think about ways to design tasks so that they make use of (rather than just recycle) *all* students’ preexisting knowledge. Chapter VII discusses potential ways to ensure that even the more advanced students are operating within their ZPD.

Appreciating Error/Failure

This is the element that I feel the students most fully embraced, as many of their attitudes toward these traditionally negative concepts—at least as they apply to the skill of writing—seemed to shift over the course of the semester, in some cases resulting in a palpable change in attitude toward risk taking in writing. Many students, whether in their journal entries, major assignments, or interviews, indicated that the course took a vastly different approach to error and failure than their previous writing classes had. In his final journal entry, which asked students to reflect on whether their attitudes toward writing had changed over the semester, Elian wrote,

I have definitely seen an improvement in my writing because of this class. All the assignments allowed me to think further upon my writing strategies as well as the goals I have set for myself. I don’t think my writing would have improved as much if I would have enrolled in the other comp classes.

And in his end-of-semester interview, Elian followed up on this entry by saying,

When I took your class it’s more of like I see it as you know how good we are at writing and you know what stage we are and so you understand that we’re doing the best of our abilities. And to me, I think now that failure is only if you don’t try—if you try your hardest and you actually write, you know, to the best of your abilities and not just do something just to get a grade.

Elian's comment that failure "is only if you don't try" aligns with Vygotsky's ZPD model, which implies the inevitability of failure: "The only 'good learning' is that which is in advance of development" (89). Since operating in the ZPD relies practicing things that the learner cannot yet do independently, the learner *must* fail in order to receive the proper feedback for avoiding the same type of failure on subsequent attempts; indeed, the only way to truly fail during practice is to quit practicing altogether. Other students shared Elian's sentiments: for one early journal entry which asked students to explain one thing they don't like about writing, one student named Ace wrote,

I hate writing because I find little fun in doing it. I have never sat down and thought, "I'm going to write a five paragraph essay today." There is no intrinsic motivation to write unless there is a grade involved. I especially hate finishing an essay and then there is always something wrong with it.

In contrast, for his last journal entry of the semester, Ace wrote the following:

I actually used to resent writing but after writing essays for this class my sense of accomplishment came back. I found myself finding an intrinsic motivation where before writing was painful and no fun. I can't say I am in love with writing but some joy has returned and I feel like I am getting better at it. It has been a growing environment.

Words like "hate," "resent," and "painful" are typical when students discuss writing, as Shaughnessy and Lunsford saw with their studies. Shaughnessy comments that even students a level above basic writers—the hypothetical "C students," the skill level likely representative of the typical college freshman—are often students who "learned to get by but...seemed to have found no fun nor challenge in academic tasks" (2). Put bluntly, many students—particularly basic writers but even those with higher skill levels—don't particularly enjoy writing because it has not challenged them appropriately: they have learned to associate it with drudgery at best and painful critique at worst. Prior to this class, Ace associated writing with assessment, punishment, and a general lack of control; writing was all about waiting to get the paper back and seeing what

was, as he puts it, “wrong with it.” By the end of the semester, although he admits he still isn’t in love with writing, Ace seemed less afraid to write and even indicated a desire to start a journal about his fishing trips. He seemed more inclined to write for himself, to write for pleasure, than simply to avoid consequences.

Perhaps as a result of a shift in attitude about error and failure, several students showed evidence of progressively taking more risks in their writing, suggesting they were becoming less inhibited by fear. Compare these two introductions, the first from a student’s Assignment 1 (the Goal Inventory) and the second from the same student’s Assignment 3 (the Writing Biography):

There are many things thing’s in a person’s writing that depict what kind of person the writer is. You can usually see how intellectual a person is. You can see what kind of personality they have. You can see just by the style and talent in that persons writing what they might aspire to be like and how likely they are to get to their dreams someday. You can tell if they are interested in the issue at hand or if they just blew it off. I want to optimize some of my writing skills, so that I can achieve many short and long term goals I’ve set for this class.

There are so many different things that could potentially influence a person’s specific writing style and habits throughout life. So many that it is practically impossible to point them all out in detail and give examples. All though this paper may seem a little generic, like the typical college girl wearing ugg boots and drinking a starbucks coffee, it is loaded with the primary influences on how I wright today, including some of the more impactful and memorable moments that I’ve had with these influences. Of course, there will be the normal examples, such as parents and teachers showing you what’s right, and the friendly and sibling based competitions, but I’m going to start with something a little different.

The first introduction plays it safe. It relies on the same subject-verb-object sentence structure throughout, and it makes an attempt at an essay map or thesis statement at the end (essentially following the clichéd model of “In this essay, I will talk about ___”), suggesting the student is still clinging to his tried-and-true heuristics and tricks of the trade. In contrast, the second introduction appears to take more stylistic risks: the student tries his hand at a humorous and topical simile, uses a tone that seems overall less stilted and more conversational, and ends with

an intriguing statement to entice the reader to keep reading. Indeed, the rest of his Writing Biography pursues a chronological order, which gives the essay a more appropriate narrative feel, rather than the rigid point-by-point structure that some other students used. Certainly, these examples don't show some dramatic transition between novice and expert (after all, the Goal Inventory and the Writing Biography were separated by only a couple of months, hardly enough time to reach expertise in writing), but that isn't the point. The point is to show that some progress—even if it was very gradual—occurred between the time this student turned in Assignment 1 and the time he turned in Assignment 3. This student is trying new things in his writing; he even states in his Writing Biography's Meta-Analysis that he “changed up his strategy” by having a “free-for-all” and typing for four hours straight instead of following his usual method of writing everything down on paper first. In his case, this rather abrupt change in strategy worked to his advantage, but even if it hadn't, the attempt itself to try something new deserves recognition.

I suspect that students' willingness to take more risks in their writing had something to do with their reconceiving the instructor-student dynamic as a mentor-friend dynamic rather than a master-apprentice one. According to music educators, the mentor-friend dynamic allows for “greater contribution on the part of students and, as a result, stronger feelings of autonomy” (Lehmann, Sloboda, and Woody 187). It also allows instructors to present themselves as Reither and Douglas Vipond's “co-researcher” (863), a sort of mediator of students' work rather than just its assigner and evaluator. I took several steps to ensure that students saw me less as an ultimate authority figure on writing and more like a fellow practicing writer. I arranged desks in a circle so that everyone was on equal footing and to discourage myself from lecturing. In emails to the whole class, I addressed students as “fellow writers” rather than students. I occasionally

brought in drafts of papers I was working on (including the prospectus for this dissertation) and shared my revision strategies, seeking to capitalize on Anne Lamott's advice to appreciate the "shitty first draft" and model that appreciation for my students. I held one-on-one conferences in a coffee shop on campus rather than in my office so as to diminish the typically wide power differential between instructor and student. In sum, I attempted to make the course a conversation about writing rather than a lesson in writing; following Dewey's advice, I wanted to convince students that our classroom was a safe place for taking risks and trying new things with writing. In *Experience and Education*, Dewey writes that one of the instructor's most important duties is to "recognize in the concrete what surroundings are conducive to having experiences that lead to growth" (40). Students generally responded positively to the "surroundings" the course afforded them, and several suggested that they felt less intimidated by writing in general than in previous writing courses. In her interview, for example, Erica said,

It's more of a discussion rather than just, like, you getting up there and talking to us. It helps that, I think that's why a lot of people do enjoy it because it's a very less intimidating—it's more of like our high school classes to where we're not feeling so lectured, you know. It's more of a discussion rather than just going to a lecture or anything like that, which I think that's how English classes should be since writing is a discussion as it is.

Erica's use of the word "discussion" to describe the classroom ethos resonates with what Nancy Sommers says about the mentor-friend dynamic in a writing classroom: when students perceive "an invitation to contribute something of their own to an academic conversation," they tend to "imagine their instructors as readers waiting to learn from their contributions, not readers waiting to report what they've done wrong on a given paper" (255). In other words, fashioning the classroom as a discussion rather than a one-sided lecture leads students to perceive their instructor as a fellow writer-scholar rather than the ultimate judge of quality, which could motivate them to take more risks. Elian had this to say about the circle arrangement in his class,

which I perhaps mistakenly abandoned a few weeks into the semester because the room had large, cumbersome tables instead of individual desks:

The circle idea, that was a good idea. And our class kind of just, you know, pittered out on that one. But I definitely really liked that where it—the teacher, you know, is kind of in the circle. It's not just up there mundanely pointing at the thing, "This is what this is, this is what this is." But if we're all in a group where we can all see each other, you know, I think it just adds to the theme of the class, you know, we're working together toward our goals and we're not just sitting there listening to some person teach and point at a board all day.

Another student from the same section wrote in her journal,

Although our classroom did not allow it all year long, I very much enjoyed the circle seating arrangement. I felt open to share my thoughts and my journals with the class when we sat in the circle, it made things much more comfortable and less stressful.

The circle was another way to send students the tacit message that while I was in charge of the class, I was *not* in charge of their learning: the burden was ultimately on them to keep practicing toward the goals they set for themselves. These examples suggest that at least some of the students saw me as more of a facilitator or co-learner rather than an authoritative gatekeeper or dispenser of knowledge. Probably not by coincidence, these students also seemed to progressively develop more intrinsic motivation in the course; I suspect that these students gradually felt less intimidated by the power differential between their instructor and themselves, which encouraged them to stretch beyond their comfort zones without fear of punishment for doing so.

Other comments from students suggest that I was successful in presenting myself as a fellow writer; their writing often showed evidence of greater sympathy for me as the *reader* of their work rather than the *grader*. One student wrote in her Assignment 1 Meta-Analysis,

I know that reading essay after essay until your eyeballs fall out and you feel your soul slowly die can be quite troublesome and boring, so I always try to have sympathy for the teacher and construct an essay that has some sort of interesting element, typically humor... The ability to write freely, and get graded for it, is a feeling that I relish. Being

free from an academic filter and being able to add as much humor as I desire was very enjoyable.

This student acknowledges that reading essay after essay can be “boring” for the instructor, so she specifically tailors her own writing style with that reader response in mind. It’s also interesting to note that she uses the word *reading* rather than *grading* in that first sentence, suggesting she saw me less as a teacher and more as a cohort. In this light, her later comment about liking to “write freely” and “get graded for it” seems almost playful, as if she is daring me to count her off for being humorous. I take it as a sign of confidence that she will not be docked points for playing around in her writing for this course. Other comments suggest that students weren’t afraid to confide in me; sometimes, students even admitted to me that they struggled with or even disliked an assignment. One student confessed in her Assignment 1 Meta-Analysis,

I did not start this paper till February 5th, so basically that is three weeks after we got the prompt. I am just now reading the prompt and a little scared of how much I have to do in order to finish this three-part task. My mind went blank trying to figure out goals for myself in the writing process. I googled some and got a little bit of inspiration. Day 2 of attempting to write my paper, the Netflix Show, Shameless was more interesting to me than trying to write my paper. That being said I watched Shameless all day instead of writing my paper. That night I finished Shameless and cried.

This student is not afraid to admit that she chose to watch a television show instead of work on her assignment. Similarly, Delilah, a self-confessed procrastinator, confessed in her Assignment 1 Meta-Analysis that she had waited until the last minute to start the assignment (it was due by midnight):

11:38 almost there, never again, I am never doing this again. I think I will make it. WHAT TO SAY. I HATE THIS. UGH. Also I just worked for four hours before this. I wish I had remembered to submit the paper this afternoon, I would have caught my issue sooner. 11:59 I didn’t figure I would make it.... Almost there almost there. I am not even sure the words I am saying make a lick of sense. Well okay, I guess we turn this in and hope for the best.

While it's unfortunate that Delilah procrastinated on the assignment, the candidness with which she admits it is telling: it suggests that she isn't afraid of my reaction, that she recognizes me as someone who could potentially help her practice toward this goal rather than punish her for it (although in order to be fair to the other students, I did dock her points for submitting the assignment late). In any case, her language represents the kind of openness and solidarity between instructor and student that I was going for: the co-researcher dynamic Reither and Vipond describe, rather than the traditional teacher-student relationship, which is "fundamentally adversarial in many ways" (Dubson 103). I wanted students to write in such a way that they were uninhibited by the looming threat of evaluation and criticism—and for the most part, it seems they did.

This topic serves as a good segue into discussing the next element, evaluating feedback, because several students indicated that my feedback to them also helped further the mentor-friend dynamic. One student wrote in his Writing Guide Meta-Analysis,

I am not the best writer, but I do want to get better and will put in the effort to make it happen, and Professor Green has helped me improve throughout the year. The fact that he genuinely wants to make us better writers and doesn't just want to bash our papers is new for an English teacher for me and makes it less dreadful.

By "bash our papers," I assume the student means he is grateful to receive feedback that (1) does not rest squarely on what Summer Smith calls "judging genres," which offer an evaluation of the student's performance and justification for the final grade (253), and (2) defies his traditional response to "coaching genres," which offer help or give advice to the student but "are so consistently paired with negative evaluations [judging] that they take on a negative association" (263). Students do need coaching comments to know what to do differently on their next attempt; indeed, Shute explains that formative feedback contains both verification and elaboration: verification tells the student whether something is correct or incorrect, while elaboration explains

how the student could arrive at the correct answer (159)—or, more likely in the case of composition, how the student could articulate a thought more effectively. However, Smith stresses that coaching comments need not take on the negative connotation students are apt to associate with them; she suggests that coaching comments be specific and relevant to what the student wants to achieve rather than thinly disguised evaluations in question or command form, and she suggests that such comments explain the potential benefits of following a certain strategy rather than bluntly tell the student to use that strategy (260-1). The student quoted above received plenty of coaching genres, but because they were framed in a way that put his goals first and represented him as a fellow scholar rather than a pupil in need of correction, he responded favorably to them.

It seems that several students also found my feedback to be a source of *confidence* for them. One student wrote in his Assignment 1 Meta-Analysis,

Before coming into my meeting with you, I was still confused on certain things about this assignment such as what to put on the poster board and how to write the meta-analysis. I thought it was going to be really complicated but after meeting with you, you cleared up all the doubts and questions that I had about this assignment, which helped me to feel more confident in writing my goal inventory. A few days later, I started up writing my paper and seemed to be flowing along pretty well.

Another wrote,

Starting on this paper I didn't know what I really wanted to write about. I had many thoughts but didn't know what to say. The meeting really helped me out and made myself more confident in the process of writing this paper. I learned more about my weaknesses through this process of writing the paper and our meeting that we had.

These comments suggest at least some students saw me as more of a facilitator than a gatekeeper or faultfinder. These are optimistic results, especially considering Lunsford and Shaughnessy's findings that unskilled writers often suffer from a lack of confidence. This lack of confidence, they found, often leads to a vicious cycle in which the students, "inhibited by their fear of error"

(Shaughnessy 7), don't even try to improve their skill and become progressively more disenchanted with the whole idea of writing. If students like those quoted above consider the instructor to be a source of confidence, they may be more likely to make bold moves in their writing, even at the risk of failure.

Evaluating Feedback

Effective practice means listening carefully to feedback from instructors and peers and determining how best to incorporate that feedback into one's work (or whether to incorporate it at all). Just as important as knowing *to* listen to feedback is knowing *how to* evaluate that feedback and apply it to a revision; indeed, Ericsson writes that learners "should receive immediate informative feedback and knowledge of results of their performance" (367), but it is not enough to simply receive feedback: learners must know what to *do* with that feedback. Lehmann, Sloboda, and Woody reiterate that feedback must be specific and individualized toward the student's goals and needs, and it must motivate the student toward self-evaluation so that they can eventually become their *own* teacher (191). In other words, by becoming proficient at evaluating feedback from other sources, students ideally reach a point at which they become their own best critics—evaluating feedback reaches a level of automaticity or "muscle memory" like the other elements of effective practice.

In general, students seemed to agree that they received quality feedback from me. Some students indicated that my feedback to them was particularly useful because it took their goals into consideration. In his interview, Elian responded,

I really like how you knew that we were good—like, for me, mine [my goals] were grammar, spelling, and vocab. So you knew those were the ones I struggled with. So on all the papers you would always write something like that.

Another student, an aspiring business writer, wrote in her first Meta-Analysis,

As I was talking with Mr. Green he explained how becoming a better writer would help in my major and beyond. He explained how writing was important in business because a lot of people will read your writing and you don't want them to get bored or be unimpressed. Leaving the conference, I was much more confident in what I wanted my paper to be about.

Sure enough, in her Goal Inventory, the same student wrote,

I want to actually learn the comma rules so my writing will be more sophisticated and flow better. Agricultural business is also my major so I will need to be able to write grammatically correct. In business many people will be reading my work; it is crucial that the grammar is correct. A lot of employers will see my writing before they meet me so I need my writing to make a good first impression.

Both of these students seem to appreciate that my feedback was tailored to their individual goals, thereby satisfying Shute's "motive" criterion for formative feedback: "the student needs it" (175). The feedback was matched to their particular needs, which also reduced the "cognitive load" (158) that they would otherwise need to take on in order to search for the relevant comments. Shute warns that feedback should generate "only enough information to help students and not more" (177); otherwise, students may become frustrated with or even outright ignore it.

There is also plenty of evidence that students actually evaluated my feedback and decided whether or not to incorporate it into their revisions. Here is an email exchange between me and Jared, a student who sent his Writing Biography draft for feedback:

Jared:

Professor Green,

I have added two comparisons of me to another author and also attached my meta-analysis. If you could take a look at them and give me your feedback it would be very much appreciated.

Thank You,
Jared

Me:

Dear Jared,

Thanks for sending your revisions. I have seen you make marked progress toward several of the goals you established at the beginning of the semester. I have only a couple of suggestions for you:

-In your Meta-Analysis, talk a little more about the workshop. What kind of feedback did you get, and did you find it useful? If so, how did you (or how will you) incorporate it into your paper?

-Make sure you spell Malcolm X's name correctly--you forgot the second L. Also, Frederick Douglass.

-Say a little bit more in the conclusion about why you found this assignment useful. How did reflecting on your past literacy sponsors better prepare you for reaching your future writing goals?

Your effort in this class is paying off for you, and your drafts are getting better and better. Let me know if I can be of more help!

Mr. Green

My feedback to Jared begins and ends with affirmation of his progress, hopefully encouraging him to keep seeking out feedback from his instructors. I also take Smith's advice by phrasing much of my feedback in the interrogative so as to reflect more of a "reader response" reaction to his writing rather than an evaluative one. In this case, Jared incorporated some of my suggestions—besides correcting the misspellings, he elaborated in his Meta-Analysis about the feedback he got from his peers. Here is an excerpt from Jared's Meta-

Analysis before my feedback:

I edited the paper and got the grammar corrected and then sent a copy to Professor Green. I did this so that I could have a pretty solid copy of my paper for peer workshop day, which I would get more feedback then.

And here is the revised passage:

At the workshop, I got some helpful feedback, mainly about content that I could add to the paper. I held conversations with classmates of what authors I could compare myself too which helped me with my paper and my presentation. There were also a couple a grammar errors that got pointed out to me that I had to go back and fix.

While Jared could add some more detail here (e.g., what content did he add based on his peers' feedback? What errors did he fix?), he at least incorporates my suggestion to say more about how the workshop affected his revision process. On the other hand, Jared's conclusion remained unchanged across the drafts, suggesting he considered and rejected my suggestion to add more about the exigence of the assignment—a strategy which would show effective metacognitive evaluation of the feedback.

Other students considered me to be a sort of soundboard for their ideas, possibly because of my efforts to establish the mentor-friend dynamic. In his interview, Ace said,

I noticed that we correlated a lot on a lot of things. Like, I was thinking the same way but often I'd go on with the intention of throwing an idea, like, "Hey, what if we did this?" and seeing your feedback on that was very helpful. Like, "How long? What if we did this this long, would that matter?" You know, and seeing what you'd say.

In his Writing Biography, another student listed me among his literacy sponsors, writing,

At the beginning of the semester he [Mr. Green] told us he would help us edit our papers, if we showed enough effort in doing them early enough for him to help. At first I didn't know how true this was going to be, but being a student that strives for a 4.0 I was going to find out. Sure, enough every single time I have ever sent in a paper to Professor Green I have gotten it back with very helpful comments faster than I expected it back.

Not every student took me up on my offer to review their drafts, but those who did tended to do so for every assignment thereafter, suggesting they saw my feedback on these drafts as *constructive* rather than *evaluative*. It also allowed me to observe the occasions when students did or did not actually incorporate my feedback. They usually did, but there were also occasions (similar to Jared's Writing Biography conclusion) where they had clearly decided *not* to implement my suggestions. What I *don't* know, however, is why: rarely did students use their Meta-Analyses to elaborate on how they evaluated my feedback. There are several possible explanations: one is that they didn't want to offend me by explaining why they found my feedback unhelpful. Perhaps they still viewed me as an authority, despite my efforts to foster the

mentor-friend dynamic, and they may have been concerned that their rejecting my feedback would change my opinion of them. On the other hand, perhaps they *did* see me as a mentor or co-researcher and didn't want to upset that relationship. Either way, they may have felt an obligation to maintain whatever power differential they perceived to exist between us; questioning my feedback out loud may have felt too risky for them. Of course, it may also be that I simply never made it clear enough to students that the Meta-Analyses were a prime place to discuss how they evaluated feedback. It may not have occurred to them independently that part of explaining their process on an assignment included what they did between drafting it and submitting it—in fact, comments about the revision process in general were fairly sparse, so students may not have even thought to discuss feedback.

While there is at least evidence of whether students incorporated my feedback even if I couldn't see the metacognition going on behind the scenes, there is far less evidence of students evaluating the feedback they received from their peers. Several students had positive comments about the feedback they received from their classmates during peer review workshops; for example, in her interview, Delilah said,

Especially with my first paper, it was really beneficial—some of the things that maybe weren't necessary that some of the other students were like, “Hey, I think you're repeating yourself here” or “This is something you do well.” That sort of thing. Some of the comments that I got back in our first workshop were beneficial.

Another student wrote in her Assignment 3 Meta-Analysis,

Once my rough draft was complete, I brought it to the workshop in class. I enjoy these workshops and find them crucial to completing my essay. Having another person read my essay and make corrections thoroughly improves my writing. I had two people look over my essay and answer questions about my essay. Once I received my rough draft back with edits I started to write my final draft.

While these students seem appreciative of their peers' feedback and generally state that they found it “beneficial” or even “crucial,” there isn't much evidence here of actually evaluating that

feedback in terms of its usefulness. Certainly, receiving feedback is a necessary ingredient for effective practice, but the element that will advance students' metacognitive abilities and therefore get them closer to the practice habits of experts is the ability to *evaluate* the feedback they receive. Again, perhaps students simply weren't aware that evaluating feedback was part of the metacognitive work I wanted them to do, or maybe they were afraid of disrupting the collaborative ethos central to the course. Even though the peers who gave them feedback would never read the Meta-Analyses and see their comments, students may have felt uncomfortable vocally dismissing or challenging that feedback. Especially in the two collaborative projects, they may have felt such statements would make them seem unreceptive to feedback in general or even hostile toward their classmates. It may be that students need to come to understand the difference between constructive evaluation and mean-spirited evaluation of their peers' feedback.

Another reason students didn't have as much to say about their peers' feedback may be that they simply didn't find their peers' feedback as useful as mine. After all, I knew their goals and was able to tailor my feedback accordingly—the students didn't have the privilege of knowing each other's goals, at least not until the last assignment. Not knowing each other's goals put students at a clear disadvantage when giving feedback: they didn't know which weaknesses to focus on, which errors their peers might want them to address. Plus, students who workshopped with each other often had divergent goals or even contradictory goals (e.g., improving at strongly contrasting disciplinary writing styles, such as business writing versus creative writing). In those cases, students may not have been knowledgeable enough about their peer's goal to offer constructive feedback, or they may have given feedback that didn't effectively align with their peer's goal. It may be that students *did* evaluate their peers' feedback

and dismissed it as irrelevant or even harmful to their purposes—but again, we can only see the *what*, not the *why*. Chapter VII offers a few ways to hold students accountable for describing how they evaluate feedback.

Still, this is not to say that students found absolutely no value in sharing experiences and strategies with each other. It was not uncommon for students to comment that other students in the class inspired their own work in some way. One student wrote in her Assignment 3 Meta-Analysis,

I sat back and thought in my head to myself about all of my classmate’s literacy sponsors that I had seen through their visual artifact presentation. I remembered that far more than one of the students listed their parents and home life growing up as one of literacy sponsors, and I immediately categorized this as a difference between my peers and I. Next, I recalled that when observing the visual presentations, I noticed that one of the students in my class had classified her journal as one of her literacy sponsors. I then wrote about how this was extremely similar to my experience with a death that caused me to start journaling.

Similarly, another student wrote,

So, I pieced that bad boy together and went to class the next day to present. I feel like it was a good poster because I told a story with the pictures and not just words. Looking around at my peers projects helped bring to mind a few more experiences I could add to my paper that I experienced as well.

Both of these students were able to get ideas for their Writing Biographies simply by observing other students’ visual artifacts on Poster Day. Perhaps even more so than receiving their feedback, students seem to have benefitted from simply seeing what their classmates were doing—seeing how *they* were solving the writing problem at hand. Vygotsky asserts that collaboration is essential for advancing one’s ZPD; he defines it, after all, as the distance between what one can do independently and what one can do “in *collaboration* with more capable peers” (86, emphasis mine). And he insists that “learning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in

his environment and in cooperation with his peers” (90). Working with fellow learners who have already devised successful strategies for solving a problem helps the student reach that next skill level; through this sort of modeling, the student learns how to invoke those successful strategies (or devise similar ones himself) in his own efforts to solve the problem.

Thinking Metacognitively

Thinking metacognitively means being able to identify not just *what* one does in order to solve writing problems but also *why* one takes that approach, *how* one uses that strategy, and whether the strategy is, in fact, effective for solving problems. As I’ve said, the sophistication of one’s metacognitive abilities may be the single most significant factor differentiating experts from novices in a skill, as cognitivists such as Perry, Kitchener, and King point to in their models of development. And studies of experts in a variety of disciplines corroborate this finding; Flower and Hayes, for example, found that expert writers were those who had developed that inner monitor to help them choose a problem solving strategy, evaluate that strategy’s effectiveness, and revise it as necessary. And Chaffin and Crawford conclude that expert pianist Gabriela Imreh “understood her own memory and practice strategies: what she does, why she does it, and why it works so well. She could articulate her strategies and reasons for adopting them” (22). Considering that metacognition appears to be one of the most important elements of effective practice (if not *the* most important element), a course seeking to incorporate the elements should give students as many opportunities as possible to develop and hone this crucial skill.

As I mentioned in the introduction of this dissertation, I believe that other attempts to incorporate metacognition into a college composition classroom (e.g., Downs and Wardle’s “writing about writing” model) have done so under the assumption that the typical first-year

student is already prepared to engage in this kind of critical metacognitive thinking. For example, Downs and Wardle assert that their model allows students to “learn to claim their own situational expertise and write from it as expert writers do” (560), but this assumes that students are aware of what situational expertise they bring to bear in the first place, as well as how they can articulate that expertise in written form. Based on my results, however, it appears that many—if not most—first-year composition students have had very little experience thinking about their own writing processes. Erica said in her interview,

I know the class is—like, with the meta-analysis and stuff, no other comp class has done that. So when I told my friends about it, they were like, “What? You explain why you did what you did?” And at first I thought it was really weird, but the more—like, obviously got easier just because it was just a step in our assignments. But it got easier too because as the year went on, I started realizing why I did what I did, and it became easier to identify the reasons why...I think it helped because it made me have reason. When I was preparing my paper I would think about, like, “How is this going to help me later on? How is this going to make it easier to write my paper?”

And Ace comments that while he has practiced metacognitive thinking in sports, he hadn’t thought to apply it to his writing:

That’s something I did in basketball. There was a point in my life where I could always—like, that’s the thing I could relate to the most is practicing. That’s what I do the most. But there was a point in my life that I was like, “Why am I not the top? Why am I not the best?” And then I was like, “Why do I do this certain thing? Why do I just shoot around arbitrarily?” So then I got online. I looked up certain things that the professionals did and then I was like, “Okay, this is what I’m going to start doing this”... so I see that metacognition. You know, why am I writing like this? To bring it back to writing. “Why?”

Metacognition *itself* is a skill that requires deliberate practice, and this course recognized that.

The course’s journal entries, class discussions, and major assignments all invited students to explore the “why?” questions behind their writing strategies, attitudes, and experiences, with the expectation that students would gradually get better at doing this kind of self-exploration as the semester went on. At first, it was not expected (nor essential) that students were able to *answer*

these metacognitive questions about their writing, as long as they were at least *asking* them. As they got more practice thinking metacognitively about their writing, many of them began asking these questions as a matter of course and with less, if any, prompting from me as the instructor.

Over the course of the semester, most students indeed showed evidence of more sophisticated metacognitive thinking, particularly in the Meta-Analyses. Compare the first excerpt below, which comes from a student's Goal Inventory Meta-Analysis, to the second excerpt, which comes from her Writing Biography Meta-Analysis:

I complete my body paragraphs first because introductions and conclusions feel forced to me. My body paragraphs are easier to read when I write them first. I try to start off with a strong topic sentence before I write anything else in my paragraph. This is because I like to relate each sentence in a body paragraph to one main topic, which is the first sentence. I wrote my short-term goals first and then moved on to writing my long-term goals. When I finished, I wrote my introduction and then conclusion. In my introduction I tried to start with a captivating sentence because I have always been told that is what first interests a reader. Then I followed with a thesis statement which is the backbone to my whole essay.

Thinking about another person to compare my writing to was difficult because I could not find any similarities in the other readings. But then I remembered I had to compare my writing skills to the members in my group for assignment two. I completely forgot that a girl in my group, Hannah, had almost identical writing strategies to mine. I then began to put my outline together, my favorite way to brainstorming. I outline my paper first because it helped me organize my thoughts. As I mentioned in my essay, when my thoughts are written down and organized, I am confident in starting the process of writing my essay.

The second excerpt shows much greater initiative in answering the “how?” and “why?” questions in addition to just the “what?” questions—the student appears to be able to more fluently articulate the reasons behind her writing strategies, not just what strategies she used. Whereas the first Meta-Analysis shows only surface-level thinking about her own writing strategies (e.g., she starts with a captivating sentence because she has “always been told” to do so), the second Meta-Analysis showcases much more critical thinking and problem solving skills (e.g., the student is able to explain that she outlines because it improves her confidence). The

second Meta-Analysis also shows that she is thinking about herself as a member of a writing community rather than a writer in solitude—she remembers a writing strategy used by Hannah, with whom she collaborated on the second assignment. She might agree with Dewey’s sentiment that “shared experience is the greatest of human goods” (*Experience and Nature* 202): since, for Dewey, all experiences are related, it makes sense for students to be able to synthesize their experiences with those of their peers. In general, this student seems to be thinking about writing less as a set of rules and guidelines to follow and more as a skill for which there are many different potentially useful strategies.

The contrast between Ace’s first Meta-Analysis and his third Meta-Analysis provides another example of what I believe to be evidence of improved metacognition. In his first Meta-Analysis, he describes how he organized the Goal Inventory:

I thought that I would list my goals firsts, then list authors I admired, and lastly books that I enjoyed. My thought on this layout was that I could get my message across as well as write all of the necessary length I needed for this assignment. The second paragraph of my essay went pretty smooth. I had already thought of all my goals so it was just a transfer of my thoughts to the paper. I did this because it is the easiest way for me to write. I catch a flow in my head and then follow it until the idea finishes or I think of a new one.

And in his third Meta-Analysis, he explains how he organized the Writing Biography:

The best format for the essay I could think of was starting when I was young and working my way up until now. This gave me a bunch of substance to write about and it was easy to break up the paragraphs as transitions in my life. I also tried to keep the flow of symbolism in my essay. This proved to be challenging especially when I tried to force it. Much of what I kept came naturally as I thought through the story of my writing growth. I added a few jokes here and there I hope you found humor in them like I did writing them.

For the first assignment, Ace seemed to let form dictate his content: he relied upon the clichéd strategy of having three main points in his essay and heavily concerned himself with satisfying the assignment’s page length requirement. When attempting to answer the “why?” behind this

decision, he vaguely states that “it is the easiest way for me to write.” But why is it the easiest way for him to write? Why does he find it more valuable than alternative ways to organize his writing? In sum, while Ace shows an attempt to think metacognitively about his approach to this writing problem (which is all I really expected from their first Meta-Analysis, when most of them were still very new to it), his thinking is still somewhat surface level and outcome-oriented. Although he never outright says it, he seems very concerned that the assignment satisfy the *instructor’s* expectations rather than his own. Notice the meekness of a phrase like “I thought that I would”: Ace lacks confidence in his strategies.

In contrast, his third Meta-Analysis shows evidence of much more sophisticated problem solving activity. He deduces on his own that a chronological order would better suit the purpose of the Writing Biography assignment than a point-by-point structure, and he commits to an extended metaphor in which he compares his literacy development to a construction project.

Here’s his introduction to that paper:

I have thought about my life and the implications of what has brought me to my current writing capabilities. Through this process of thinking I have learned that there are several defining events and people that have created the foundation of my writing adroitness. Soon after the foundation had been laid there are several people who gave me the intrinsic motivation to build on my freshly dried infrastructure. The building hasn't stopped. There has been setbacks and breakthroughs as new contractors force their new and different ideals upon my base. But the building hasn't stopped.

This is especially promising coming from Ace, whose most emphatic goal for the semester was to incorporate more stylistic and creative elements into his writing. His commitment to this metaphor shows that he is actively working toward one of his goals and metacognitively asking himself, “How can I practice this goal within the context of this assignment?” This Meta-Analysis and the writing strategies it describes also show evidence of more risk taking than Ace exhibited in his first assignment: he admits to adding jokes to his writing and even breaks the

fourth wall by speaking to me directly (“I hope you found humor in them”). He seems completely comfortable explaining his process for solving this particular writing problem, and his explanations for his strategies are much more sophisticated than they were at the beginning of the semester. Lois Broder Greenfield suggests that this sort of change in attitude from Ace could be a sign of a dramatic transition in skill level: in her discussion of Bloom and Broder’s study of college students’ problem solving abilities, she claims that “the unsuccessful students... seemed to feel that they could do nothing... had little confidence in their ability to solve problems. The successful problem solvers portrayed a positive self-image” (16). Like the students of Lunsford and Shaughnessy, the novice problem solvers felt helpless and often gave up in the face of difficulty. In contrast, the experts were willing to (and even excited to) follow leads and take chances, even if they led to failure. For Ace, as for Erica, the metacognitive requirement of the course seems to have struck him as challenging and perhaps “weird” at first, but he gradually became better at asking himself the “why?” and “how?” questions about his writing and giving answers that reflected critical thinking. By the end of the semester, Ace had become a competent metacognitive thinker: to use Flower and Hayes’ words, he was closer to being able to articulate his writing strategies with the “detail and specificity” (“Cognition of Discovery” 100) of an expert writer.

Of course, not every student showed such dramatic improvement in metacognition. By and large, the students *did* show growth in this area over the course of the semester, but in many cases, it was much more piecemeal or subtle. For example, the following passages come from the same student’s Assignment 1 and Assignment 3 Meta-Analyses, respectively:

I had an epiphany in the shower and realized I needed to get my stuff together. went grocery shopping and Finally, after much procrastination I finished my goal inventory paper on February 10th, also known as the due date. Right after I clicked submit I took a long hot shower for an hour, It was much needed. Right after that my friends from home

showed up and I am so happy they did because I really needed a piece of home after this busy week. Good thing I did not procrastinate any more than I already did else I probably would not have finished it on time. This paper was not as easy as I thought it would be but it was much better than writing a rhetorical analysis or something like that.

I did not feel like I had to scramble for time, which was a first because I think I knew what I wanted to write about already. I wrote my whole paper in my friends bed or in a study room with them because I cannot concentrate in my own room because anything and everything distracts me if I am alone. I did a lot of my thinking in the shower because that is where I do most of my thinking and playing out different situations in my head. I do this because it is just myself and the water and no one or anything can distract me.

Besides elaborating a bit on why she seems to take so many showers, this student doesn't show the same vivid improvement in metacognitive thinking that some other students did. Despite a greater effort (notice all the "because" clauses), the second Meta-Analysis is still more centered on *what* she did to complete the assignment than *why* she did things that way. However, there is still promise here. Importantly, one of this student's goals was to eliminate her habit of procrastinating on writing assignments, and she seems to be making some progress toward that goal. In the second excerpt, she at least considers a possible reason she didn't feel as rushed on this assignment compared to others: she already knew what she wanted to write about. If the student were to explore that response further, she may be encouraged to find strategies for making sure she goes into writing problems with more of a plan already in place. Also, if she were to explore her tendency to get distracted further, she may discover *why* certain things distract her and develop strategies for overcoming those distractions (other than lingering in the shower, a strategy she won't always have access to for future writing problems).

Conclusion

The responses from students in this course, both in their written work and their end-of-semester interviews, provide a number of implications for educators seeking to incorporate the elements of effective practice into their curricula. For one, the responses suggest that students

react to the elements in diverse ways; for example, some students appreciated the challenge the assignments offered while others avoided the challenge or found the challenge inadequate for their skill level. On an optimistic note, their responses suggest that it *is* possible to lead students toward reconceiving of writing as a practice-able skill by making these elements the central pillars of the curriculum. On a less optimistic (but still useful note), their responses suggest that incorporating the elements into a curriculum is easier said than done and that not all students will improve at them at the same rate and with the same enthusiasm, matters to be addressed in Chapter VII.

While this chapter examined how students responded to the elements of effective practice at large, the following two chapters narrow the focus to two students in particular: Giovanni and L.A. As case studies of these two students, the chapters proceed chronologically, following each student's progress through the course. The goal of these chapters is to more specifically explore how students responded to a writing curriculum based on the elements of effective practice through the work they did in the course and the responses they offered at the end of the semester.

Chapter V: Case Study of Giovanni

This chapter narrows the focus to Giovanni, taking a closer look at his progress in the course, his approach to the course's assignments and activities, and his response to the course's curriculum and instruction. I chose Giovanni for the first case study primarily for his unique response to the theme of the course and his attitudes and approaches toward its assignments, both of which are potentially useful to writers and teachers of writers. I also chose him because of his high degree of buy-in for the course; Giovanni, a business major, professed that he excitedly signed up for the course having read its course description, and he voiced enthusiasm for its theme of "best practice" throughout the course. By exploring Giovanni's experiences in the course (and L.A.'s in the next chapter) in greater detail, I do not assume that *all* of the students responded to the course in these ways. I do, however, hope to expand upon the previous chapter by exploring possible benefits and risks associated with cultivating the elements of effective practice in a composition course. After all, the purpose of this study was to "demonstrate the successes and shortcomings" of such a curriculum, and I believe that Giovanni's responses provide plenty of evidence for both. Chapter VII will use Giovanni's and L.A.'s responses—along with the other students'—to more fully assess the advantages and challenges of basing a composition curriculum on the elements.

Giovanni, who was a twenty-year-old sophomore at the time of the course, is a white male who grew up in a large Midwestern city. He comes from an upper-middle class background; his mother is a counselor with a master's degree, and his father holds a medical degree. He has one sibling. Giovanni introduced himself to me at the first class meeting, where he expressed enthusiasm for a writing course which challenged the notion of natural talent. As I would quickly learn, Giovanni is skeptical of natural talent in general and strongly believes that

dedicated effort is far more important than innate ability in determining success. He has a passionate interest in playing football for the University of Arkansas despite a physical condition which impedes this goal, a topic he explores further in his Goal Inventory. Suffice to say, Giovanni is an extremely driven individual whose personality in several ways shaped the way he responded to the course's curriculum. This chapter explores those responses and what they mean for writing teachers.

Setting his Goals

Prior to the semester, students had the opportunity to view the semester's course descriptions, brief explanations of the course's subject matter and major assignments. The course description for "Perfect Practice and Writing" appears in Figure 1:

Description:

"I just can't write." "I'm not a natural-born writer." "I've never been good at writing." Does this sound like you? If so, this is the course for you! In this special topics Composition II course, we will debunk the myth that writing is a mysterious talent possessed only by the lucky few and demonstrate that—on the contrary—writing can be learned, practiced, and eventually mastered in the same way as any other skill. By investigating proven practice habits from other fields such as music, art, and even weightlifting, we will learn the best ways to improve our writing. The central goal of the course is to foster in students the habit of *metacognition*, an ability that cognitive psychology suggests may be the single most important distinguishing factor between novices and experts in any skill. Metacognition is the ability to know what you do and, more importantly, why you do it. To that end, the course's essays, journal entries, and discussions encourage students to examine and analyze their own writing experiences and strategies.

Figure 1: Course Description as it Appeared to Students

Of course, not every student read the course description before enrolling; several students confessed that they weren't aware they were signing up for a "special topics" Composition II course. Giovanni, however, had this to say when asked in his interview what stood out in his mind about the course:

I would say the first thing that stood out was the course description. I was looking for Comp II classes, and I saw that there were special Comp II classes. I was looking through each one specifically, and this one just seemed to attract me towards it. I remember I was in Starbucks one day last semester. I even asked my teacher from last year, Comp I, and I had gotten his opinion. But the words—just the word metacognition itself and understanding I was at a time in my life, and I still am, trying to constantly grow in a sense that my knowledge—I would like to grow. And I see that in my life, especially in the past couple of years, that any time I've explored the reason behind something—and especially something that I've always had trouble with—that I always tend to advance myself in some way or another. And this course—I knew I had a strong feeling that it could do that for me.

This response already foreshadows Giovanni's unique interpretation of the course. He enrolled in the course already enthusiastic about its theme of self-improvement and “growing,” and he was able to relate the idea of metacognition to some of his previous experiences. As it turns out, Giovanni was passionate about self-improvement in general and therefore seems to have bought into the course's individualistic focus as early as the first journal entry, which asked students to reflect on the following Junot Díaz quotation: “In my view a writer is a writer not because she writes well and easily, because she has amazing talent, because everything she does is golden. In my view a writer is a writer because even when there is no hope, even when nothing you do shows any sign of promise, you keep writing anyway.” In response to this prompt, Giovanni wrote,

I could not agree more with this quote. I think the quote itself exposes the true nature of writing. As the author exclaims, I would argue that writing is a constant process of trial, and error, not a benchmark system of final products.

“Good writing” can be described as a written expression of an individual's knowledge of a specific subject. Good writing reflects the unique ability of an individual's intellect and experience.

In opening the semester with this prompt, I wanted to gauge students' preexisting notions of talent and practice. When it comes to writing, does hard work pay off? Does effort matter more than natural talent? Is there even such a thing as natural talent? Giovanni clearly came to the

course with the idea that improvement in writing *is* possible through “trial and error,” and he criticized any notion of a “benchmark” or standard for evaluating the “products” of writing. He clearly concurred with Ericsson that “unique environmental conditions...rather than talent, may be the important factors determining the initial onset of training and ultimate performance” (365), and after one of the earliest class meetings, he even recommended I read Geoffrey Colvin’s *Talent is Overrated*. Throughout the semester, Giovanni would continue to interpret the course as a critique of natural talent and an opportunity to explore himself as an individual writer.

Accordingly, Giovanni’s interpretation of the first assignment, the Goal Inventory, was considerably different from most other students’. In the paper, Giovanni mostly set goals that were more like *life* goals than *writing* goals. In our conference, I had told him that this was fine, but that he would need to find a way to relate writing to those goals, perhaps by explaining how improving his writing would help him achieve those larger life goals. Here is how he presented his only short-term goal, which was addressing his procrastination habit, in a journal entry:

I designed my short-term goal specifically to attack my biggest weaknesses. Throughout my child I struggled with being on time, procrastination and planning my priorities accordingly. With an academic plan in place, I am confident that I will turn this weakness into a strength. Most importantly, this skill will prepare me for a legitimate career, where lateness is not excused, and quarterly planning is a minimum requirement.

Both the second coder and I coded this goal as relevant to his interests (a career in business) but lacking in specificity and not very realistic (SEG, green)—he doesn’t attempt to explain *why* he procrastinates or how that procrastination specifically manifests (e.g., does he put things off until the last minute or simply not do them at all?). Although this is a fairly poorly defined goal, we agreed that Giovanni at least thoughtfully explores the exigence of his goal—it seems to be a goal that truly matters to him. This was a pattern with the goals Giovanni set in his Goal

Inventory and, I will argue, also a pattern with how he approached the course as a whole: Giovanni was quite skilled at applying class discussions and journal prompts to the bigger picture of what he wanted to achieve in life, but he at least initially struggled to conceive of the course in specifically writerly terms. To Giovanni's benefit, on the one hand, the discussions and prompts offered an opportunity for Deweyan synthesis, a sort of "combinatory play" (Simonton 29) allowing him to connect concepts and form frameworks to draw upon for solving future problems. Also, establishing exigence for his goals allowed Giovanni to stay motivated to pursue those goals: Dewey writes that in true learning, "The individual is faced with a problem that is real and meaningful to him" (*John Dewey on Education* xvi). Giovanni chose goals that, while they may not have been writerly goals, constituted ambitions that meant a great deal to him, and for the most part, his enthusiasm for pursuing those goals never waned.

However, when it came to thinking about how writing itself factored into that bigger picture, Giovanni seemed to struggle. In the above example, Giovanni makes no mention of writing and seems to be wanting to address his procrastination habit *in general*. Along those lines, here is how he presented his first long-term goal in the Goal Inventory:

My first long term goal is the product of more than 365 days of dreaming, reasoning and questioning my dream of conquering the biggest feat of my life. This leads me into the study of sports psychology...As a flourishing writer, I have made it my duty to gain proficiency in the study of sports psychology by the time I graduate college. When I was six years old, I was diagnosed with Congenital Adrenal Hyperplasia (CAH), a condition that limits the adrenal glands' ability to make cortisone, which is vital hormone that controls normal growth and puberty in children...This affected how I performed when it came to sports, namely, football. I complained every car ride home to my parents about why I was convinced their genetics limited my athletic ability, and it was my father who told me time and time again that it was my mindset that caused this limitation. I was content with making excuses, so I quit playing football my junior year. My father was right; I had developed a self-handicapping attitude. By developing as a writer, I will accomplish my dream of playing football at the division one level by acquiring knowledge of sports psychology.

Both the second coder and I designated this a fairly poorly defined goal (SEG, blue). Passionate as he is about this goal of “acquiring knowledge of sports psychology,” Giovanni doesn’t explicitly make it clear how writing plays into achieving that goal or even how that goal relates to playing football. He makes a couple of passing references to writing but never specifically explains how honing his writing strategies will help him attain his long-term goals. Giovanni’s other goal, confronting the “historical patterns of elitism, legacy, and segregation that’ve plagued the Greek [fraternity] community of its core values,” was also ambitiously presented but vaguely defined and probably unrealistic. But even these non-writerly goals provide valuable insight into how Giovanni responded to the course: they are evidence of his never-give-up, no-excuses attitude and his dedication to self-improvement in general. Giovanni even comments on his “self-handicapping attitude” and supposes that “it was my mindset that caused this limitation.” His lofty goals and intolerance for excuses are indicative of the way Giovanni approaches life in general, if not writing specifically. However, even if these goals don’t speak directly to writing, they still shed light on why Giovanni may have responded to the curriculum as he did and why he so enthusiastically signed up for the course to begin with: he already believed writing was a practice-able skill; he just didn’t know how exactly to practice it.

In fact, it is not until his Goal Inventory’s Meta-Analysis that he even refers to the skill of writing, but even then, he falls short of explaining where exactly writing comes into play. He writes*,

By developing as a writer, what will you accomplish before you graduate?

By putting all your faith in God and trust that this is a process, you:

1. *Have earned admission into the Walton Honors Program.*
 - a. *Short Term: **End chronic procrastination.***
2. *Have earned a spot on the Arkansas Razorbacks football roster.*
 - a. *Short Term: **Read, watch and acquire knowledge of sports psychology.***
3. *Are an influential leader who earned the following roles:*
 - a. *Theta Chi Fraternity: President*

- i. *Long term: To inspire thought that leads to international, proactive action.*

You will achieve all that you aspire to earn by working your ass off, being self-disciplined and never giving up on these goals.

Read it.

Reread it.

Live it.

You're more powerful than you think.

*Formatting preserved from original

Giovanni seems to have three main goals here: put an end to his procrastination habits, become more familiar with sports psychology as a discipline, and “inspire thought.” Unfortunately, all three of these goals are quite vaguely stated, and Giovanni still doesn’t specifically relate them to writing. Giovanni’s Goal Inventory would have been more successful—and probably more useful to him—if he had found a way to identify the writerly features that could contribute to achieving each of those goals. He could ask himself, “What goes into composing writing that inspires thought? What are the elements of inspiring writing?” This would possibly help him set better defined short-term goals and give him a greater awareness of how writing (this was, after all, a writing course) could help his lofty goals come to fruition. Plus, being more specific with his goals could potentially further his motivation to pursue them: Steve Oare argues that “goal setting and motivation are strongly interconnected” (44) and that setting clear, challenging, and proximal goals encourages students to keep learning and practicing material on their own. Defining those ambitious goals, especially the long-goal to “inspire thought,” in more concrete language might have given Giovanni a more concrete view of how practicing writing could help him achieve them—which might have made him even more passionate about the course.

But despite the lack of specificity and realism of some of his goals, Giovanni did very well at explaining the “so what?” behind his goals and relating them to his larger life interests. In addition, he demonstrated remarkable creative expression not only in the written portion of the assignment but in the visual portion, as well. His visual artifact for Poster Day appears in Figure 2.

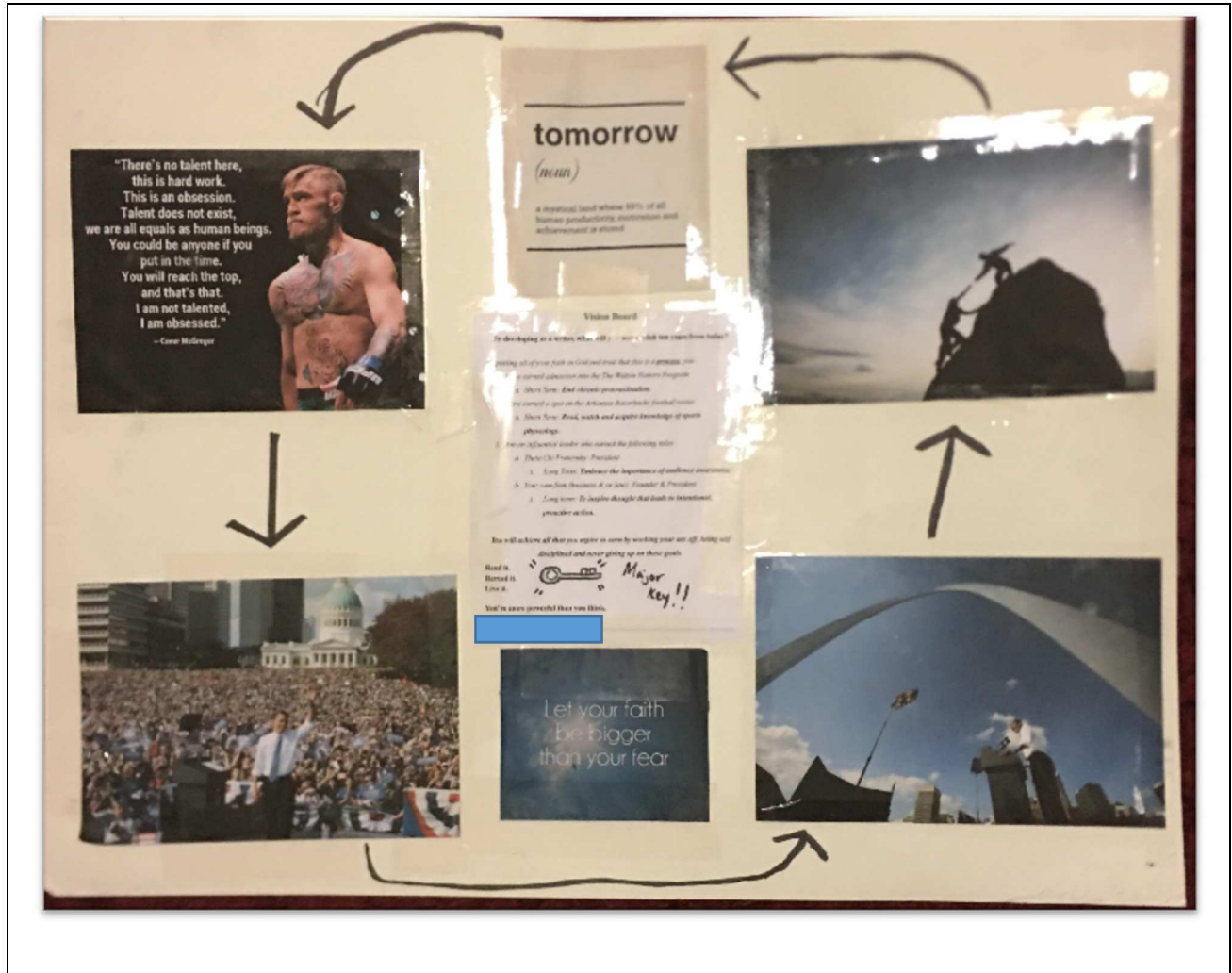


Figure 2: Giovanni's Goal Inventory Poster

His visuals are (from top left to top middle) an image of mixed martial artist Connor McGregor with his quotation that “talent does not exist,” a photograph of Barack Obama delivering a

speech in St. Louis, a quotation reading “Let your faith be bigger than your fear,” another photo of Obama at St. Louis, an image of two people climbing a rock, and a definition of *tomorrow* which reads, “a mystical land where 99% of all human productivity, motivation and achievement is stored.” In the center is the last page of Giovanni’s Meta-Analysis (the “By developing as a writer” selection quoted earlier), with a few minor additions. During his poster presentation, Giovanni was able to thoroughly explain the reasoning behind his choices for visuals, although he still struggled to explain how writing factored into his goals. He explained that McGregor’s quotation perfectly represented his own attitude toward talent—that it is “overrated.” The photos of Obama encapsulate Giovanni’s goal to “inspire thought” with his language. The quotation about faith and fear, as well as the image of the rock climbers, represent Giovanni’s attitude toward failure. The *tomorrow* definition represents his goal of eliminating procrastination, and the page from his Meta-Analysis serves as a reminder of why he has set these goals. The arrows between the images represent the interrelatedness of his goals and the notion that development is a never-ending process—here, he seems to agree with Dewey’s critique of the “ends” of education: “Activity will not cease when the port is attained, but merely the *present direction* of activity” (“The Nature of Aims” 72, emphasis in original). To his credit, Giovanni represented his goals creatively and was able to fluently articulate the reasons behind his choices. Clearly, the assignment meant something powerful to Giovanni, and he expressed enthusiasm for it throughout the process of completing it. To return to Dewey’s language, he found the assignment “real and meaningful.” Completing an assignment for which Giovanni felt passionate may have also had a long-term effect: “When people have a strong motivation or interest in a domain, they often spontaneously function near their optimal level” (Kitchener and King 895). Assignment 1 may have caused a sort of positive feedback loop in which his interest in the assignment resulted

in his doing well on it, which then furthered his motivation and interest in the subsequent units and their assignments.

However, the fact remains that at this point, Giovanni was still wrestling with thinking about the course in writerly terms: passionate as he was about the course's critique of natural talent and emphasis on practice, he wasn't thinking about how writing specifically might factor into his goals. It seems to have been challenging for Giovanni to put his ambitious but ambiguous life goals into conversation with the skill of writing, and Giovanni's fiery motivation did not necessarily align with his success in Unit 1. Fortunately, the course's second unit seems to have begun to steer Giovanni's thinking toward writing, and it is here that he makes marked progress toward thinking metacognitively about his writing strategies.

Exploring his Strategies

Given Giovanni's broad interpretation of Unit 1, I was concerned that he would struggle with narrowing his focus to his own writing strategies, the theme of Unit 2. I was pleasantly surprised, however, that Giovanni seemed not only skilled at, but enthusiastic about, exploring his own writing processes. One journal entry prompt asked students whether they considered themselves more of what Muriel Harris calls a "one-draft writer" or a "multi-draft writer" (176); in other words, did they tend to devote more time to prewriting and formulating ideas in their head (one-drafter), or did they tend to take Anne Lamott's advice to churn out subpar rough drafts and revise them into progressively better versions (multi-drafter)? In response to this prompt, Giovanni wrote,

I would consider myself to be a one-drafter essay writer. If I am being honest with myself, I have been like this my whole life. The primary reason for my one-drafting persistency is direct cause of my perfectionism and living in a natural state of never feeling content.

Both I and the second coder identified this as a fairly strong example of metacognitive thinking in that Giovanni hypothesizes why he follows the one-draft strategy and suggests how well it has tended to work for him, though he isn't very specific as to how exactly he follows the one-drafter strategy (TM, yellow). Tellingly, Giovanni's language suggests he sees the one-drafter writing strategy as a poor one, even though I made sure in my explanation of the terms not to suggest one was a more effective strategy than the other. Rather, I (like Harris herself does) explained that there are good one-draft writers and good multi-draft writers and that in reality, writers rarely fall on one extreme but incorporate habits from both strategies. Still, the fact that Giovanni seems to have an evaluative aspect to his metacognition shows promise: it suggests that he is already thinking about writing as an individualistic endeavor and is willing to explore new (and potentially better) strategies to add to his toolbox. This is especially promising considering that one distinguishing factor between novices and experts appears to be that experts have a much broader repertoire of potential strategies to call upon when solving new problems; in her study of musicians, for example, Susan Hallam found that the experts all had "a wide range of practice strategies that they applied flexibly according to the needs of the moment, deliberately and strategically managing their own learning, practice, motivation, and emotional state" (qtd. in Chaffin, Imreh, and Crawford 82). In contrast, the novices consistently relied on the same strategies, and if those strategies failed them, they were likely to feel powerless and give up on the problem. If Giovanni is already open-minded to learning new strategies to add to his toolbox, he is in a better position to acquire the flexibility of an expert writer.

A later journal entry asked students to respond with their favorite piece of advice from Stephen King's *On Writing*, which we discussed in class. Giovanni wrote,

My absolute favorite piece of advice from King is the recommendation to "stick to your own style." I stress the importance of this suggestion because it symbolizes the core value

of all my writing. I have found that genuine writing is the key to my success as an avid writer.

While a bit vague, Giovanni again shows enthusiasm for getting to the bottom of his writing strategies. He synthesizes King's advice with his own "core value" of his writing, and he again reflects on how well the strategy has served him as a writer thus far. This was the goal of Unit 2: to get students to start thinking more metacognitively about their own strategies for solving writing problems and therefore get closer to discovering *why* certain strategies do or do not work for them. While the last thing I wanted to do was lead students to believe there were certain ideal strategies that they needed to adopt, I did want them to become better at stocking their toolboxes with useful tools (strategies) and being able to find the right tool for the job. On the one hand, the above passage may seem to contradict what I said about Giovanni's openness to new strategies: he equates his own style with "genuine writing," implying in doing so that deviating from one's standard arsenal of strategies is somehow disingenuous or artificial. But I would argue the two stances aren't mutually exclusive, and Giovanni recognizes this: he wants to add more strategies to his style, thereby becoming a more versatile writer, but only once he has mastered those strategies to the point where he can fluently work them into his unique style. Co-opting writing strategies before he is ready for them *would* probably make those strategies appear forced or contrived. Here, he may also be coming to the realization that doing "genuine" writing may help him achieve his lofty long-term goal of inspiring thought. Passages like these suggest that Giovanni is beginning to negotiate his own individual identity as a writer—not just as a person, as he did in Unit 1.

Giovanni seemed to appreciate this individualistic aspect of the course; in response to an interview question which asked him whether and how the course was different from his previous writing courses, he said,

I think that the acceptedness—like, your ability to accept that fact that some many students do not like writing. In fact, many students hate writing, and I think just saying that from the first day to the last day—in almost every classroom that somehow came into conversation—reminding students, like, “We’re all in this together.” Reminding students, “Yeah, you probably hate writing and probably always have trouble. You probably were never talented at it, but that’s not why you’re here. You’re here to explore that reason. You’re here to, you know, really explore if you are a good writer.” And a lot of students I think realized their potential in this class.

While Giovanni puts a few words in my mouth here (I would hope that I never implied that the students probably hated writing or were bad at it), his language of “we’re all in this together,” “explore,” and “realized their potential” suggests that Giovanni gained a heightened interest in investigating his writing strategies, as well as an interest in how knowing more about his strategies could help him improve. Giovanni’s response suggests an increased interest in teaching himself about writing by way of metacognitively exploring the strategies he uses to solve writing problems.

Giovanni’s response to the second major assignment, the Writing Profile, reflects the “exploration” language he used in his interview: he used the assignment to explore the “why?” behind how he writes and to compare his writing strategies with those of his partners. He also began to investigate his procrastination habit in more depth, as seen in this passage from his group’s Writing Profile:

Giovanni has struggled with the perfectionism-procrastination infinite loop. What exactly is this? one might ask. Perfectionists like Giovanni fear being unable to complete a task perfectly, so they put it off if possible. This can be seen in his brainstorming process when can’t seem to put the all the ideas and thoughts jumbling around in his head-on paper.

Here, Giovanni expands on his theory that his procrastination is a result of his perfectionism, and he synthesizes this “perfectionism-procrastination infinite loop” with what he perceives to be a struggle with brainstorming effectively. While he still uses the assignment as an opportunity to explore (and perhaps critique) his general behaviors and thought processes, at this point, he

seems to be getting better at bringing it all back to writing. In other words, he seems to be thinking more specifically about how writing factors into his goals. Here is a similar example from later in the paper:

The moment Giovanni is presented with a new writing assignment, he already feels trapped in this vicious cycle. To combat this, he makes a clear plan of action of how he will accomplish the assignment, including the entire brainstorming process. Before he starts any new assignment, he must remind himself of a saying ingrained in his head at an early age. That is, to always remember to K.I.S.S - Keep It Simple Stupid.

Again, we see Giovanni not abandoning the general platitudes he follows (e.g., “keep it simple, stupid,” “talent is overrated”) but rather applying them more directly to the practice of writing and to his short-term goal of eliminating procrastination. Not many students took this approach, at least not to the extent Giovanni did; the more typical response was to maintain a laser focus on writing all the way through. It’s possible that Giovanni’s unique responses here are a result of how he interpreted and responded to the first unit, which set the tone for how he would interpret and respond to the rest of the course. Having perceived the course primarily as a self-help or motivational venture, Giovanni may have wanted to continue to explore the ideas about talent and effort he always held but this time within the context of writing.

I want to argue that this is the point in the semester where Giovanni seems to have connected the dots, so to speak, and found a way to successfully think metacognitively about his writing strategies (particularly when it comes to procrastinating), and I also suspect it was the unit from which Giovanni saw the most personal benefit. It is here that he shows evidence of Deweyan synthesis, connecting the beliefs and experiences he brought with him to a new problem: the problem of writing. In his interview, when asked whether and how the course changed the way he thinks about his writing, Giovanni responded,

This course has made me think beyond my capacity I never could expect of myself... Since the beginning of this class, I’ve started journaling on my own throughout

my own days just because I saw to it and I saw the benefit of it. I really see that this course impacted not only my journey through my writing career, setting goals and making those goals more—keep working towards goals, it also helped me in my personal life.

Again, this response—particularly the last sentence—suggests that Giovanni was able to make the course about both writing in specific and life in general and to do so in a way that left a lasting impact on his attitudes about writing. Dewey makes clear that “synthesis is not a matter of mechanical addition, but of application of something discovered in one case to bring other cases into line” (*How We Think* 118). In Giovanni’s case, he was able to synthesize the writing goals he set in the course with the goals he set for his larger “personal life.” In that it made him “think beyond [his] capacity,” the course also aligned with Vygotsky’s attitudes toward challenge and Jerome Bruner’s concept of scaffolding, or building gradually toward mastery by having learners continually tackle new problems and devise new strategies for solving them. Like real scaffolding, the old material is not forgotten or discarded; rather, it’s used to reinforce the new material on top of it: “What is in the zone of proximal development today will be the actual developmental level tomorrow—that is, what a child can do with assistance today she will be able to do by herself tomorrow” (Vygotsky 87). By continually thinking beyond his capacity in writing, Giovanni prepared himself for *advancing* his capacity, for moving his ZPD to the next concentric circle of ability.

Speaking of challenge, Giovanni faced a variety of challenges in the second unit and its assignment, the Writing Profile, some of which came from the novelty of thinking about his own writing strategies: he was asked to take the general life advice he brought with him and apply it more specifically to writing, a task which apparently made him “think beyond [his] capacity.” But Giovanni also faced challenges from the collaborative aspect of the assignment: for the Writing Profile, Giovanni worked with L.A., an advanced student who receives much more

attention in the next chapter, and Forrest, an average-performing student who, according to other students who worked with him, tended to shirk most of his group work duties. Not surprisingly, tension arose in the group, and L.A. emailed me the week the assignment was due to explain that her groupmates were not pulling their weight and that she felt she was doing an unfairly large amount of the work. On the due date, Giovanni stayed after class, seemingly wanting to discuss the situation but not knowing how to go about it. I asked how things were going with the project, and he confided that L.A. was overreacting and being, in his words, a “control freak.” At this point, with only a few hours until the 11:59 p.m. deadline for submission and only hearsay to go on, there was little I could do about the situation. The group submitted a decent Writing Profile, but their Meta-Analysis shows just how much they struggled with the collaborative nature of the assignment:

Working with groups can be very difficult to manage times to meet. It became quickly obvious that this was going to be our biggest obstacle...L.A. felt a little nervous that many projects were left “in construction” on the google docs because as a writer and person she likes to do as much as she can at one time and work on specific tasks one at a time. This project challenged her and she was not very happy about it. At times, she felt that if she didn’t know where the other group members were at, that she would have been happier. It was more difficult not doing everything herself.

While both the second coder and I identified this as a moment of challenge for the group (MAC, pink), we agreed that it was not the type of challenge conducive to effective practice: it had nothing to do with allowing the students to capitalize on their “preexisting knowledge” (Ericsson, Krampe, and Tesch-Römer 367), nor did it encourage them to reach the next closest skill level while affirming what they had already achieved (Kurfiss vii). Appropriate challenge, Vygotsky asserts, is that which gradually trains learners to independently solve problems that they currently can only do through “collaboration with more capable peers” (86). Here, however, there appears to be little collaboration going on in the first place: the students seemed to

individually make edits to a shared document rather than meet in person, resulting in tasks being “left in construction” and an unnecessary layer of logistical difficulty.

Tracing his History

Unit 3’s theme of reflecting on past literacy sponsors and how they inform one’s present writing strategies seems to have resonated strongly with Giovanni. By this point in this semester, he began focusing even more strongly on his short-term goal of eliminating procrastination than at the beginning of the course. Perhaps working with other writers on the Writing Profile motivated him to turn his attention to his own writing strategies, or perhaps he was aware that the semester was almost over and therefore chose to focus on his more immediate goal. Regardless, Giovanni seemed to use less of the broad motivational language he began the course with and more language specific to his writerly ambitions. He also began reflecting more thoughtfully on writing feedback he received and how to use that feedback productively. On one early journal entry which asked students to brainstorm some of their literacy sponsors, Giovanni responded,

My freshman honors English teach was one of my literacy sponsors. She helped build the foundation for my career as a successful writer. She was the first teacher to tell me “writing is a process” which never truly sunk in until my senior year of high school.

Although his response is again brief, both the second coder and I identified this response as evidence of Giovanni evaluating the feedback he received from a literacy sponsor (EF, green).

This advice seems to have stuck with Giovanni, as his work strongly reflects a process-over-product attitude about writing. In the next journal entry, Giovanni again used the entry as an opportunity to reflect on feedback he received from his past literacy sponsors:

As a child, my parents would consistently ask to see my writing. They would make suggestion after suggestion, which to me felt like I was being picked on. In reality, they were pinpointing my weak points in order for me to be a successful writer.

And in another journal entry, which the second coder and I identified as evidence of appreciating a writing failure (AEF, pink), Giovanni wrote,

Interestingly enough, some of the most impactful literacy sponsors were unexpected sources such as constructive criticism and feedback on my work. Particularly, feedback I didn't want to hear. Throughout my K-12 academic career, feedback instilled in me the internal motivation I needed to improve and succeed.

Here, Giovanni sees value in even negative feedback, using it to fuel the internal motivation to keep practicing. Continuing to develop this attitude toward criticism could help foster in Giovanni what Ellen Winner calls the “rage to master,” an insatiable appetite for mastery characteristic of gifted learners and “inevitably involved in highly effective behavior” (Dai, “Nature and Nurture” 28). Learners operating under the rage to master maintain motivation to practice their skill in spite of (or perhaps even in part because of) perceived errors or failures, and they are more likely to experience the “flow” state Csikszentmihalyi describes, a “characteristic of creative engagement, generally occurring when people are working... on challenging, self-assigned tasks that they are highly motivated to accomplish” (qtd. in Chaffin, Imreh, and Crawford 255). As the learner begins to associate the flow state with a positive feeling of “being carried away by a current” (Csikszentmihalyi 132) because the task is so engaging, the learner may begin to independently seek out the conditions leading to flow. By listening to and learning from feedback that he “didn't want to hear,” Giovanni shows a willingness to seek out his own intrinsic motivation for pursuing his writing tasks with the “rage” of an expert. In a sort of feedback loop, Giovanni could be further motivated by the positive feelings he feels from experiencing a flow state.

However, Assignment 3, the Writing Biography, was a letdown for Giovanni, not because he did particularly poorly on it but because he apparently procrastinated on it and seems to have disappointed himself as a result. In his Meta-Analysis, he wrote,

The past few weeks have honestly been some of the most stressful times of yet to come in college. With pressure to maintain a certain GPA to keep my scholarships, this paper was not a priority until the final day before the due date. Fortunately, I was prepared with previous readings, journal entries and mind maps of my work. The entire process from start to finish occurred main in the day of submission. Although, it is something I never strive to have, it was the reality that I made the best of.

The tone of this passage betrays Giovanni's typical tone of enthusiasm and motivation; he seems overwhelmed by his workload in his other courses. Especially in the last sentence, Giovanni seems disappointed that he put the assignment off until the last minute. His language also suggests that he sees himself as the victim of his circumstances, an interesting departure from the "no excuses" attitude he conveyed in his Goal Inventory:

I complained every car ride home to my parents about why I was convinced their genetics limited my athletic ability, and it was my father who told me time and time again that it was my mindset that caused this limitation. I was content with making excuses, so I quit playing football my junior year. My father was right; I had developed a self-handicapping attitude.

Giovanni's uncharacteristic blaming of his procrastination on external factors recalls one of Lunsford's findings about basic writers: "They most often presented themselves as more or less helpless victims" (279-80). But the fact that such a response was unusual from Giovanni and apparently not long-lasting—his enthusiasm returned for the final assignment, as we'll see—suggests that he may have been feeling the effects of burnout at this point in the semester. Shaughnessy observes that "writing is a skill that involves a highly self-conscious use of our linguistic and intellectual resources. It demands from the writer a sustained accountability for his thoughts" (249). In other words, writing requires extensive metacognitive engagement from the writer, and prolonging that sort of mental energy could very well cause fatigue and an overall loss in motivation. Ericsson reminds us that "deliberate practice is an effortful activity that can be sustained only for a limited time each day during extended periods without leading to exhaustion" (369), and overdoing it often leads to "'staleness,' 'overtraining,' and eventually

‘burnout’” (371). Indeed, music educators strongly advise against over-practicing, suggesting it may be almost as detrimental as not practicing it at all. Madeline Bruser, for one, writes that “the most important thing is not to overpractice but to do high-quality work” (52), and Gerald Klickstein warns, “If you feel fatigue or discomfort, stop for the day...once your mind dulls, practice becomes useless” (12). In their study of expert musicians, Chaffin and Crawford found that another hallmark of expertise was the ability to know when to stop practicing to ward off burnout: “A concern about the effectiveness of practice may be one of the keys to developing high levels of skill” (163). In Giovanni’s case, he may have felt he was being asked to do too much metacognitive thinking too quickly and was procrastinating on the assignment as a way to stave off impending burnout (which could also help explain why his enthusiasm returned in time for the last assignment).

Initially, both the second coder and I coded the “past few weeks” passage above differently. I marked it as evidence that the assignment had not challenged Giovanni (MAC, yellow), hence why he felt compelled to engage in a bit of academic triage and turn his attention to more difficult tasks in other classes. The second coder marked it as evidence of poor metacognitive thinking (TM, blue); Giovanni explained *what* his writing strategy was (using “previous readings, journal entries and mind maps”) but not why he used that strategy, how exactly he used it, or how effective it was for him. Ultimately, the second coder and I agreed that it was actually more representative of a poorly-defined operational goal (SOG, blue) since it was related to his strategies for a particular assignment. We agreed that this passage conveys sort of a bare minimum approach to the assignment uncharacteristic of Giovanni’s typical outlook on the course. His end-of-semester interview also provides a clue as to what was going on here; when

asked if he thought there was too much, too little, or just enough writing done in the class, he responded,

Well, it depends on what time you ask me. Part of the year, there's probably times I would have answered every one of those just because there have been longer essays with the metacognition attached. But I think it really challenged me, so I would say, overall, just right... I think trying to balance it out with different types of projects and using group work really pushes the kids towards the final, and of course, it's—you know, it can be tough trying, you know, pushing those students. They start to get worn out.

Giovanni might have gotten more benefit from doing the assignment if he had been able to give it more of his attention. Deprioritizing the Writing Biography likely means he had less opportunity to metacognitively reflect on how his literacy sponsors shaped his current writing strategies. Again, I suspect the feeling of being “worn out” that Giovanni describes is a feeling of approaching burnout and needing a break from the demands of metacognitive thinking. Music educator Margaret Berg cautions that the cost of practicing should not outweigh the benefit (58), and despite the common association of practice with hours on end of intense, dedicated focus, the priority should not be placed on simply getting the minutes in. To be worthwhile, Berg says, practice must be driven by catalysts such as motivation, persistence, and belief that the practicing will pay off in the end (46). If practice becomes a chore, as it seems to have become for Giovanni around this time, it provides little benefit and may even cause harm by taking on self-defeating connotations of monotony, stress, and drudgery.

However, I do not mean to say that Giovanni got nothing out of the Writing Biography. As with Assignment 1, Giovanni excelled at the visual component of the assignment and his verbal explanation of his choices on Poster Day. Giovanni was the only student to use a medium other than poster board; instead, he created a slideshow on his laptop. In addition, Giovanni was able to think of literacy sponsors besides the most obvious choices, such as parents and past teachers. On both of his slides and in his verbal explanation, he was able thoroughly describe the

specific impact each sponsor had on his writing strategies. For example, he explains that listening to rap inspired him to inject more creativity into his writing (though he might have gotten more specific there—how exactly does that creativity manifest in his writing?), and he observes that Twitter taught him the value of concision, which is especially important for a business major like him. By articulating these connections, Giovanni shows strong evidence of Deweyan synthesis, and exploring the link between his writing goals and influences like rap and Twitter allowed Giovanni to make connections that may encourage further creative exploration. Giovanni's slide on Malcolm X doesn't really explain what he has in common with the activist, but in his verbal explanation, Giovanni clarified that both he and Malcolm X shared the goal of inspiring change with their language. As usual, Giovanni relies heavily on generalities, and he would likely benefit from finding a way to more specifically articulate the "how?" question behind such phrases as "building an empathy," "infinite creativity," and "sway conversations." Still, Giovanni shows fairly strong metacognitive thinking on this aspect of the assignment: not only is he able to articulate why these unconventional literacy sponsors influenced him so strongly, he is also able to synthesize his own literacy sponsorship with one of the authors we discussed in class. Seeing how his experiences overlap with a seemingly distant counterpart could motivate him to keep practicing the ability to "sway conversations," whatever that means to him.

Sharing his Strategies

As the semester neared its end, Giovanni's class attendance dropped off somewhat dramatically. He attended just enough times to convince me that he was still invested in the course (and his end-of-semester interview responses don't suggest he lost interest), but I missed his journal entries and contributions to class discussions. In hindsight, I suspect Giovanni was

simply overwhelmed by his coursework and feeling burned out with thinking metacognitively, and he thus allowed his procrastination habit to get the better of him. He sent me this email when he missed his group's conference:

Hello, Professor Green. First off, I wanted to apologize for my absence at today's conference meeting. I do not believe in making excuses so it is on me. I am emailing you today because I wanted to take the initiative to ask you if we can set up another appointment for our conference meeting whenever you are available... Thank you again for your patience and understanding, as you may know, these last few weeks are hectic, to say the least.

The last line especially suggests that Giovanni was simply feeling the end-of-semester crunch. However, I maintain that behind the scenes, Giovanni was fighting an impending feeling of burnout. His language suggests a return to his characteristic "no excuses" ethos: he states once again that he does not "believe in making excuses" and that the absence is "on me"; he similarly speaks of "tak[ing] the initiative" to reschedule the conference. I want to argue that Giovanni's taking responsibility for missing the conference, in contrast to his shifting the blame for procrastinating on his Writing Biography, suggests that he was overcoming his feelings of burnout and beginning to regain his former motivation. His email doesn't contain the language of helplessness and victimhood common to basic writers; on the contrary, his willingness to "take the initiative," as he puts it, indicates a "task-involved condition" (Dai 312) more conducive to effective practice. My response to Giovanni attempted to encourage his return to his old self by fostering phatic communion with him rather than criticizing or otherwise calling attention to his absence:

Dear Giovanni,

Nina has already offered to make up her conference at 1:30 Wednesday. If that time works for you, why don't you just come, too, so I can talk to both of you at the same time. And if the time works for Emma, all the better.

Mr. Green

Again, rather than condemn Giovanni's absence, I attempt to treat him like a fellow scholar and an adult who is capable of making his own academic decisions. He responded favorably with: "That works for both of us!. Meet at Arsagas?" His short, informal response contrasts sharply with the lengthy initial email, suggesting Giovanni felt more comfortable with and confident in his progress on the Writing Guide. By the last few weeks of the semester, as Giovanni began drafting his Writing Guide with his group, his original enthusiasm returned to his journal entries and discussions.

Speaking of group work, Giovanni seems to have gotten along much better with his Writing Guide group than his Writing Profile group. This may be because Giovanni was placed in a group with three other students who had the goal of finding motivation and/or eliminating procrastination. The group produced a brochure which included motivational quotations from famous authors about procrastination, various strategies for addressing procrastination, and explanations as to why those strategies could benefit sufferers of procrastination. Working with students who shared one of his goals may have motivated Giovanni to put more effort into the Writing Guide; it guaranteed Giovanni that he and his group mates could draw on their shared experiences to create a successful Writing Guide. One reason for his tension with the Writing Profile group may have been that he and his partners didn't have enough shared experiences to draw upon: their goals were too different. But here, the students in general, but Giovanni especially, seemed excited about the prospect of becoming the "teachers" of the goals they had set for themselves at the beginning of the semester. For example, here is the last paragraph of Giovanni's group's Meta-Analysis:

In conclusion, we cannot express the amount of gratitude we have for professor Green giving us the opportunity to help future students. We are extremely proud of the work we

have put forward and are faithful that our work will one day help students defeat a struggle that we have had much experience with ourselves.

I argue that this passage reflects a genuine investment in the assignment, a reassuring response to the course's culminating project. Giovanni seems to recognize that his group's Writing Guide has a sort of staying power—it could potentially be useful to both himself and to other writers, perhaps for years to come. This response is a promising sign that Giovanni may be further motivated to keep practicing even after the course ends: in researching how to promote motivation in writing, Pietro Boscolo and Carmen Gelati find that motivation comes in part from “the value a student places on a learning activity” (285). The authors clarify, however, that trying to artificially make writing tasks interesting to students is likely to fail: “The problem is not finding an *interesting topic* or event on which to make students write, but *making writing interesting*” (290, emphasis in original). In other words, students themselves need to see the intrinsic value of writing at large, and they need to be solving writing problems of their own making, not stock-standard problems hand selected by the instructor (no matter how interesting the instructor finds them or thinks students will find them). The Writing Guide asked Giovanni and his group mates to solve their own problem: how do we share our strategies for practicing our writing goal? As such, it could have a longer-lasting impact on their motivation to keep practicing.

The group's Meta-Analysis reflects a fairly streamlined process to the assignment, and the second coder and I agreed that it included detailed explanations of what strategies they used, why and how they used them, and how well they played out for the group (TM, pink). Here is an excerpt from that Meta-Analysis:

Other things that we really wanted to stress in our presentation was that we all had our own tips that we wanted to share. Sara really stressed on being organized and having a to-do list. Explaining that is was helpful and kept her thoughts all together. Giovanni likes to

take study breaks, from taking a walk to the bathroom to stretching, he understands the importance of breaks. He finds that by doing this he is more productive, therefore, avoiding potential overload and fatigue on his mental capacity. Nina spoke about working a little bit everyday on a project and not leaving everything till last minute, by doing this you don't have 6 pages of an essay to do in a couple of hours. Instead you can break it up over multiple days or weeks, allowing the individual to produce quality work.

While there is certainly room for more detail here (e.g., what goes into making a to-do list? What exactly does it mean to “break up” a writing project over a period of time?), the students generally show an effort to explain the reasoning behind and the effectiveness of their respective strategies. Giovanni, for instance, finds that the strategy of taking breaks works well for him in warding off impending burnout, and he describes that strategy in the brochure:

Work in intervals with breaks in between.

The Pomodoro Technique can guide you through completing any task at hand in timely manner. When faced with any large assignment or a series of projects, break the work done into short 25 minute intervals, with short five minute breaks in between. You can find free apps for Android or iOS that utilize this technique purely for your benefit.

Giovanni might have spoken more to the “why?” of this Pomodoro Technique, perhaps by citing research on burnout and mental fatigue. He could have even made reference to his own apparent burnout just a few weeks prior and whether (and how/how well) he applied the strategy to that particular instance. Still, the purpose of the assignment was to explore and explain the various strategies students could use to meet their goal, and Giovanni and his group mates were largely successful in that regard. More so than at the beginning of the semester, they were able to articulate why they do the things they do and evaluate the effectiveness of those strategies, suggesting their metacognitive abilities improved over the semester. In the words of Flower and Hayes, they were in a better position to “explore ideas, to develop, act on, test, and regenerate [their] own goals” (386), bringing them closer to developing the hallmark monitor of expert writers. In Giovanni's case, he seems to have once again found a way to synthesize his general

approach to life with one of his writing goals in particular. Hopefully, he left the course with a greater understanding of how his guiding principles—“talent is overrated,” “I do not believe in making excuses,” etc.—could help him practice what he perceives to be his greatest writing weakness. It also seems that his collaborative experience with this group was much more positive than with the Writing Profile, perhaps because since all group members shared the same goal, there was no compromising or silencing of any individual student’s goals.

Conclusion

Giovanni clearly had a unique reaction to the course’s emphasis on the elements of effective practice, and his initial response seems to have informed how he continued to respond to the course’s curriculum throughout the semester. At the beginning of the course, he had significant difficulty synthesizing his rather broad, general goals with the skill of writing specifically. But by the end of the course, it appears that Giovanni was able to find a way to connect his broad outlook on life to at least one of his writing goals. Overall, Giovanni’s “narrative” seems to reflect a very gradual but still present improvement in this aspect of metacognition, with at least one major setback along the way in his apparent burnout around the end of the course.

But not all students responded to the curriculum like Giovanni did, and the next chapter discusses a student who had a substantially different response, both because she seems to have sought something very different from the course and because she entered the course as a much more advanced metacognitive thinker. Whereas I think Giovanni’s case study shows the benefits of (but also the difficulty of) having students set effective goals, L.A.’s case study illustrates just how difficult it is to maintain appropriate challenge for all students in a writing course, as well as

the various risks which come when students do not feel adequately challenged by the writing problems the course offers.

Chapter VI: Case Study of L.A.

L.A. actually has quite a bit in common with Giovanni. She shares Giovanni's penchant for outside-the-box thinking and personal expression, and she, like Giovanni, obviously takes issue with the very idea of talent. But she seems to have valued the course not for what it could teach her about life but for what she perceived as its transferability to her own discipline, music education. Her coursework and responses also suggest that she found the course largely unchallenging, perhaps because, as a junior, she had already had more experience than her classmates thinking metacognitively about her own problem solving strategies. As an aspiring educator, and in music no less, she had also already thought critically about these elements and how she might apply them to not just her own practice but to the practice of her future students. In short, L.A. entered the course better prepared to think, talk, and write about the elements than any other student, and her responses offer an interesting view into how that precociousness shaped her overall reaction to the course.

L.A., who was twenty-one years old at the time of the course, is a white female from a large city in Texas. Her mother is a teacher with a master's degree, and her father is in sales and has a bachelor's degree. She has two brothers. Again, because she was a junior, she stood out among the other students, who were overwhelmingly first-year students. Although most students at the University of Arkansas take Composition I and II their freshman year as it is part of the University's core curriculum, L.A. indicated in her end-of-semester interview that music education majors typically completed a separate certification requirement first. Therefore, L.A. had already taken various courses in music and music education, and most of her remaining courses were lower-level core classes, including Composition II. This may have in part shaped her attitude about the course and the other students in it; as her responses show, L.A. (accurately)

saw herself as more advanced than her peers, especially in terms of critical thinking ability. Perceiving herself as more advanced may have contributed to her lack of challenge in the course and therefore her occasional lapse in interest. Although L.A. attested in her interview to enjoying the course and even finding it useful as a future music educator, several of her responses which follow suggest that her interest waned when she found the assignments unchallenging. As such, she offers valuable insight into the remarkable difficulty of incorporating the “maintaining appropriate challenge” element of effective practice, as well as some potential ways to incorporate it more effectively.

Setting her Goals

An aspiring music educator, L.A.—like Giovanni—entered the course already with strong opinions about natural talent. For her first journal entry, in which she reflected on the Junot Díaz quotation about talent and effort, she wrote,

I believe Diaz’s quote is true in suggesting that a writer is not made by talent, but through perseverance through personal struggles and circumstances. Similar to the saying “you are what you eat,” I believe that you are what you strive to become. Your identity is fluid as you grow and evolve, and the characteristics that remain through dynamic circumstances are an integral aspect of who you are... Good writing is from the composer’s heart. It contains the grit and overarching theme of who they are as a person.

While L.A. never specified whether she enrolled in the course having read its description, she seems to have valued the critical approach it took to the notion of natural talent. More specifically, her end-of-semester interview responses suggest that she saw connections between how we discussed natural talent vis-à-vis writing and how she could discuss it vis-à-vis music once she began her career. Here is how she ended her interview:

For me, it was—it’s cool to see how this class still helped me in my more career-focused classes. With, like—I took practicum this semester, and it’s a lot of demonstrate—like, you have to model. You have to do a lot of lesson plans of aural, visual, kinesthetic, talking about modalities and combinations and modifications. And I feel like this class

definitely demonstrated a lot of those things in ways that don't pertain to music but that I could bring to music.

Whereas Giovanni seems to have used the course as an evaluation of—or perhaps a confirmation of—the broad generalities that guided his approach to life and finding motivation, L.A. seems to have used it as an opportunity to further explore the principles of pedagogy she intended to employ as a future educator. Her use of language related to growing and evolving fluidly while maintaining her core identity traits suggests that the course's progressivist underpinnings resonated with her own progressivist ideology, which may have increased L.A.'s initial buy-in into the course. Darsie Bowden notes that “progressive education was governed by the assumption—drawn from a growing body of literature in psychology—that children learn and develop at different rates” (51). L.A. clearly agreed with the premise that learning happens at different rates for different students and that education should therefore be individualized to each student's needs.

Below is the full version of the “I have lots of thoughts today” journal entry from L.A. I briefly discussed in Chapter IV. She responded fervently to the prompt, which asked students to name something they felt they were talented at and explain how they think they became talented at it. I asked the question somewhat tongue-in-cheek, wanting to use it to show students how difficult—maybe even impossible—it was to trace one's development from novice to expert. She wrote,

I have lots of thoughts today. I don't think you “get talented” at anything. You have natural abilities that allow things to come easily to you, but you have to work hard to become better. I've never heard someone say “I want to become talented at __, so I will do __.” Talent is the wrong word in my opinion. The word that better fits is “better/more skilled” and you do that by intentional practice. Also no one “great” ever calls themselves “talented.” I have issue w/ your lesson's assertions...Talent and musical success are irrelevant. Desire is why people continue to strive for higher things. If a child is “good at” flute having never touched it, but they want to play trombone...they should play trombone.

L.A.'s use of "desire" recalls Winner's concept of the rage to master: Winner writes that although "individual differences in innate ability exist," "high levels of ability include a motivational component: a strong interest in a particular domain, *along with a strong drive to master that domain*" (272, emphasis mine). Like Winner, L.A. believes that learners "have natural abilities that allow things to come easily" to them, but they still "have to work hard to become better." Natural talent may exist, but it is not enough to lead to expertise; sustained effort and desire are what separate the experts from the novices. François Gagné likewise writes that "internal catalysts" such as motivation, effort, and self-esteem, along with "environmental catalysts" such as instructor guidance, feedback, and sufficient practice time/space, are what differentiate *giftedness* from *talent*. Giftedness, he argues, "designates the possession and use of untrained and spontaneously expressed superior natural abilities," whereas talent is "the superior mastery of systematically developed abilities" (1). In other words, mere giftedness—the "natural abilities" L.A. speaks of—must be refined into talent through the proper internal and environmental catalysts, including the "desire" and hard work she describes. L.A. brought this same kind of passion to the class discussions, and she would often complement or perhaps critique the musical analogies I used in class. I was also excited to have a student who could potentially help me establish an enthusiastic (but not antagonistic) tone from the beginning, which would hopefully encourage the other students to contribute their own opinions and lead to lively class discussions.

The second coder and I agreed that L.A.'s Goal Inventory Meta-Analysis showed evidence of her ability to set effective operational goals for completing the assignment (TM, pink), which is itself a form of metacognitive thinking. For example, she writes,

While writing my goals for writing, I felt the itch to tie in my overall life and career goals. In the same mindset of having an overarching theme for this assignment, I felt it was imperative to have the honesty of including themes for my real life goals and ambitions. Mentioning my future as a music educator provided me an outlet for my reader of this assignment to understand my perspective of having a particularly emotional mindset when writing. I do not have anything against people who choose to do lab reports for a living...or at least a part of their lives. I recognize that someone has to write the dry stuff, and in my moment of sharing that sass-filled paragraph about my distaste for dry writing with a group of close friends, I felt very proud of being so bold.

Few students, especially for the course's first Meta-Analysis, were able to articulate their writing process in such detail. She explains *why* she set this operational goal, she explains *how* it played out in the assignment, and she evaluates how effective it proved to be. For L.A., it was important to use her "overall life and career goals" to help her define her goals for writing: she was actively looking for connections to make between this subject matter and the subject matter she was already familiar with, a textbook example of Deweyan synthesis. Her goal of writing with more emotion mirrors the style with which she plays her music and how she intends to teach her own students to play.

L.A.'s sophisticated metacognition was also reflected in her Goal Inventory itself, in which the second coder and I agreed that she was able to set specific, realistic goals and explain how they were relevant to her personal interests (SEG, pink). Here is how she presents her first goal:

Under the general idea of emotional writing, I believe that words are very powerful. My goal when writing anything, including this assignment is to say something that will leave a lasting impact with my reader. My career path as a music educator deals with writing in a very different language, commonly known as musical notation. If I could evoke a specific feeling or emotion with my own musical composition, I would consider that a huge success. The same goes for linguistic composition...I feel that emotional writing is the more fun kind of writing to both compose and read. Connecting with others to encourage human values such as empathy are very important to me...That is why I personally choose to invest in others through the art of teaching and music. This however, could be seen as a weakness to choose to ignore the value of things I consider to be dry reading such as lab reports. But dry writing inevitably equals dry reading, so my emotional appeal to connect with my reader stands as stated.

She seems to share this goal of leaving a “lasting impact” with Giovanni (though they use different words to describe it), but she does so in a much more specific—and a much more writerly—way. She draws on her prior knowledge of what it means to leave a lasting impact with the language of music to more precisely identify what it means to leave a lasting impact with writing, making the goal seem more realistic to her. And she very clearly explains why the goal is relevant to her: encouraging “human values” is something she already strives to do in music, and she understands how doing it in writing could likewise help her “connect” with other people. But L.A. also does something else that very few students did in the Goal Inventory: she explains how her goals address what she perceives to be her weaknesses; in the above passage, she admits that overlooking what she considers “dry” genres, like lab reports, could hold her back from her goals. She does something similar when she sets her next goal, improving her argumentative writing abilities:

Writing that is logically driven can definitely be a weaker spot for my writing skills. I find it difficult to tame some of my emotionally driven thoughts. My idea of well-balanced logical writing is to take a strongly felt argument and to back it up with inarguable tidbits of facts, statistics and other forms of mathematical and scientific data. Only then can your argument face the challenge of controversy. One struggle of mine when I write in a very factual and argument based way is that my considerations of other perspectives kicks in and despite that my argument can be justified, I feel obligated to mention other justifiable perspectives. I know that this can strengthen an argument, but it can also make a mess of my original idea when these muddy waters rise.

The fact that L.A. so fluently matches her goals to her self-described weaknesses provides further evidence that she entered the class with fairly advanced metacognitive abilities. She explains *why* each goal is exigent to her and *how* reaching the goal will help her conquer the weakness. Ericsson notes that in deliberate practice, “Specific tasks are invented to overcome weaknesses, and performance is carefully monitored to provide cues for ways to improve it further” (368). That Ericsson uses the same “monitor” language as Flower and Hayes suggests

that experts have developed the inner monitor by practicing the act of monitoring their own strategies. And in her study of expert musicians, Susan Hallam observed that experts use metacognition more than novices; specifically, they used it to “identify personal strengths and weaknesses” (qtd. in Benton 23) and devise strategies for overcoming the weaknesses. Even at the beginning of the course, L.A. showed a precocious ability to assess her own writing weaknesses; if L.A. was arrogant, her arrogance didn’t prevent her from acknowledging her shortcomings when it came to writing. In fact, on an early journal entry which asked students to assess their own writing strengths and weaknesses, she went into much greater detail on her weaknesses than her strengths:

Strengths: thinking about worldly impacts
 relating things to different subjects/motives/circumstances
 empathizing with others
 proving my points while giving recognition of other ideas

Weaknesses: my ideas spinning into a chaotic mess of excitement
 I don’t like to pick sides because I see many valid sides
 I hate losing (in life or not being able to have the effective I want when I write...with others AND myself)
 (Realistically...I don’t like this but) I have a tendency to feel that I have one of the most unique perspectives and in reality I may not. This can be frustrating when my work doesn’t reflect my uniqueness. ← AKA I’m never satisfied with my work.

Most other students were able to reflect on their weaknesses a bit, but not to the extent that L.A. did in entries like this. L.A.’s Goal Inventory was successful in part because she was able to match her goals to her weaknesses in a way that showed sophisticated metacognition. The experts in Hallam’s study all had “a keen awareness of their own strengths and weaknesses” (qtd. in Benton 82) and used that information to devise specific, realistic, and relevant goals. Likewise, L.A.’s ability to define her weaknesses allowed her to set more effective goals for herself, which allowed her to begin the course from an advantage not every student enjoyed.

But the three responses discussed above also say something even more telling of L.A.'s sophisticated metacognitive abilities: she seems to know how to assess her strengths and weaknesses differently for different writing problems. In the "Under the general idea" passage, she identifies her distaste for "dry writing" as a weakness, but she also seems dismissive of it: she concludes that "dry writing inevitably equals dry reading," so her goal of writing with more emotion ultimately overrules that possible weakness. In contrast, in the "Writing that is logically driven" passage, as well as the journal entry in which she lists her strengths and weaknesses, L.A. seems to assign much more value to the writing genres she would consider "dry": she now recognizes that in the context of argumentative writing, her inclination to write with emotion would "muddy the waters" and cause a "chaotic mess of excitement." In other words, in L.A.'s first response, she analyzes the weakness and decides it isn't as important as her overall goal; however, in her later responses, she analyzes the same weakness, this time recognizing that it would cause her serious problems. In short, she realizes that a strength in one writing context is a weakness in another; she has already come to see writing strategies as tools with different uses and different occasions for which to use them. In her study, Hallam found that not only were the expert musicians better able to assess their strengths and weaknesses, they also "described a wide range of practice strategies that they applied flexibly according to the needs of the moment, deliberately and strategically managing their own learning, practice, motivation, and emotional state" (qtd. in Chaffin, Imreh, and Crawford 82). Here, L.A. displays the type of flexibility of a seasoned metacognitive thinker: she manages her strengths and weaknesses "according to the needs of the moment," acknowledging the conditions in which certain strategies would be more effective than others. No other students in the course displayed this level of metacognitive sophistication, which may be one reason L.A. seems to have felt out of place in her class.

Exploring her Strategies

It is around this time that L.A.'s attendance began to drop off, perhaps because Assignment 1 convinced her the course would be an easy A or because she simply lost interest in it. L.A.'s interview responses also suggest that she wasn't seeing much value in Unit 2, which may be why she was absent for a good portion of it. The purpose of Unit 2 was to have students put their own writing strategies into conversation with other students', comparing and contrasting the approaches they used and why they used them. To that end, in the interview, I asked whether the course had changed the way she thought about her writing, to which she responded,

I don't know that I necessarily learned a ton of new strategies as much as I did solidify the ones that I had. And I feel more confident with my writing. Sounds kind of bad, but through talking with my peers, there are definitely some things that I feel like I get and I understand that other people aren't there yet. And they may have things organizationally and in other ways that I haven't grasped, but I definitely have kind of always felt like I was a decent writer, and I think that kind of solidified that thought a little bit.

Both the second coder and I agreed that this passage indicates a moment in which L.A. had not felt adequately challenged (MAC, yellow); it seems L.A. felt she had nothing to learn from her peers because she believed she was already ahead of them—and she *was*. L.A.'s interest in the course seemed to drop off fairly quickly around the second unit, and she began biting back against the course's curriculum often enough to convince me she was getting frustrated with it.

I suspect her attitude, which was borderline confrontational at times, reflected a lack of challenge. She was one of the few students who spoke up in class regularly, often without raising her hand, and she was not afraid to contest something I or another student said. That didn't bother me; after all, I wanted the class to be a place where ideas *could* be challenged freely. But L.A.'s challenges often seemed to come from a position of arrogance, and I quickly got the

impression that she felt the course was beneath her. In her interview, when I asked if anything had surprised her about the course, she replied,

Honestly, just the people in the class. Since we got to talk to a lot of people, I was at least one to two years older than I think every member of the class because I'm a junior and most of them were freshmen or sophomores, I believe... And as a future teacher, that's something I picked up on, just the difference between what two years of college does to you. Because I can definitely think back to when I was a freshman, how I felt comfortable writing. And they say comparison is the killer of all joy, but I feel like it's also a really good tool for gauging your own progress because there's kind of competitive nature that I have. But it's not necessarily like an, "Oh, be a better writer [than other people]," but it's against myself. Be better than you were yesterday or two years ago or whenever.

L.A.'s response, especially her statement about "the difference between what two years of college does" to a student and her inclination to compare herself to her peers, hearkens back to Perry's scheme; in fact, her advanced metacognitive abilities are strong evidence that she was already farther along the scheme than her classmates.

In discussing Perry's scheme in the context of composition pedagogy, Christopher Burnham even invokes Deweyan synthesis by arguing that "learning is growth resulting from an individual's ability to integrate previous experience with new experience, synthesize existing beliefs with new contents, and develop flexible and productive life behaviors" (153). According to Perry, this sort of metacognitive ability to synthesize prior experiences with novel problems first arises around Position 4, "Multiplicity Correlate," in which the student makes a correction from seeking out "what they want" to seeking out "the way they want you to think" (32). In other words, students start to acquire a greater awareness of the methods of thinking their instructors expect of them rather than searching for the "correct" answer their instructors expect.

But I would say L.A. is even farther along than that and has begun to form commitments based on her beliefs, beliefs which she has metacognitively evaluated, asking such questions as "Why do I believe this?" and "What does it mean to believe the way I do?" Therefore, the

dramatic gulf in metacognitive ability between L.A. and her peers can likely be explained by the fact that she was perhaps the only student in the course to have reached the commitment stages, the stages in which she had begun metacognitively evaluating the beliefs she held about writing. In fact, Perry writes that his scheme marks “the progression...from thinking to meta-thinking, from man as knower to man as critic of his own thought” (25). Those “two years of college” L.A. had over her peers made a monumental difference in how fluently she was able to plan, monitor, and evaluate her writing strategies, as demonstrated in her work for the course. Plus, it’s important to note that as a junior, L.A. was perhaps the only student to begin thinking seriously about her transition toward a career, which would itself entail a significant commitment.

It’s also interesting to observe the language choices L.A. makes in some of her responses: “other justifiable perspectives,” seeing “many valid sides,” feeling she has “one of the most unique perspectives.” Such language again suggests that L.A. has at least reached the multiplistic stages of Perry’s scheme, in which the student rejects the dogmatic notion of right versus wrong and instead recognizes that there are multiple perspectives on and approaches to the same problem. And as the student approaches relativism, the student realizes “he, too, faces the challenge of taking a stand, of affirming his own values and decisions” (36)—there now seems to be a sense of responsibility to take a stand and to be able to justify it. L.A.’s responses suggest she is well past this point: she has begun to explore the reasons behind her own stances, “proving [her] points while giving recognition of other ideas.” She has begun to form commitments to her positions while at the same time staying open-minded to alternate perspectives. She may even have attained the final stage of Kitchener and King’s reflective judgment model, a stage at which “individuals are able to evaluate their own beliefs as rational conjectures about reality, and they claim that their views are better approximations of reality than are other views” (100). The

individual is now able to rationalize and justify her own positions vis-à-vis other positions, in contrast to previous stages, where the individual believes all positions are equally valid (Perry's multiplistic stages) or that certain positions are correct *per se* and require no justification (Perry's dualistic stages). Even on these earliest assignments, L.A. displayed a level of metacognitive thought that starkly separated her from her classmates, which may have also been one source of her occasional resistance to the curriculum.

Another phrase from L.A.'s interview provides further evidence for her advanced multiplicity or even relativism: "And they may have things organizationally and in other ways that I haven't grasped." Here, L.A. acknowledges that she could benefit from exposure to her classmates' positions (in this case, writing strategies), even if she remains confident that hers are optimal. She is at least open-minded to other perspectives. Perhaps L.A. just needed to have more interactions with peers from whom she felt she had something to learn. After all, one of her journal entries in Unit 2 suggests she wanted to expand the number of strategies available to her in order to reach her goals of writing both more effectively and more emotionally:

I like the idea of having a skillset like a "toolbox" because there are times you don't have time to plan, write out every draft of a paper or piece of writing in order to write something great. The more extensive the "tools" or skills, the more likely you can capture your audience from the start. I don't like wasting time, so having the tools to accomplish my goals right off the bat is important to me.

As mentioned with Giovanni, Dewey contends that collaboration is conducive to learning when the collaborators have shared experiences—common ground—that they can draw upon to solve the problem before them. L.A. might have felt she had too little in common with her classmates to learn anything new from them. But her desire to build a "toolbox" of writing strategies suggests she was at least interested in seeing what she could learn from her peers. Unfortunately

for L.A., her early experiences in the course led her to believe that she was better off working alone.

It obviously didn't help L.A.'s case that she completed her Writing Profile with two students she struggled to get along with. I touched on this tension in Giovanni's chapter, but L.A.'s side of the story offers another useful perspective on it. In her private email to me, she claimed that she was the only one to "put any gradable work" into the project and called their excuses for lack of progress "idiotic." It may be that L.A.'s personality doesn't jibe well with group work in general; in her interview, when I asked her what suggestions or recommendations she had for the course, she quickly replied, "There's too many group projects." However, she implies that the other group project, the Writing Guide, went fine:

The second group project definitely went better than the first for me—for my situation because the group members themselves.

Perhaps she is right that Giovanni and Forrest simply weren't pulling their weight on the assignment. Regardless, it seems that her personality and her approach to writing problems simply did not match well with those of her group mates. When I prompted students to write about what they thought went into a successful peer review workshop, L.A. wrote,

I feel like peer review workshops can be ineffective. I feel like others do not care about my writing. They do not know me so I'm not sure why they would care. If you, the instructor, are expecting to get to know us to better understand our writing, we should know each other to give adequate peer help.

Again, L.A. doesn't dismiss peer review completely: she says that it *can* be ineffective, not that it *is* ineffective. She isn't sure why other students would care about her writing if they don't know her or don't understand her writing, but she seems open to the possibility that they could care. L.A.'s qualifiers here indicate, I think, a cautious open-mindedness toward peer review and collaboration in general. But her disconnect with the members of her group for the first few peer

review workshops, as well as when she completed the Writing Profile, soured her opinion of collaboration, possibly damaging her interest in the course as a whole.

In addition, the collaborative element of the Writing Profile seems to have at least partially forced the group members to put their own individual goals aside in order to appease the others and submit an acceptable product, a considerable problem for a student as goal-driven as L.A. Distracted by the logistics of working in a group, L.A., Giovanni, and Forrest had less of an opportunity to reflect productively on their writing strategies and compare their writing strategies to each other. And while they optimistically conclude in their Meta-Analysis that the project was a “learning experience” and that they “learned how to work as team member in one of many more group projects to come,” the fact remains that the group tension seemed to diminish the individual benefit each of these students received from the Writing Profile. The perceived need for the group to reach a consensus may have had a sort of silencing effect that ran counter to the course’s individualistic ethos, and such a phenomenon is well researched in composition studies. Rebecca Moore Howard, for example, points out that “students...are accustomed to thinking of authorship in terms of the individual” (62), and Helen Dale notes that students are “bound to disagree about ideas, organization, or phrasing” (68), any of which could align with an individual student’s writing goals. Both authors, however, stress that such tension can be turned to the group’s advantage; Dale, for instance, argues that this “cognitive conflict” could give students experience “testing ideas against each other, clarifying their own ideas, and evaluating what works” (68). In other words, group dissent in terms of *content* could ironically further the course’s individualistic agenda by making students think more metacognitively about their *own* ideas vis-à-vis those of their group mates. But for this to be a possibility, group dissent in terms of *logistics* needs to be backgrounded. Chapter VII explores a few ways to accomplish this.

Perhaps because of her advanced metacognition as well, L.A. may have thought the pace of the course was too slow; whereas most of her first-year peers initially struggled with the Meta-Analyses, she seems to have breezed through them and may have been waiting for a greater challenge. As O'Neill and McPherson wrote, a mismatch of skill level and challenge level will result in either boredom or frustration (35). If L.A. found the metacognitive demands of the course too easy, she may have become bored with the course's tasks and discussions because she did not anticipate ever reaching a flow state. L.A.'s responses are testament to just how important maintaining appropriate challenge is to effective practice—as well as how difficult it is to implement into a writing course.

Tracing her History

Unit 3's focus on the past seems to have resonated with L.A., who was quite successful at metacognitively explaining how her literacy sponsors had informed her writing practices. In general, she showed more enthusiasm for this unit than for Unit 2. She wrote in her Assignment 3 Meta-Analysis,

I've never been afraid to talk about my life and the events in it, in fact I take so much pride in my accomplishments that it's fun for me to discuss them and the ways that my experiences could have affected my life up to now.

L.A. enjoyed the opportunity to synthesize her past experiences with the strategies she currently uses to solve writing problems. Dewey writes that learning occurs when the learner realizes how a given experience fits into the larger continuum of experiences: “Reflective inquiry moves in each particular case from differences toward unity; from indeterminate and ambiguous position to clear determination, from confusion and disorder to system” (*Experience and Nature* 66).

L.A.'s synthesis of her literacy sponsors with her writing strategies represents her making a

“system” out of her experiences; not by coincidence, I think, L.A. invokes a “thread” metaphor with which to weave her literacy experiences, to be discussed later.

At the same time as she showed this enthusiasm, though, L.A. pushed back against the unit’s theme of synthesizing her literacy sponsorship with other writers’:

I hate comparing my experiences with others in a verbal setting. It feels prompted and anti-genuine all around. Whether you survey someone or ask them directly, there is no way they can give you a response that will truly surprise you...Don’t get me wrong, I love direct burning questions, but I hate that for this, there were already some premeditated answers that accompany questions that only belong in a composition class...The synthesis part of the assignment was fine. I did it. I do not feel that it added anything to my paper except that I remembered my dad reading to me as a child.

L.A. believed that comparing her sponsorship to other writers’ sponsorship felt artificial and perhaps tacked onto the assignment; she failed to see the benefit of synthesizing her experiences with those of other writers. In fact, on the same day I asked students to compose a poem about their Spring Break (which L.A. indicated was her favorite journal entry), we also discussed Malcolm X’s “Learning to Read,” and I gave students a follow-up prompt to explain how their literacy experiences overlapped with Malcolm X’s. L.A.’s response shows the apathy she had for the second prompt versus the enthusiasm she had for the poem prompt:

Here’s my meta on this journal. I knew I wanted the sleep line and everything else was chosen on the meaning I wanted to convey. If you don’t understand the sleep reference, please look it up. Very important. I crossed things out as I used them. They only need to be written one time to keep their meaning. I don’t want to dilute it. Malcolm X and I are similar because we both have a set process.

The comparison to Malcolm X is very clearly an afterthought, something L.A. tacked on to satisfy what I’d asked for. The sentence might as well say, “This is artificial. This isn’t *real* to me. I’d rather be writing about my poem—*that* is real to me.” Indeed, after reading the students’ Writing Biographies, I realized that many of them had either given the synthesis section a passing mention or even forgot to include it entirely, reducing what would have otherwise been

very strong grades. Such an ubiquitous response suggests that that part of the assignment didn't carry enough exigence for students—they didn't see why it mattered. After all, “Students must feel that there is something of value in the assignment beyond simply completing a series of tasks” (Newell, VanDerHeide, and Wilson 148), and Shaughnessy argues that “if students understand why they are being asked to learn something...they are disposed to learn it” (125). It seems that most students, including L.A., did not understand why they were being asked to synthesize their literacy sponsorship with that of other writers, and so the task was either forgotten or ignored.

But that wasn't L.A.'s only way of challenging the assignment. When L.A. says she loves “direct burning questions” but hates that there were “questions that only belong in a composition class,” she appears to be pushing back against what she perceived to be an overly restrictive assignment prompt. The Writing Biography prompt asked students to answer a particular set of questions:

-Answer the following questions about each literacy sponsor you identify:

- Do you think this sponsor had an overall positive or negative effect on your writing practices? Why?
- Do you think this sponsor had a temporary or permanent effect on your writing practices? In other words, are you still using the writing strategy you learned from this sponsor?
- Was that effect immediate, or did it take some time to materialize? Why?
- In what ways has this sponsor either helped or hindered you from reaching your writing goals?
- How did this sponsor help shape your definition of “good writing” or “bad writing”?

This list of questions commits the flaw of *telling* students what problems they should be solving, rather than letting them find and define the problems for themselves. Flower and Hayes suggest giving students practice identifying a problem and generating solutions, citing a study of expert artists which concluded that one behavior distinguishing the experts was “the breadth and depth of their exploration of the problem” (“Cognition of Discovery” 31). L.A.’s harsh response to the assignment’s prescriptivism suggests she was feeling constrained by being told which problems to solve; especially for an advanced metacognitive thinker like her, it was important for her practice that she have the liberty to choose, define, and solve her own problems.

As far as identifying her own literacy sponsors, L.A., like Giovanni, seems to have challenged herself to think creatively about her sponsors. In a journal entry which asked students to brainstorm some possible sponsors to write about in the Writing Biography, she wrote,

Last night I was thinking about my life. I went on an adventure around Fayetteville with a few friends. I used to do the same with a friend who graduated who I am very close to. I didn’t initiate the adventure driving around talking and laughing, but last night I had the urge to read my daily devotional which I have been away from for a while. It discussed how God may seemingly “close” doors but he opens new ones. I thought the random fun adventuring part of my life was over because my friend graduated, but last night I found myself surrounded by my littles in my sorority who share my values. The lineage of our “family” was still able to continue. I needed to write my thoughts to discover that my door never closed, I was just being nurtured in a little bit different way. Writing helped me discover this.

Here, L.A. discusses at least three literacy sponsors in just one passage: her friends, her devotional and spirituality in general, and her sorority “family.” And the fact that she can transition so smoothly from one to the next suggests that she is thinking about her literacy sponsorship as a thread or web of interconnected influences. As I mentioned, I believe this reflects L.A.’s effort to form a system out of her prior experiences. In fact, her Assignment 3 Meta-Analysis reflects this:

This essay is not tied together in a pretty pink bow the way that my other projects have been up to this point. That is completely intentional. I believe that since the topic of writing sponsors is sporadic and full of complex life events, they should all relate, but not in any predetermined way that suggests that I had that kind of control over my life as a child and young adult. I wanted to keep the assignment response organic with a very “part of the whole” feel because that itself is a metaphor for how each of our lives play out.

L.A.’s Assignment 3 poster reinforced this “thread” theme even more. On the poster, she drew a line connecting all of the sponsors she chose to represent, and in her verbal explanation, she clarified that the thread metaphor was a reiteration of a metaphor she’d used in her Goal Inventory. In the Goal Inventory, she wrote,

Despite the many purposes people have for writing, my biggest goal is to find greater themes connecting the concrete world to the abstract. Even if I am trying to convince someone not to cut funding for fine arts in public schools, as I may be doing in the foreseeable future, I would like to be able to create a very meaningful picture for them to envision as they read. Ideally, this image will be wound through the paragraphs like a beautiful strand of gold in a woven basket making it more valuable. Or, for the opposite effect, a strand of hair in your nachos. That decision is ultimately up to me, the writer.

L.A. explained that she saw her literacy sponsors in a similar way as the “meaningful picture” she sought to create with her words: as a sort of tapestry of influences composed of—depending on the perspective—a “beautiful strand of gold” or a “strand of hair in your nachos.” This metaphor seems to resonate with her operational goal in Assignment 3 of showing that all of her sponsors relate but “not in any predetermined way.” It seems that the Writing Biography assignment presented L.A. with the opportunity to explore new territory with her writing and try her hand at some creative writing strategies.

In fact, as we saw in Chapter IV, several students seemed to have used Assignment 3 as a means to test out new strategies; Ace similarly used an extended metaphor of construction to represent his literacy sponsorship, and Delilah claimed in her Meta-Analysis that she tried a new strategy for overcoming her procrastination. Dewey makes it clear that this willingness to devise

new strategies and refine (or discard) old ones is necessary for metacognitive thought: “The [learner] ought to have a positive consciousness of what he is about, and to be able to judge and criticise his respective acts...enabling him properly to appreciate his failures and to estimate them at their right value” (“Ethical Principles” 117); indeed, “The artist studies the progress of his own attempts to see what succeeds and what fails” (“The Nature of Method” 393). Students can only assess the strengths and weaknesses of a writing strategy if they have the opportunity to try out that strategy in the first place. Because L.A. and several of her classmates felt at ease to test new strategies, the students had the chance to gauge how effective those strategies proved to be, not only adding to their storehouse of potential strategies but also giving them practice with metacognitively evaluating their strategies.

Sharing her Strategies

Like Giovanni, L.A. worked better with her Unit 4 group than her Unit 2 group; in her group’s Assignment 4 Meta-Analysis, she wrote somewhat bitterly,

In L.A.’s mind, she was relieved to have a group that was good at communicating and didn’t put things off until last minute (unlike the last project when her counterparts didn’t do anything until after the in-class presentation)...L.A. really enjoyed this assignment because it was very easy to compile and do even though it was a group project. L.A. hates group projects. She wonders if she would have had a good experience if her group were made up of different people.

Despite this allegedly rare positive experience, she confidently stated in her interview that there were too many group projects in the course, probably because her negative experience with the Writing Profile predisposed her to dread other group projects. Had L.A. gotten along better with her first group, she might have entered the final assignment with a more optimistic outlook, which may have motivated her to put even more effort into it. Donovan et al. argue that classrooms conducive to learning must promote “intellectual camaraderie and the attitudes toward learning that build a sense of community” (22). “In such a community,” the authors write,

“Students might help one another solve problems by building on each other’s knowledge” (22). L.A.’s sense that this group was “good at communicating” and didn’t put things off until the last minute, in contrast to her sense of Giovanni and Forrest, suggests that she found the sort of intellectual camaraderie in this group favorable for working toward her own goals. It probably also helped that her peers shared one of her goals, writing with more creativity, allowing more opportunities for them to build on each other’s knowledge and experiences. In this case, it seems she found herself able to build on the knowledge of her classmates in a way she hadn’t been able to with the Writing Profile—in other words, the collaborative context of the Writing Guide may have presented her with more opportunities to engage in the Deweyan synthesis she was looking for.

However, L.A. also used the assignment as an opportunity to challenge the very notion of creativity. She wrote in the Meta-Analysis,

When she found out that her group would be writing about “how to be creative,” she was excited. L.A. feels that “creative” is a multiple meaning word and that it’s actually the most useless of words used to describe the mood of someone’s work. She believes that the term “creative” suggests that some people are more creative than others by nature, but the reality is that not everyone has been shown how to use their actual natural abilities in a way that meets their own learning style. Creativity is too subjective to justifiably classify someone’s writing as “creative” without being able to say that any other person’s writing is also creative. However, someone CAN do things that make their writing more interesting and memorable to the general audience. With this mindset, L.A. began her project on giving tips to make writing more memorable.

I believe this marks another moment in the course when L.A.—to use her words—“did her own thing” because she needed a greater challenge. When I created the “adding creativity to writing” groups, I didn’t anticipate that any of the students would take issue with how I had termed that goal. But L.A. pushes back against the “creativity” part of that title, probably for several reasons. First, it at least partially reflects her teaching philosophy; after all, several influential figures in music education, particularly Csikszentmihalyi, complicate the issue of creativity, suggesting it

cannot be pared down to a neat, predictable set of qualities—nor, perhaps, should it be. If L.A. is using her existing knowledge and attitudes about creativity to help her respond to the assignment, that means she is engaging in fairly sophisticated Deweyan synthesis: she’s using old information to solve a new problem. Her response also suggests an impressive level of metacognition, as she is able to articulate with specificity *why* she feels this way about creativity and *how* those attitudes influenced her approach to the problem (the assignment). The passage above illustrates the dexterity and confidence with which L.A. is able to take inventory of her beliefs and use them to formulate a working strategy for the assignment. I also simply like the fact that L.A. feels at liberty to challenge the assignment in the first place, and while I don’t think her pushback here necessarily reflects any growth on her part (she was this way from the beginning of the course), it appears that her excitement for the assignment, at least to an extent, *came from* her need to push back against it. For her, it was stimulating to have an opportunity to challenge the underlying assumptions of the project while still meeting the requirements of the project.

In her group’s Writing Guide, L.A. continued to expand upon her “thread” metaphor.

Here is the strategy she shared in her group’s pamphlet (emphasis mine):

The **Woven Threads** of Writing

When writing, you may want to consider using metaphors that are meaningful to you. Try using situations or symbols that create strong feelings in your mind. For example: Trees can symbolize strength and durability with their roots. This now means you could describe a person in a specific situation as having “hope that her roots would support her even in the bleakest drought.”

Also consider that a symbol like trees can stand for many things including new life, the color green, something old and much more. If it is relatively close to trees, you can maneuver your arguments and statements to fit your writing scenario. On the flip side, you must remember to be consistent. If you use a tree to symbolize new life, you may want to be specific and refer to them as “saplings” instead of the “old wise willow.”

Other ideas for multiple meaning symbols/metaphors are:

Water- life, rebirth, purity, cleanliness, femininity
 Bears (animals)- Protective, unchanging, wild
 Music- melodious, harmonious, peaceful, chaotic, living

Once you pick your symbol, it can be useful to mind map all of the associations you can think of that go with it like in the examples above. Then you will have created a list of descriptors that you can **thread** throughout your writing to **weave your ideas together**.

The thread metaphor seems to have worked well for L.A.; it was a strategy for responding to all four of the course's assignments that also meant something important to her. It seems to be a metaphor that L.A. brought with her to the course and then used throughout the course to make sense of its questions and assignments. In this way, L.A.'s extension of this metaphor across the semester represents yet another form of Deweyan synthesis: it represents her movement "from differences toward unity...from confusion and disorder to system" (*Experience and Nature* 66). The thread metaphor helped L.A. make connections between her literacy sponsors and her present writing strategies, and the analogy reflects her precocious creative imagination.

I want to end by discussing a few responses from L.A. which suggest that students may be able to transfer their experiences with the elements of effective practice to other disciplinary contexts. In her end-of-semester interview, L.A. spoke at length about her favorite journal entry of the semester, a Unit 3 entry which asked students to compose a poem about how they spent their Spring Break:

In the moment, at that time, I was playing an Eric Whitacre piece in band, and his pieces are poetic. And all of the lines of the poem were titles of a composition of his, and so it was really interesting to me that they went through...I ended up type—or writing, "Sleep." And then "goodnight moon," because those are both two compositions that have to do with peacefulness and basically tomorrow's a fresh day...I don't know, I was just really feeling that one at the time because for me, I think poems are fun for me to do generally because I like to be sneaky and creative. But at that time, it was the perfect time to ask that question because that had been on my mind, and it just kind of came out.

On the one hand, it could be argued that I just so happened to give L.A. a timely prompt that invited her to use a musical experience to answer it. On the other hand, I believe a curriculum

built around the elements of effective practice lends itself well to giving students opportunities to merge their personal interests with its subject matter, which, as Dewey says, is crucial to synthesis (*How We Think* 45). L.A.'s responses elsewhere in Unit 4 also hint at potential for transferability. In her Writing Guide Meta-Analysis, her group wrote,

She [L.A.] likes to use symbolism in her own writing because it gives a visual representation for her words. This can appeal to more people depending on how they process information. This is a very educator approach, which fits considering L.A. is studying music education.

Here, L.A. adapts a strategy from her discipline of education (prior knowledge) to writing practice (new problem), although she doesn't go into much detail about the strategy: what uses does music education in particular have for the visual representation of information? Expanding on this idea could lead L.A. to make even more interesting and useful connections between this assignment and her future career.

In the introduction of this dissertation, I discussed the dangers of calling metacognition “transferable.” It *is* transferable in the sense that the sub-skills of metacognition—planning, monitoring, and evaluating—can be applied to any skill. The catch is that they must be applied *differently* from skill to skill. Because of this, metacognition cannot be taught or learned outside of context; it must work as an undercurrent to some other subject matter (e.g., writing). Donovan et al., for example, caution that “an emphasis on metacognition needs to accompany instruction in each of the disciplines, because the type of *monitoring* required will vary” (17, emphasis mine). In other words, the type of monitoring required for effective metacognition in writing will differ from the type required in music, biology, mathematics, and so on. The authors agree that expertise is the result of synthesis, the interconnecting of accumulated knowledge acquired through experience to create frameworks for making sense of and solving new problems. Interestingly, however, they refer to this ability not as *synthesis* but as *transfer*, claiming that “it

allows the student to apply what was learned in new situations and to learn related information more quickly” (13). This suggests that giving students practice with Deweyan synthesis—allowing them the opportunity to use prior knowledge and experiences to solve new problems that meet them at their ZPD—may at the very least equip them with a greater “storehouse of resources” (*Art as Experience* 17) they can draw on when solving new problems, even those in other disciplines. Several of L.A.’s responses, including her statements that it was “cool” to see how a writing class could inform her “more career focused classes” and that the class demonstrated pedagogical concepts that “don’t pertain to music but that [she] could bring to music, suggest that a curriculum focused on the elements of effective practice could equip students with more tools to add to their toolbox (to use Stephen King’s language), more experiences to add to their storehouse (to use Dewey’s language).

Conclusion

I chose L.A. for a case study in part because she was an obvious outlier: she was certainly not representative of the typical Composition II student, both in terms of writing ability and metacognitive ability. Some may argue that this makes her a poor case study choice because she doesn’t evince the typical student response to the elements of effective practice. On the contrary, I contend that this makes L.A. the *perfect* candidate for a case study: she illustrates the difficulty of incorporating the elements in a way that best serves *all* students. Particularly when it comes to maintaining challenge, what constitutes best practice will vary from student to student; students below and above the “typical” student will require an even more individualistic approach. In several ways, L.A. is a perfect counterpart to Giovanni: whereas Giovanni seems to have at least initially found the course challenging in that he had a tough time seeing the course in specifically writerly terms, L.A. was able to immediately and fluently apply her advanced metacognitive

abilities to the skill of writing—perhaps even to the extent that the course was not asking enough of her. This difficulty of making the course adequately challenging for all students is one of the most significant complications with a “Perfect Practice” curriculum, and I discuss it further in the next chapter.

Chapters IV, V, and VI have discussed the results of the course from the students’ perspective: how did they respond to a writing curriculum operating on the premise that writing is a practice-able skill, and how did the elements of effective practice manifest in their written work and their comments about the course? The next chapter, in contrast, examines the results through a pedagogical lens: what are the advantages and disadvantages of teaching such a course? What are the challenges of doing so, and what are some potential ways to overcome those challenges? What could have been done differently—whether in terms of the design of the course or the teaching of it—to better reinforce the elements of effective practice? Peter Hoffman-Kipp, Alfredo Artiles, and Laura López-Torres argue that teacher reflection is actually “a practice embedded in a larger process, namely teacher learning” (248), and they stress that effective reflection is a matter of praxis, “the dialectical union of reflection and action” (249). Praxis represents the nexus of theory and practice; it is the alignment of what we *say* we do (or what we want to do) with what we *actually* do as educators. Teacher reflection, the authors conclude, is therefore itself a “metacognitive mechanism” (253), a means of thinking about our own pedagogical strategies: where do they come from, how and why do we use them, and why are they effective (or not)? Chapter VII, then, turns the metacognitive burden over to us, the teachers, by asking us to evaluate our own strategies for teaching a course centered on the elements of effective practice.

Chapter VII: Discussion and Pedagogical Implications

If nothing else, the results discussed in the previous three chapters show that implementing the elements of effective practice into a curriculum is easier said than done. As is often the case, it's easy to hypothesize on paper about how students might respond to a certain curricular structure, but it is entirely different matter to actually implement that structure in a way that is not only logistically practical but pedagogically practical as well. Hence, as I concluded in Chapter VI, successful teacher reflection means thinking critically about *praxis*, the juncture of theory and practice (Hoffman-Kipp, Artiles, and López-Torres 249). We must ask ourselves, "Did this curriculum have the pedagogical effects we expected and/or intended it to have, and why or why not?" In this way, teacher reflection entails a great deal of metacognition on the educator's part: it requires us to consider not just the successes and shortcomings of a curriculum but *what* exactly caused those successes and shortcomings. In other words, *why* were certain aspects of the curriculum more successful than others, and *how* could we address the less successful aspects in the future? On that note, this chapter offers a final, in-depth look into both the successes and the obstacles of centering a college writing course on the elements of effective practice.

Success: Setting Effective Goals

By and large, the Goal Inventory assignment helped students set "clear, measurable, timely goals" (Oare 41) for themselves. Students' responses indicate that they found the assignment valuable in a number of ways. First, several students indicated that setting their own goals allowed them to find their own direction in the course; Delilah, for instance, responded in her interview,

I think the thing that stood out the most was the emphasis on finding things that you enjoy about writing or finding ways that work better for you to enjoy writing or to write

well, rather than, “This is the only way you can do this,” which was nice, and I appreciate it.

Students like Delilah appreciated that from the first assignment, the course allowed them to reflect on their strategies for solving writing problems exigent to them (e.g., procrastination, in Delilah’s case), that it allowed them to do their own “finding,” as Delilah put it, rather than have the instructor do the finding for them. Charles MacArthur writes that “it is important to provide a classroom context in which writing has meaningful goals” and that “one of the most common and best ways to make writing meaningful is to arrange *authentic* writing tasks” (234, emphasis mine). And Dewey reminds us that a problem has no educational value to students unless they feel “there is something the matter” (“Ends and Values” 90), a real, authentic problem in need of solving. Having students set their own goals seems to have made the rest of the course’s assignments more exigent to them, as students began to see how the writing problems they were being asked to solve aligned with the goals they had set from the beginning.

The students also appreciated how setting goals at the beginning of the course had a lasting effect in that it shaped my feedback to them on all of the future assignments; Elian, for example, said,

I really liked the whole aspect of, like, the way you set it up was to help us get our goals. In other comp classes, we were all taught the same way, so we would be writing a paper and [the instructor] would try to help everybody on one topic, versus I set my own goals in your class so that you would try to help me specifically for those goals.

Taking inventory of students’ goals puts the instructor in a more advantageous position to individualize feedback according to each student’s priorities. As Shute writes, feedback should be goal-oriented: “Research has shown that for a learner to remain motivated and engaged depends on a close match between a learner’s goals and his or her expectations that these goals can be met” (161). This is just one example of how interrelated the elements of effective practice

are: having students set effective goals puts them in a better position to evaluate feedback later in the course, as it ensures that the feedback they do receive (from the instructor, at least) is worth evaluating in the first place. Csikszentmihalyi argues that students can only achieve a flow state when they have clear goals and *useful* feedback on how to pursue those goals (132). Giving students feedback which speaks directly to their goals, therefore, may help them develop more intrinsic motivation to write.

Setting effective goals also overlaps with maintaining appropriate challenge, as several of the students' responses suggest. The Goal Inventory challenged students in a way few of them had been challenged before. In his interview, Giovanni said,

I think the most unique aspect about [the course] was it challenged me to make goals, that I needed to be aware of my weaknesses. Because everyone has such a developed ego, and it's hard for us to admit sometimes what we're struggling at. And so being able to identify my weaknesses and goals related to writing, whether that's procrastination or something else within the writing process, I would say that I think this really helped me develop myself as a writer and also the ability to set realistic goals, set attainable goals, and kind of see the process through.

This was a moment of challenge for Giovanni: the Goal Inventory was asking him to do something new and unusual. And even though that assignment was not necessarily a complete success for Giovanni, as Chapter V discussed, it *was* a success in that it forced Giovanni to grapple with essential components of metacognitive thought, such as being aware of one's weaknesses and acknowledging what a learner is "struggling at." Other students echoed Giovanni's sentiments that setting writing goals, at least consciously, was perhaps a foreign concept to them but not one that they felt was completely beyond their abilities. In keeping with Vygotsky's ZPD model, the Goal Inventory asked them to do the new and the difficult, but not the impossible.

Despite these successes of the first unit's emphasis on setting effective goals, there were a few obstacles in making sure that this element of effective practice resonated with all students. First, asking students to do something as broad as setting goals for the course and beyond invites any number of different interpretations. Some students thought primarily in terms of formal features such as grammar and punctuation; others, like Giovanni, thought in terms of lofty (and somewhat vague) goals that may or may not have even had much to do directly with writing. How students interpret what it means to set goals at the beginning of the course will affect how they interpret and respond to the rest of the course as well. By comparing just Giovanni's and L.A.'s interpretation of this initial writing problem, we see how differently they attempted to solve the course's future writing problems. Teachers looking to incorporate this element must therefore consider how they want students to interpret the act of "setting goals" in a writing course: perhaps they should spend more time early in the course conversing with students about what exactly makes an effective writing goal. After all, a writing course should, above all else, center on the subject matter of *writing*, and students should be setting writerly goals. Donovan et al. stress that metacognitive strategies "are not generic across subjects" and must be taught in the context of some other subject matter (15); I would go a step further and argue that practice itself is something that can't be taught out of context. A course on how to practice could explain the importance of the elements, the importance of doing things like setting goals and learning from mistakes, but without a particular skill set to which one could apply the elements, they are just vague, generic platitudes. Allowing too broad an interpretation of what it means to set goals in the course could lead some students to view the course as a course on practice itself rather than a course specifically on the practice of writing.

In addition, “Perfect Practice and Writing” could have given students more opportunities to set effective operational goals. Flower and Hayes observe that novice writers “frequently depend on very abstract, undeveloped top-level goals,” or they rely on “only very low-level goals, such as finishing a sentence or correctly spelling a word” (“Cognitive Process Theory” 379). In contrast, expert writers have a rich network of operational goals which they are constantly refining and returning to as they write. Writing teachers looking to have their students set effective goals should not overlook the importance of setting these shorter-term operational goals in addition to larger goals for the course and beyond, as expert writers are constantly updating, revisiting, and setting new operational goals as part of their problem-solving process. Douglas Hill writes that “goals should be thought of as directions rather than actual destinations” (64), echoing Dewey’s sentiments that there is always another “port” to sail toward (“The Nature of Aims” 70). Experts set operational goals in such a way that the end of one goal becomes the beginning of another: each goal “is in its turn but the starting-point of further reconstruction” (“Need for a Philosophy” 8). While students did have to report on their process for completing each assignment in their Meta-Analyses, they could have done more *while* working on these assignments to set goals for completing them. For example, the instructor could require students to turn in a checklist of operational goals for completing each assignment shortly after assigning it and assign periodic “status updates” in which students report on what problems they are confronting while writing, along with how they are trying to solve those problems. Conferences would also provide the perfect opportunity to work with each student to set clear, specific operational goals for the current assignment. Hill, in fact, advises that collaborating with students to set operational goals can “help them find their own way” (88) in solving problems, at least until the students become confident enough to “find those characteristic problem-solving powers

within themselves” (89). By doing more to model effective operational goal setting, the instructor can get students closer to developing that ability for themselves.

Another opportunity for improvement is to have students articulate sub-goals for their larger goals, which may help them better understand how to precisely define their goals in specific, realistic, and relevant terms. One problem with the Goal Inventory is that, while students were (for the most part) adept at choosing goals that would help them address their self-perceived writing weaknesses, many of them couldn't really put their finger on the *specific* weaknesses they were trying to overcome. For example, more than half of the thirty-eight students set the goal of improving their grammar and mechanics. But few of those students identified a particular grammatical or mechanical concept that they struggled with (e.g., verb tense, comma usage). It may be that these students have never been made aware of the specific issues with their grammatical/mechanical skill; they only know that *something* is wrong with it. Because the high-stakes testing students are accustomed to is more concerned with *whether* a student's answer is correct or incorrect than with *why* the answer is correct or incorrect (Gere, Christenbury, and Sassi 31), many students likely don't know what exactly they should be practicing—and therefore what goals they should set. They may resort to rather broad nouns like “grammar,” “organization,” and “flow” without really knowing what those things mean, or at the very least, not knowing how to go about practicing them in a fruitful way. Perhaps the instructor could prompt them to think more critically about their goals by asking what other factors go into making their writing improve in the way they want it to. For example, a student who wants to make her writing more creative would then need to explore what specific features make a text creative, such as colorful diction, sentence variety, and clever use of figurative and stylistic devices. Perhaps these smaller concepts could constitute sub-goals that the student could track in

her larger pursuit of a more creative voice in her writing. Such an approach might work well for encouraging students like Giovanni to interpret their broad goals in a more specific, writerly way.

Such an approach might also work well to set the stage for future reflection on their goals, an opportunity I discuss in greater detail later. As students progress through the semester, they are likely to gain a greater understanding of what exactly each of their goals means to them and what sub-goals would help them achieve that goal. The student who sets the vague goal of adding more creativity to her writing might gradually come to see the specific textual elements that factor into that goal. Giving students the chance to later return to, adapt, hone, or perhaps even abandon one or more of their goals—even longer-term goals—aligns with the self-teaching behavior of experts in both writing and music; Donovan et al. write that students can “take control of their own learning by defining learning goals and monitoring their progress in achieving them” (13). Class activities which ask students to reflect on their progress toward their goals—and possibly make adjustments to those goals—could encourage students to start thinking metacognitively about their goals. This could then give them the tools to articulate their goals in more specific, practical terms.

Success: Appreciating Error and Failure

It is perhaps this element that “Perfect Practice and Writing” most successfully implemented. As Chapter IV showed, many students voiced a change in attitude toward error and failure over the course of the semester, perhaps due in part to my efforts to foster a mentor-friend dynamic. Frequently corresponding with students (both in writing and in person), making it clear that writing can be challenging even for the experts, and generally making an effort to reduce the power differential between students and instructor all helped in directing my students toward

adopting a more accepting attitude toward error and failure, which in turn seems to have made many of them more inclined to take risks in their writing. For example, Delilah opened her Writing Biography Meta-Analysis with the sentence, “I decided to try a different approach with this assignment,” and she concluded, “I enjoyed this assignment especially trying something new to overcome my procrastination.” And Elian commented in his interview that by the end of the class, he had come to see that “failure is only if you don’t try.” In their writing itself, several students showed an increased willingness to take chances at the risk of failure, even if they didn’t acknowledge that shift in attitude in their Meta-Analyses. In Chapter IV, I gave the example of the student who used Assignment 3 to depart from the rather safe prose he had displayed in Assignment 1: he used more figurative language, played with a more conversational tone, and generally seemed to approach the assignment with a more sophisticated, deliberate idea of the strategies he wanted to use. Students like him seemed comfortable using class assignments—even graded ones—as playgrounds for new, potentially risky strategies.

This element is especially important to a curriculum focused on practice because risk taking is a distinguishing quality of experts’ practice: Rubinstein and Firstenberg, for example, observe that successful problem solving “depends on a state of mind, as does learning...productive attitudes will enable us to take risks, to overcome fear of failure, and to overcome setbacks in our efforts to solve problems” (24). And music educators agree that the best music education is that which invites risk taking; to re-quote Peter Boonshaft, “The joy of making mistakes is in learning from them, growing as a result of information gained from those mistakes” (172). The more writing educators can instill in students the confidence to try new things, the more likely they will gain an appreciation for—rather than a dread of—making mistakes in their writing.

But something important for compositionists to consider is the transferability of this element. In other words, were the positive changes in attitude I observed in my students permanent or temporary? When these students have to write again for another class, another instructor, will they retain this sort of confidence, this willingness to take risks? Or will they revert to the safe prose that they are more sure will earn them a passing grade? My course established a very specific context in which students wrote, a context that explicitly encouraged risk taking, error, and self-reflection. When students enter a new writing context, particularly one in their own disciplines, a whole new set of expectations and priorities will be laid upon them which may not jibe with those of a “Perfect Practice” writing course. In other words, their next instructor may not (and probably will not) have the same attitude about risk taking that I do, and if my students are punished for taking risks with their writing in the future, they may regress to safer writing strategies simply out of self-preservation.

In addition, in “Big Rubrics and Weird Genres,” Chris Anson et al. make it clear that evaluative criteria cannot be separated from their disciplinary context—they must be matched to the “ways of knowing and doing” (Carter 385) in each specific discipline. Students may be able to transfer a certain skill—say, the skill of rhetorical analysis—across disciplines, but rhetorical analysis in one discipline does not look the same and is not done the same as rhetorical analysis in another. In the same way, certain risks that would be acceptable or even welcome in a composition classroom may be deemed unacceptable in other disciplines, meaning students may have to stifle these impulses for the sake of adhering to disciplinary conventions. Writing teachers prioritizing this element are therefore caught between wanting their students to take more risks in their writing on the one hand and doing what is best for their students in the long term on the other. What can writing teachers do to make sure students leave the course with a

practical attitude toward risk taking, one that will have a permanent and positive effect on the quality of their writing?

The question, I think, is how to clarify for students the difference between *wise* risk taking and *unwise* risk taking. One of the most useful class sessions, in my opinion, was the day in Unit 2 when we discussed Stephen King's "toolbox" metaphor, which he describes as such: "I want to suggest that to write to your best abilities, it behooves you to construct your own toolbox and then build up enough muscle so you can carry it with you. Then, instead of looking at a hard job and getting discouraged, you will perhaps seize the correct tool and get immediately to work" (106). In other words, King argues, adept writers carry with them a large inventory of writing strategies and moves (the tools), but at the same time, they know that different writing contexts (the problems) require different tools. As Flower and Hayes indicate, one hallmark of expert writers, in addition to being able to develop new strategies, is the ability to revise or even abandon strategies which aren't working ("Cognitive Process Theory" 386)—expert writers are more adept than novices at distinguishing between the effective tools and ineffective tools for any given writing problem. Composition teachers seeking to implement this element could devise more frequent opportunities to practice this toolbox concept. The instructor could occasionally have students tackle the same writing problem with different contexts in mind (e.g., have students reflect on how they completed an assignment to three different audiences: a peer, the instructor, and themselves). This is similar to a strategy offered by Gere, Christenbury, and Sassi for giving students practice writing for standardized tests: have students roleplay as the *evaluators* of such tests rather than the test-takers (108)—what would such an audience be looking for, and why? What are the demands of *this particular* rhetorical situation, and in what ways does the "game" change? As students get more practice writing for different situations and

to people other than their teacher, they may acquire a greater ability to adapt their writing strategies fluidly—in other words, they may become better at recognizing the right tool for the job. This, in turn, could result in a more permanent sense of confidence that would carry over to future writing contexts.

Also, classrooms seeking to implement this element could give students more practice writing in their own disciplines to further encourage this versatility. After all, “improving at discipline-specific writing” was the second most commonly set goal on the Goal Inventories, suggesting that a significant number of students wanted the course to help them learn the discourses of their majors. In a writing course centered on the elements, where individualization is already an essential component, it would not be difficult for students who explicitly want to practice business writing, medical writing, legal writing, and so on to have several opportunities to do so. Major assignments could accommodate this approach; collaborative assignments, for instance, could group students with the same major together and add the requirement that they complete their project in a genre appropriate to their discipline (e.g., a group of business students must write their paper in the form of a business brief, or a group of pre-med students must observe the conventions of medical journal articles). This approach could allow these students to pursue the same objectives of the assignment as everyone else while also giving them exposure to and practice with their future discourses. It could also make the assignments more exigent to students, as they would have “a strong motivation or interest in [the] domain” (Kitchener and King 895). Similarly, on journal entries written by students with discipline-related goals, the teacher could give students brief exercises geared toward their disciplines’ writing expectations. Elian, for example, aspires to be a lawyer and therefore set the goal of improving his argumentative writing technique. It would be easy enough for the teacher to occasionally give a

student like Elian a simple exercise for practicing this goal (e.g., have him briefly argue a point using a pathos appeal, an ethos appeal, and a logos appeal, or have him take a stance on a topic and then list potential counterarguments to his stance). Such exercises would give students like Elian the opportunity to practice discipline-specific writing strategies without forcing students who did *not* set goals related to discipline-specific writing to do the same.

Shortcoming: Maintaining Appropriate Challenge

This, I would argue, was the most difficult element of effective practice to implement in a writing course, and I would be so bold as to anticipate it being the most difficult element to implement in just about *any* standard college curriculum. Ensuring that each student is operating in her individual ZPD requires extensive individualization, which becomes increasingly difficult with larger numbers of students. As Vygotsky writes, a one-size-fits-all method of teaching will invariably fail to satisfy the needs of all students: “There can be no universal schema that adequately represents the dynamic relation between internal and external aspects of development. Therefore, a functional learning system of one [student] may not be identical to that of another” (125). In the case of this writing course, some students went under-challenged rather than over-challenged; comments from L.A. and the student who concluded that she had learned nothing from the course suggest that the curriculum did not pose enough of a challenge to maintain their interest. Importantly, I designed the course with first-year students in mind and did not want to overestimate their metacognitive abilities. In general, this seems to have been the wise approach, as again, most students *did* find challenge in the course’s writing problems. But a drawback of this approach is that those students who are already experienced with thinking metacognitively weren’t challenged enough.

Therefore, writing teachers looking to incorporate this element must consider ways to, first of all, identify those students for whom the course isn't offering appropriate challenge. As Hill puts it, instructors must "be aware of where the student is at any one time in order to motivate him or her to fulfill the proper sequence of needs" (77), and this requires not just identifying students' relative skill levels at the beginning of the course but monitoring their progress throughout the course, adjusting the challenge accordingly. Class exercises and activities early in the course could help clue the teacher into each student's overall skill level with writing upon entering the course, and subsequent exercises could then allow the teacher to observe the student's progress on certain subject matter. Open-ended exercises would likely work more effectively than fill-in-the-blank-type exercises, as opportunities to generate their *own* answers rather than the correct answer expected by the instructor could give students further outlets to try novel solutions. Nancy Sommers warns that when students are asked to solve the sorts of what's-in-my-pocket questions or even larger-scale essay prompts that invite a particular answer or response, they tend to "defer to the voice of the academy" (223), falling back on the tried-and-true strategies they are certain will earn them points. Exercises such as those in Joe Glaser's *Understanding Style* invite more open-ended, creative responses; for example, an exercise on concision asks readers to rewrite wordy passages "so they are only half as long and easier to read." Glaser says to "change the sentence structure however you like, but include the essential content of the original." Therefore, readers still have a great deal of control over how they approach this writing problem; they can still use their preferred strategies to revise the passages for concision. A more limiting exercise might have readers cross out unnecessary words or phrases, which would accomplish the same purpose of teaching concision but without encouraging the same amount of independent problem solving. Readers would be expected to

recognize all the same words and phrases as unnecessary—in other words, readers would all be expected to arrive at the same answer. More open-ended exercises provide the teacher with greater insight into each student’s problem solving strategies, which could help in identifying each student’s ZPD.

However, knowing each student’s ZPD and giving each student tasks appropriate to her ZPD are entirely different matters, and the trickier part of implementing this element is figuring out the logistics behind tailoring the course’s challenge level on an individual basis. It is very likely impossible to provide a different challenge level to every student in the course: to ensure fairness, the graded assignments must require the same expectations from students, and all students attend the same class meetings. The key to incorporating this element in a writing course, I argue, is to capitalize on those opportunities of individualized communication between the students and the teacher. In the first class meeting after Spring Break, I assigned a journal entry in which students were to write a poem about what they did over the break. The idea was to throw students a curveball, to encourage them to be playful with their writing—I was seeking to capitalize on Gerald Klickstein’s sentiment that playful practice leads to taking “whatever creative risks you please” (312). By providing an opportunity for them to try new, interesting things in their writing that they probably wouldn’t expect to do in college-level writing, I wanted students to get more comfortable taking creative risks. But based on the students’ audible groans and blank expressions when I presented that task, I assumed they disliked it. To my surprise, though, several students later commented that they enjoyed that particular journal entry more than any other and wished we had done more tasks similar to that one. Elian said,

You know, I think the journal things, those were really helpful. I think you could have implemented a little bit more of those, like those ones where you had to write poems, because that one was hard. I could not do it, but I think it was a really good exercise for me to expand or, you know, like, just to write every day. You know, when I’m asked to

write a poem or asked to write all rhyming, it makes it a little harder. It makes me, it makes it a little funner too.

Interestingly, Elian credits the poem journal entry as being not only more challenging than the other entries but also more enjoyable, suggesting he equates challenge with pleasure. This attitude aligns with Csikszentmihalyi's criteria for the flow state, one of which is appropriate challenge (132). A learner is more likely to reach that state of pure intrinsic motivation, Csikszentmihalyi says, when the learner perceives the task as challenging but not impossible. Likewise, L.A. commented about the same prompt,

I don't know, I was just really feeling that one at the time because for me, I think poems are fun for me to do generally because I like to be sneaky and creative. But at that time it was like the perfect time to ask that question because that had been on my mind, and it just kind of came out.

For L.A., this particular entry resonated with her desire to be “sneaky and creative” with her writing: it presented her with the opportunity to work toward one of her primary goals—writing with more emotion—in a way that other journal entries did not. In addition, not only did these students enjoy the creative freedom offered by the prompt, they were able to relate it to their personal experiences, making the assignment more exigent to them and encouraging synthesis. It allowed them the opportunity to engage in Simonton's “combinatory play” (29), a hallmark of creative thought. Perhaps I misread the groans and blank expressions as signs of disliking this prompt when they were actually signs of being challenged by it. Incorporating more prompts that invite creative response could go a long way toward fostering in students the intrinsic motivation to write while still challenging them at a level appropriate to their ZPD.

L.A. had another suggestion for the journal entries in her interview. She brought up her I-have-lots-of-thoughts-today journal entry and explained a potential way that prompt could have challenged her further:

L.A.:

I think that I still kind of answered it, followed, like, kind of prompt, but I think that one, for me, could have been, like, the question—

Me:

It was just kind of hard to respond to that sort of prompt?

L.A.:

Yeah, yeah. Like, maybe if it was, “What are your thoughts about talent? Um...

Me:

Okay.

L.A.:

And then give a list of things you could talk about, like, “How do you get talented? What do you think talent is? Can you prove—” maybe not to answer all of those questions since we had five minutes and that might stress some people out (laughs), but maybe making that one a little bit more open-ended. Obviously, I wrote like a page on this one so it wasn’t that difficult, but...”

Giving students a variety of questions to answer broadens the prompt, allowing students greater control over how they interpret and respond to it. David Bartholomae observes that unconfident writers often feel a “lack of control” (255) over the writing problems they face; they operate in the Multiplicity Subordinate stage of Perry’s scheme: “Uncertainty is now unavoidable... Nothing seems to be left but ‘good expression’” (29). Unable to devise their own solutions to the problems before them, these writers try to figure out what their instructors are looking for—“what they want” (29). L.A.’s response suggests that there were at least a few occasions where students felt coaxed into responding in a certain way or perhaps telling me what I wanted to hear. In their study of expert problem solvers, Bloom and Broder found that identifying the problem was just as, if not more, important as solving the problem: “The successful and unsuccessful students differed in their ability both to understand what they were

supposed to do and to keep this in mind as they worked toward a solution” (14). Making activities such as journal entries more open-ended could give students more opportunities to define and pursue their own problems, which in turn could help make sure they stayed appropriately challenged throughout the course.

One-on-one conferencing also allows the student and teacher to discuss each student’s individual challenges in a way that the regular classroom meetings cannot. Rather than use conference time to dispense the guidelines of or tips for completing the upcoming assignment (which students can get from the prompt anyway), the teacher could use this time to take inventory of the student’s particular struggles with the assignment and provide relevant feedback specifically tailored to those struggles. And conferences need not focus only on current writing assignments; in fact, presenting conferences as opportunities to simply discuss students’ progress in the course in general as opposed to their progress on a singular assignment could help engender a process-over-product attitude in students. This way, conferences become more about meeting students where they are rather than assuming all students are being equally challenged by the course material. Used wisely, conferences could resemble the private lessons common to music education, where instruction is tailored to the individual rather than an entire class, or the typical appointment at a writing center. As I wrote in Chapter II, writing center theory has long embraced the value of individualization; Stephen North famously wrote in “The Idea of a Writing Center” that the writing center’s goal is to “produce better writers, not better writing” (438) with a curriculum that “begin[s] from where the student is” and “move[s] where the student moves” (439). North calls this a “pedagogy of direct intervention” (439) in that the tutor *intervenes* in the student’s problem-solving process as a mentor but does not *interrupt* the process by, say, correcting the text for the student or otherwise encouraging the student to make

whatever changes the tutor thinks would work best. Conferencing allows writing teachers to replicate the writing center's ability to begin instruction at the student's current skill level and adapt instruction as the student's skill level fluctuates over time.

In addition, in his experiments, it was not uncommon for Vygotsky to give students tasks beyond their current abilities so as to see how they coped with the challenge (13). Giving them such assignments resulted in "more intensive efforts to solve the problem" (34), providing a window into how the student actually strategized to solve problems, both for Vygotsky (the experimenter) and for the student himself. And Chaffin and Crawford posit that one difference between experts and novices may be that experts are better able to recognize difficulty when they see it (177), which would make them better able to set appropriate challenge for *themselves*. Therefore, using conferences this way could not only better attune the teacher to what counts as appropriate challenge for each student, it could also provide more opportunities for students to practice identifying their own skill levels and setting appropriate challenges for themselves, skills that would ideally reach a state of automaticity later in their writing careers. North even comments that preferably, "all writers would have their own ready auditor...who would not only listen but draw them out, ask them questions they would not think to ask themselves" (440). Developing what North calls an "auditor" (which seems similar to Flower and Hayes' monitor) provides yet another benefit for sophisticated metacognitive thinkers: a heightened ability to detect challenge and even set appropriate challenges for themselves.

Shortcoming: Evaluating Feedback

The results from the previous three chapters suggest that students generally found my individualized approach to feedback useful for helping them work toward their goals. Beginning the course with a good understanding of what my students wanted to achieve allowed me to

tailor my feedback to those goals, which also seems to have spurred on intrinsic motivation for some of them. But receiving feedback is not the same thing as evaluating feedback, and writing teachers seeking to implement this element must be aware that the mere act of giving students formative feedback is only half of the equation. Certainly, Ericsson points out that one component of deliberate practice is that “the [students] should receive immediate informative feedback and knowledge of results of their performance” (367). But there is a burden on the student, too: Benton writes, “Metacognitive learners develop the ability to evaluate *themselves* rather than being solely dependent on feedback from teachers” (73, emphasis mine). This ability to evaluate one’s own performance requires a great deal of practice evaluating feedback from *other* sources, sources like the teacher and peers working toward similar goals. The problematizing factor of this element of effective practice, therefore, is that it requires accountability on the part of the students: students must have frequent opportunities to not just receive feedback but think metacognitively about how that feedback aligns (or does not align) with their goals—and they must ultimately make a metacognitively sound decision as to whether the feedback is worth incorporating at all.

This is, I believe, the most significant opportunity for improvement in the evaluating feedback element. There should be accountability to ensure that students are actually reading and considering feedback from the teacher and peers. Without this accountability, there is no guarantee that the *giving* of feedback is reciprocated with the *taking* of feedback. As I mentioned in Chapter IV, only some students acknowledged considering my feedback in their Meta-Analyses (and even fewer acknowledged considering their peers’ feedback, an issue to be addressed in the next paragraph). However, the Meta-Analyses offer a prime opportunity for students to expand upon their response to feedback they received. Many students wrote that they

attended their conference but went no further—what did they discuss with the teacher? What advice did the teacher have? What does the student think about that advice? Psychology professor Marsha Lovett uses “exam wrappers” to have her students reflect on how they prepared for an exam and what they could do differently to prepare for the next one. These wrappers could also be used to invite students to reflect on the feedback they received on that assignment; students could, for example, write about the teacher’s marginal and end comments: what did the teacher have to say, and what does the student think about that feedback? Does the student agree that the teacher’s feedback is potentially useful, and how *could* it be used on the next assignment? This last question could especially help encourage students to see the course’s assignments as logically sequenced writing problems rather than discrete products to be produced. Lovett claims that since implementing the wrappers, she has found in her students a shift away from thinking of exams as the “end” of learning (19). Writing teachers might have similar results if students had opportunities to use the feedback they received on one paper to better prepare for the next one.

As we also saw in Chapter IV, the students were even less vocal about the feedback they received from each other. Again, they might have been less inclined to evaluate their peers’ feedback for any number of reasons: perhaps the peers’ feedback comments were less useful because the students were mostly unfamiliar with each other’s goals, perhaps they still viewed me as more of an authority than their classmates (or, conversely, perhaps they saw me as more of a mentor and were therefore more trusting of my feedback), or perhaps it simply wasn’t apparent to them that the Meta-Analyses were a good place to discuss the feedback they had received. Prior to the first workshop, I asked students to write in their journals what they thought was needed in order to have a successful peer review session. Giovanni wrote,

In peer review workshops, I look for a structured design of how it should work, team members who care about the success of their classmates, as well as integrity of the class as a whole. These factors are vital to the success of peer review because each acts as a building block to the foundation of such workshops: preparedness, teamwork, and learning from teaching.

Similarly, Delilah wrote in her journal,

The biggest factor in a successful peer review is peer willingness to engage and think critically and then give constructive feedback. If someone only rips your idea apart and is very negative with their feedback it makes for a miserable experience. On the other hand if they don't really say anything it feels like a waste of both peoples time. A good workshop would encourage a good balance between the two.

These responses, with phrases like “team members who care,” “learning from teaching,” and “willingness to engage,” suggest that the students wanted to get the sense that their peer review partners genuinely cared about their success as writers. This, I argue, is strong evidence that students may have been uninspired by their peers’ feedback because they either weren’t aware of each other’s goals or had goals that were at odds with each other (e.g., a student whose goal is writing more concisely may criticize a peer’s use of “flowery” language, even if that student’s goal is, in fact, to write with more flowery language). After all, as we saw in Chapters V and VI, both Giovanni and L.A. had much better experiences with their second group projects, seemingly in part because they were working alongside peers who shared one of their writing goals. Dewey writes that the benefit of collaborative work is that it allows students to use “shared experience” (*Experience and Nature* 202) to solve a common problem: “There is no mode of action as fulfilling and as rewarding as is concerted consensus of action. It brings with it the sense of sharing and merging in a whole” (184). But students have to have that shared experience, that something in common, in the first place for collaboration to be truly effective. Students would perhaps find the feedback they received from peer review more valuable if it came from students who shared at least one of their goals.

Additionally, I kept each student's goals private from each other until the last assignment, but I see no reason not to allow the students to familiarize themselves with each other's goals, putting them in the same advantageous position for giving formative feedback as I enjoyed. That way, the students, too, could possibly take on the mentor-friend dynamic with one another, which would likely not only put them in a position to share more thoughtful, genuine feedback but could also foster "greater contribution on the part of students and, as a result, stronger feelings of autonomy" (Lehmann, Sloboda, and Woody 187). As I wrote above, one reason students may have been less inclined to evaluate their peers' feedback as opposed to mine is that I had a vastly different relationship with them: I had gone out of my way to develop the mentor-friend dynamic with them but had neglected to encourage them to see their peers in that same way. Hephzibah Roskelly writes that one reason group work in a writing classroom so often fails is that students simply don't trust each other; she quotes one student teacher, "I don't know the other people in my group. Why would I want to talk to them about how I feel about anything?" A freshman responds with similar concerns, worrying that her peers will find her or her ideas "stupid" (127). Making the writing classroom a place where students feel comfortable sharing their work with one another could go a long way toward ensuring that students exchanged specific, relevant, useful feedback—feedback that they could then evaluate and reflect upon in their Meta-Analyses or elsewhere. Roskelly notes that many students enter college writing with the unhealthy perspective that school is "competitive, not collaborative" (128), discouraging them from seeing their peers as fellow learners. Perhaps students just need more opportunities to get to know each other—frequent small collaborative projects (e.g., having students complete brief exercises in pairs or groups) would provide more chances for students to familiarize

themselves with each other's goals, ultimately putting them in a better position to comment *thoughtfully* on each other's work.

One final interesting observation about this element is that several students commented that they found value in simply observing each other's strategies for completing the assignments. Especially for the Writing Biography, a number of students wrote in their Meta-Analyses that they were inspired by a literacy sponsor they heard one of their peers discussing on Poster Day. This suggests that another valuable source of feedback for students may be models from their peers. Modeling as a pedagogical practice dates back as far as Quintilian, who wrote that imitation of these models—*mimesis*—was useful for giving students “knowledge of the options available to the writer” (qtd. in Murphy 61). And modeling has traditionally been very common in music education; Calvin Brainerd Cady, for example, sought to develop in students an ability to “conceive and express ideas” (Shiraishi 152) in part by using modeling activities with real music rather than mechanical drill exercises, and Francis Elliot Clark was a strong advocate of using model exercises to build students' appreciation for aural qualities in music (Keene 273). But there is a certain risk involved with modeling, including in composition: as Kathleen McCormick points out, modeling rarely shows the failures intrinsic to writing; teachers are more likely to show their students examples of writing successes rather than examples of writing failures or occasions where solving writing problems does not go as planned (209). Such textbook models fail to show students the messiness involved in writing, the constant revision and recursion Flower and Hayes saw from the experts. Using *students'* work as models, however, brings some interesting possibilities: first, it potentially bolsters the mentor-friend dynamic between students by giving them more opportunities to share their strategies for solving a writing problem. In addition, by observing a model text created by a fellow learner who is at or

near their skill level, students could be more motivated to expend effort on their own project: solving the problem may not seem so lofty a task after all. Finally, having their models observed and commented on by their classmates would give students yet another means of receiving feedback, offering more opportunities for them to practice evaluating feedback not just from their teacher but from their peers as well.

A Mixed Bag: Thinking Metacognitively

As the previous chapters showed, students responded to this umbrella element in very diverse ways, and so I hesitate to call it a success *or* a shortcoming. Several students ended the course as much more sophisticated metacognitive thinkers than when they entered it; others showed considerably less dramatic improvement (but improvement nonetheless). Considering that even small-scale or piecemeal progress should be celebrated, the course was largely successful in getting students to think more metacognitively about their writing. However, where it stands to improve is the depth with which it explored this element. Incorporating this element is a matter of getting students in the habit of asking three questions: the “why?” question, the “how?” question, and the “how well?” question. In other words, for any strategy that students use to solve a writing problem in the course, they need to be able to think about and articulate their answers to (1) why they decided to use that strategy, (2) how the strategy actually played out—what exactly they *did*, and (3) how successful the strategy helped them solve the problem. Based on my students’ responses, I suspect that “Perfect Practice and Writing” gave students plenty of practice with the “why?” question but perhaps not with the “how?” and the “how well?” questions. To get the complete picture of metacognition, students need to understand how all three questions apply to their writing strategies. Crawford and Chaffin make a statement about musical practice that is equally applicable to writing practice: “One characteristic that

undoubtedly characterizes effective practice is diligent monitoring of the performance quality” (158). And it is not by coincidence that they use the same monitoring language Flower and Hayes use when discussing expert writers: simply put, experts in both skills have developed the ability to know what they’re doing—as well as why, how, and to what benefit. Of course, this ability alone requires extensive practice, and unless students enter the writing classroom with a level of metacognitive sophistication on par with L.A., they will need frequent opportunities to *do* metacognition before it reaches the point of automaticity.

Writing courses seeking to capitalize on the elements of effective practice must therefore find ways to weave opportunities for metacognitive thinking into all the other elements. First, setting effective goals should hold students responsible for these questions: “Why have I set these goals?” “How do I intend to practice toward this goals?” “How well did I practice toward these goals—how close did I get to reaching them?” For my students, the Goal Inventory required them to answer the “why?” question but not the “how?” and “how well?” questions. As for the “how?” question, students could indicate the specifics behind how they intended to work toward each goal: what would they actually *do* to progress toward that goal? They may not yet know what they need to do, but regardless, the objective is to get them to develop specific plans and devise working strategies for their practice. Benton argues that music students should learn to “devise their own strategies for learning” (62) by completing practice logs which ask them to list their goals for each practice session, as well as the specific strategies they used to complete those goals (49). These practice logs not only give students better direction for pursuing their goals, they also encourage students to start thinking (and practicing) like experts do. On a similar note, as I mentioned earlier in the dissertation, Mike Rose found in his study of writer’s block that most writing students—even novices—*do* set plans for reaching their goals, but the

difference is in the quality of those plans: the struggling writers in his study “were all operating either with writing rules or with planning strategies that impeded rather than enhanced the composing process” (86). In contrast, the “non-blockers” had more flexible plans: they had more options—more tools, as Stephen King might say—at their disposal in case one strategy failed. And again, Flower and Hayes likewise found that expert writers were willing and able to revise or even abandon plans that were proving ineffective. Therefore, giving students more practice setting plans for how exactly they intend to pursue their goals could help them become more sophisticated metacognitive thinkers.

But what about the “how well?” question? Students also need the chance throughout the course to reflect on how well they are working toward their goals, and they need a final chance at the end of the course to look back on how close they got to actually reaching those goals. They need to practice developing the same (sometimes harsh) reflective attitude shown in expert writers—such as the writer in Flower and Hayes’ study who called one of his sentences-in-progress “banal” and “awful” (“Cognitive Process Theory” 376)—as well as in expert musicians such as Gabriela Imreh, who sometimes called her own playing “lousy,” “bad,” and “terrible” (159). Students need a similar platform to evaluate how well their strategies for reaching their goals were working and to change course if necessary. At first, it may take some prompting from the teacher to help the student see when it’s time to try something new, but ideally, students eventually reach the point where they can make that decision independently.

Likewise, when it comes to maintaining appropriate challenge, students need to think about questions like, “Why is this particular writing problem a challenge for me?” “How do I intend to solve this problem?” “How well did my strategies for solving this problem play out?” The “why?” question requires that the students assess their own strengths and weaknesses similar

to how L.A. did in her early journal entries and on her Goal Inventory. They need to know, first of all, what exactly the problem is—which of the writer’s weaknesses are making it problematic in the first place? Susan Hallam and Nancy Barry write that “metacognitive skills are concerned with the planning, monitoring, and evaluation of learning, including knowledge of personal strengths and weaknesses” (154), and in her 2001 study, Hallam observed that expert musicians were able to articulate their strengths and weaknesses better than novices. My writing course featured an early journal entry which asked students to list their writing strengths and weaknesses, but students also need to start thinking critically about why they think they have those strengths and weaknesses, particularly the weaknesses. Knowing where their weaknesses come from could help them independently invent tasks for overcoming those weaknesses, which, according to Ericsson, is a component of deliberate practice (368).

The “how?” and “how well?” questions here are matters of setting effective *operational* goals and evaluating how well those goals contributed toward solving the larger writing problem. As with the longer-term goals, teachers can get students accustomed to creating plans for the writing problems they face. E. Ashley Hall, Jane Danielewicz, and Jennifer Ware have had success incorporating “design plans” for the assignments in various writing courses. Before they begin work on an assignment, students must provide a succinct statement of purpose, an explanation of the assignment’s intended audience, an evaluation of the context (i.e., “the academic, scholarly, public, or popular conversation to which you are contributing”), a description of the assignment’s genre, a list of materials to be used to complete the assignment, and an “arrangement strategy” (i.e., how the content will be organized and why) (148). The authors’ rationale for the design plans is that making students more aware of their operational goals will give them greater “metacognitive control” (153) over the strategies they use to attain

those goals. They find that students using design plans are more likely to achieve what they call “metacognitive reciprocal flow”: alternating between awareness of their “thinking process while composing” and control over those “composing choices” (158). The authors’ use of the word *control* resonates with Flower and Hayes’ findings that expert writers seem to “have greater conscious control over their own process” (“Cognitive Process Theory” 377). Having students create thorough design plans in which they set specific, realistic, and relevant operational goals could both help them do better on the assignment and foster the metacognitive habits students need to develop their own monitor.

Teachers should also make sure students are asking metacognitive questions pertaining to appreciating error and failure: “Why did I make this error?” “How will I avoid the error in the future?” “How well have I managed to avoid this error using the strategies I devised in question two?” Students can answer all three of these questions, I argue, using error analysis. I touched on error analysis and the work compositionists have done with it in Chapter II, but I want to elaborate here on how exactly it can be used to help students tackle these metacognitive questions. Kroll and Schafer write that students’ errors provide “windows into the mind” (243) of novice writers, which is of obvious benefit to the teacher, but that they also help students “make sense of their errors” (247) without presenting error as something that must be feared or avoided. Bartholomae takes a similarly optimistic outlook on error, arguing that “even the most apparently incoherent writing...is evidence of systematic, coherent, rule-governed behavior” (256-7). Therefore, error analysis not only casts error as a logical and inevitable component of writing, it provides the perfect opportunity for both instructor and students to explore the “why?” and the “how?” behind students’ errors. Knowing where their errors come from puts students in a better position to devise specific strategies for preventing the error from emerging later (the

“how?” question), which in turn puts them in a better position to evaluate their progress toward eliminating the error in their writing (the “how well?” question). As a bonus, error analysis can help students “see those errors as evidence of hypotheses or strategies they have formed and, as a consequence, put them in a position to change, experiment, imagine other strategies” (Bartholomae 258). Students may be more willing to take risks in their writing if they conceive of errors as strategies gone awry rather than as evidence of inferiority. Kroll and Schafer argue that the best way to bring error analysis into a composition classroom is through frequent conferencing (247), which aligns well with a “Perfect Practice” composition course’s emphasis on individualization. The goal is to have students eventually “begin to investigate their own errors” (247), bringing them another step closer to the independent metacognitive habits of the experts.

Finally, where do the metacognitive “why?”, “how?”, and “how well?” questions come into play with evaluating feedback? Students must ask, “Why did I receive the feedback I did?” “How will I incorporate it into my revision, if I incorporate it at all?” “How well did I incorporate the feedback into my revision?” The metacognitive thought required of this “why?” question overlaps with the same kind of metacognitive thought students need for appreciating error and failure, as well as for identifying their weaknesses: they need to determine whether and how each feedback statement they receive matches their writing weaknesses and the errors they know they are prone to commit. Formative feedback, according to Shute, should have *motive*: the student should *need* it (175). Feedback that doesn’t speak to a student’s goals literally fails to feed back to the student: it may be good advice, but it doesn’t help the student address her self-perceived writing weaknesses, and as such, it doesn’t help the student get closer to her goals.

Therefore, answering this initial “why?” question helps students move to the “how?” question, which is a matter of *evaluating* the feedback they receive.

Next, students must assess whether the feedback is worth incorporating and, if it is, how they want to incorporate it. Some feedback may require only small, local changes; other feedback may require a much larger scale re-vision of how a student has approached a writing problem. Making these larger revisions requires a tremendous amount of metacognitive thought, so the teacher may wish to allow for more time between the receiving of feedback (e.g., at conferences or peer review sessions) and the decision of whether and how to incorporate it (i.e., the due date). In “Perfect Practice,” conferences and peer review usually occurred shortly before students had to submit their final drafts, meaning they had very little time to evaluate their feedback—which may in part explain why they so rarely mentioned doing it in their Meta-Analyses. Shute makes it clear that evaluating feedback is an intense activity that adds a great deal of stress to students’ “cognitive load” (158), which could increase the risk of burnout.

As I mentioned earlier, one reason students didn’t write much in their Meta-Analyses about the feedback they received could be that they simply didn’t think to do so. After all, I never explicitly told them to cover that topic—I only asked them to reflect on how they completed the assignment. But the Meta-Analyses are the perfect place for answering the metacognitive questions surrounding feedback, especially the “how?” and “how well?” questions. Similar to Lovett’s exam wrappers, the Meta-Analyses could “give students something constructive to do with the feedback” (23); students could assess how valuable they perceived the feedback they received to be, as well as whether and how they incorporated that feedback into their revisions. With enough practice, they could eventually master the ability to

evaluate feedback, which would contribute to the overall control they had over their writing strategies.

Conclusion

Centering a college writing course on the elements of effective practice, as “Perfect Practice and Writing” has demonstrated, has quite a few promising implications for composition pedagogy. For many of my students, it seems to have disenchanting the myth of natural talent: most students, even if they didn’t outright state that their attitudes about writing and talent had changed, underwent a noticeable shift in attitude across the course. They took more risks, showed more engagement with the assignments, and generally came to understand writing as a practice-able, learnable, improvable skill rather than a mysterious innate ability. In turn, I would argue, they generally became more motivated to write for intrinsic reasons rather than extrinsic threats of punishment (see, for example, Ace’s comment in Chapter IV that the class motivated him to start journaling). In addition, most students seemed further motivated by having the opportunity to set their own goals and consistently receive feedback tailored to their progress toward those goals, and a significant number of students developed much more sophisticated abilities to think metacognitively about their writing. Therefore, a “Perfect Practice” curriculum can, in fact, help writing students make the transition from novice to expert—while it’s unlikely to *transform* them into experts in such a brief time, it at least gets them accustomed to the practice habits of expert writers, putting them in a better position to make that gradual transition throughout their writing careers.

But this chapter has also showcased the difficulties of crafting and following such a curriculum, especially when it comes to incorporating those elements which require an especially individualistic touch, such as maintaining appropriate challenge. Writing teachers wanting to

incorporate these elements will have to anticipate those difficulties and be prepared for the limitations of such a curriculum, including the fact that individualization becomes increasingly hard the larger the class size, the fact that students will not all come to the course with the same experiences, attitudes, and skill levels, and—perhaps most importantly—the fact that there are only so many hours in the day. In addition, there were some limitations of this study itself which complicate matters: first, as with any case study, it is difficult to generalize about how *all* students responded to the curriculum given the responses of just a handful of students. In addition, while this study focused on how well the elements of effective practice played out in a writing course, the question remains how well they would play out in other disciplines—or if they could even feasibly be implemented. The following conclusion explores these limitations in further detail.

Conclusion

This project has shown that the elements of effective practice can, by and large, be successfully incorporated into a college writing curriculum, despite the various challenges that come with doing so. College writing teachers seeking to disenchant the myth of natural writing talent for their students may especially benefit from incorporating the elements, as students' responses in my course suggested that several of their attitudes about writing had changed over the semester. More specifically, several students came to see writing as a skill that could be practiced like any other rather than as an arcane talent possessed by the fortunate few. The results also suggest that composition pedagogy may benefit from embracing some of the cognitive psychology which continues to inform the pedagogy of fields like music education.

However, there are a number of caveats which come with this conclusion. First, as I concluded in the previous chapter, the difficulty of incorporating the elements increases with class size; the elements all require a significant amount of individualization, which is logistically impractical in larger writing classes. My course had a combined total of thirty-eight students, a number small enough to afford individualistic measures such as frequent conferencing and daily journal entry feedback. Teachers of larger classes will find it considerably more difficult—or perhaps even impossible—to individualize their instruction to such an extent. Therefore, I invite future research to explore how well the elements of effective practice fit into larger writing classes: what compromises need to be made for each element? Are there ways to account for—or possibly even take advantage of—a larger population of students?

Similar to the matter of size is the matter of time: does incorporating the elements become easier or more difficult as class meeting times become longer and/or more frequent? On the one hand, Ericsson concludes that it takes about ten thousand hours of deliberate practice,

generally spread across ten or so years, to achieve expertise (366). And while instructors obviously don't have that much time to spend with their students, that conclusion would suggest that the more chances students have to practice, the more quickly they will improve. On the other hand, though, Ericsson also warns against burnout from practicing too much (371), and music educators reiterate that concern; Chaffin and Crawford, for instance, found that expert musicians had developed another skill that novices seemed to lack: they knew when to stop practicing (163). Cognitive psychologists and music educators seem to agree that while frequent *doing* is a necessary ingredient for improvement, the quality of practice is far more important than the quantity. On that note, future studies could explore how students respond to changes in the length and frequency of practice sessions; for example, is it more effective for students to have longer but less frequent opportunities to practice, or vice-versa? Also important is the fact that "Perfect Practice and Writing" met for sixteen weeks—what happens when that span is lengthened or shortened? At first glance, it may seem that stretching the course out longer would allow students to more effectively practice their writing, but it could also increase the risk of burnout—after all, Giovanni seemed to be on the verge of burnout as early as week twelve, and I doubt he was the only student who felt that way.

In addition, this study invites the question of how different demographics of students respond to the elements. For one, ninety-two percent of my students were first-year college students, and almost all of them entered the course with what would be considered a typical skill level for first-year students. As L.A. said in her end-of-semester interview and as Perry's scheme confirms, two years of college makes a significant difference in students' ability to think metacognitively. And as Chapter VI illustrated, because L.A.'s metacognitive abilities were so much more advanced than the other students', she responded quite a bit differently to the

curriculum than her peers. Future studies could observe how students of other relative skill levels—either above or below the typical first-year college student—respond to the elements. There may be promise, for example, in studying the benefits of a practice-focused writing curriculum specifically for basic writers. After all, Shaughnessy’s and Lunsford’s research suggests that basic writers are especially fearful of taking risks (Lunsford 284), resent their vulnerability (Shaughnessy 7), and are “inhibited by their fear of error” (7). My students generally responded positively to efforts to present writing practice as a matter of taking risks, embracing the inevitability of the occasional error, and using those errors as opportunities for improvement. Teachers of basic writers may find success in using the elements to likewise instill greater confidence and willingness to take risks in their students. On the other hand, there also needs to be more research on how advanced writers like L.A. respond to the elements: are they more or less prone to burnout than less advanced students? Do they take a more independent role in maintaining appropriate challenge, similar to how L.A. challenged herself on some of the journal entries? Do they respond better to alternative methods of providing feedback?

One final way in which the context of this particular study limits its conclusion involves the physical layout of the classroom. Both sections of my course met in fairly small classrooms with movable desks, allowing for the circle arrangement which apparently positively affected several students’ response to the course (particularly the way they perceived me, their instructor). But writing teachers are not always so lucky with their classroom arrangements: their rooms may have long tables or desks that are bolted to the floor. This may seem like a minor issue, but my students’ comments suggest that classroom layout may actually have a significant effect on how students respond to a “Perfect Practice” curriculum. Future studies could manipulate classroom

layout to determine what effects it has on the feasibility of incorporating the elements, as well as how students respond to them.

There are also some limitations associated with the methodology of the study itself. For one, as with any case study, it may be fallacious to generalize about how *all* students responded to the elements based on how a select few responded to them. Especially for a curriculum with such an individualized focus, it would be ideal to understand how *every* student responded. The six students I chose for an end-of-semester interview were, I felt, representative of the entire pool of thirty-eight students; however, this is still a bold assumption, and D. R. Sadler notes that one limitation of case study methodologies is that “researchers are often insensitive to the total size of a population, basing impressions on only a few cases” (qtd. in Lauer and Asher 47). Plus, smaller sample sizes “exhibit less reliability of data than large samples” (47), so extending the coding to the work of more than just these six students would produce more dependable results, as would writing more fully developed case studies for more students besides Giovanni and L.A. Another limitation of case studies involves the “novelty of information” (47), in which researchers tend to place greater value on more extreme or “outlier” data than they do the more predictable data. I chose Giovanni and L.A. for the case studies in part because of their particularly interesting responses to the curriculum, but I did so at the expense of examining a more typical student response. Both students, for instance, ultimately did well in the course and showed overall enthusiasm for its subject matter. But equally valuable are the responses of students who did not do so well in the course or who entered it with markedly less interest: how did *they* respond to the elements and to a writing curriculum premised on practicing the skill? How might writing teachers looking to use the elements help motivate these students to better engage with the course?

One limitation of case studies which deserves special attention in the context of this study is the limitation of missing information: “Some researchers tend to fill in missing data when evaluating it, often in unpredictable ways... The type of rating is affected by what researchers consider important conceptually and also by the focus of their attention” (Lauer and Asher 47). When evaluating qualitative data, it is easy for researchers to fall into the trap of confirmation bias, to search for data which aligns with the results they *want* to have while excluding data which either seems irrelevant to or contradictory of those results. The second coder and I—by design—read the students’ responses with an eye toward the five elements of effective practice, which may have occasionally led us to see things which weren’t there, to interpret a response as evidence of an element simply because we wanted it to be. Complicating matters further is that the second coder and I went into the coding with differing degrees of interest in and knowledge of the elements: I had already done extensive, enthusiastic research into the topic of effective practice, while the second coder, a Ph.D. student in American literature, had neither the same level of enthusiasm for, nor experience with, the topic. This may have affected how we interpreted and therefore coded the students’ responses: I especially may have been prone to filling in missing information, and the second coder may not have understood the elements well enough to effectively and consistently detect them in students’ responses early in the process.

Another complication of the coding process is that while both coders ultimately reached a very high level of agreement, there were some important deviations early in the process. More specifically, it was not uncommon for the second coder and I to initially identify a particular passage in a student’s responses as being evidence of different elements. For example, take this passage from Giovanni, which I discussed in Chapter V:

The past few weeks have honestly been some of the most stressful times of yet to come in college. With pressure to maintain a certain GPA to keep my scholarships, this paper was

not a priority until the final day before the due date. Fortunately, I was prepared with previous readings, journal entries and mind maps of my work. The entire process from start to finish occurred mainly in the day of submission. Although, it is something I never strive to have, it was the reality that I made the best of.

As I mentioned in that chapter, I initially coded this response as a moment when Giovanni had found an aspect of the course unchallenging. The second coder, however, marked it as evidence of poor metacognitive thinking in that Giovanni explains *what* he did to complete the assignment but not why he did it, how he did it, or how well it served him. It was especially common for me to code a student's response as relating to the setting effective goals element (more specifically, setting effective operational goals) while the second coder initially coded the same response as relating to thinking metacognitively. On the one hand, this may be further evidence of just how much the elements overlap and intersect with each other. After all, setting effective operational goals *is* in part a matter of thinking metacognitively, as is maintaining appropriate challenge, appreciating error and failure, and evaluating feedback—hence why I continuously refer to metacognition as the umbrella skill. On the other hand, from an empirical standpoint, this complicates the results, as it shows that the second coder and I had somewhat different understandings of what exactly each of the elements means, at least in the early stages of the coding process. The integrity of the study could be improved perhaps by recruiting more coders, creating more explicit and specific coding instructions, providing more training before starting the coding process, or doing more to ensure that all coders had a clear and consistent understanding of the five elements.

For all of these reasons, I reiterate Lauer and Asher's warning that composition researchers using qualitative data should interpret their results as "exploratory and generative of hypotheses" (48) rather than concrete evidence of absolute, replicable truths. I remain confident that this study revealed some of the potential pedagogical benefits of a "Perfect Practice" writing

curriculum, but I also acknowledge the danger of generalizing my results, especially to disciplines beyond composition.

On that note, it's important to acknowledge that this study focused on how the elements specifically fit into a writing course, but there may be pedagogical value in determining how (and how well) the elements could be incorporated into other disciplines. Teaching writing is different from teaching biology or algebra or physics, and it would be irresponsible to assume that the results I observed in a writing course apply to other disciplines in a perfectly linear fashion. For one, quite a few disciplines require much larger class sizes, which returns to the first complication I discussed—for instance, Principles of Biology, a first-year course at the University of Arkansas, enrolled four hundred and seventy students for the Fall 2017 semester. Such a massive student population makes individualization incredibly difficult, making it that much harder (but perhaps not impossible) to incorporate the elements. But beyond that, we must remember what cognitive psychologists say about the transferability of metacognition. Donovan et al. remind us that metacognition cannot be divorced from subject matter (17); as we saw in Chapter II, while the various sub-skills associated with metacognition—planning, monitoring, and evaluating—can be transferred across subject matter, they must be applied *differently*. Planning for a composition essay is not done the same way as planning for a math quiz, for instance. Just because my writing students generally responded positively to this curriculum doesn't suggest that educators in other disciplines would have the same results.

But what it does suggest is that one logical extension of this study is to expand the study to other disciplines, to observe what pedagogical benefit could arise from teaching, say, math as a practice-able activity. After all, writing is not the only skill with which students associate natural talent; a study by statistician Andreas Schleicher, for example, showed that North

American students were more likely than students from other countries to attribute skill in mathematics to luck or natural-born talent (qtd. in Coughlan). Incorporating the elements of effective practice into their curricula—making an effort to present math as a practice-able skill—could allow math educators to belie this harmful myth for their students similarly to how it seems to have done for at least several of my writing students. As Elbow writes, the danger of the myth of natural talent is that it immediately sets students up to fail as soon as they enter the classroom: they feel helpless over their own abilities and therefore shy away from the challenges, risks, and failures necessary for improvement (12). And while Elbow speaks specifically about writing talent, the same could be said for talent in any number of other skills: novices are prone to attributing experts' abilities to some unknown, unattainable source, as in the famous legend that blues guitarist Robert Johnson sold his soul to the devil to achieve musical mastery. But if students come to understand the subject matter as something that can be improved upon by anyone willing to put in the time and effort required of deliberate practice, they may be more likely to engage in what Dai calls task-involved behavior—"learning through effort is experienced as an end itself"—rather than ego-involved behavior, in which the learner pursues the task merely to demonstrate competence or earn some external reward (312). Task-involved behavior is more likely to lead to the type of engagement characteristic of Csikszentmihalyi's flow state, in which the learner is so intrinsically motivated to practice the subject matter that she feels a sense of "being carried away by a current" (132). Therefore, while I don't claim that my results can be transferred wholesale to other disciplinary contexts, cognitive psychology at least suggests that educators in other disciplines could find it lucrative to pursue similar studies. I invite researchers from across the curriculum to do their own study of a "Perfect Practice" pedagogy and contribute to what I have written here about my own discipline.

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Appendix A: IRB Approval Memo



Office of Research Compliance
Institutional Review Board

October 25, 2016

MEMORANDUM

TO: Jonathan Green
Patrick Slattery

FROM: Ro Windwalker
IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 16-09-088

Protocol Title: *Perfect Practice and Writing*

Review Type: EXEMPT EXPEDITED FULL IRB

Approved Project Period: Start Date: 10/25/2016 Expiration Date: 09/28/2017

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (<https://vpred.uark.edu/units/rsoc/index.php>). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

This protocol has been approved for 40 participants. If you wish to make *any* modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior* to implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 109 MLKG Building, 5-2208, or irb@uark.edu.

Appendix B: IRB-Approved Informed Consent Form



Department of English Fulbright College of Arts & Sciences
 Kimpel Hall 333 Fayetteville, AR 72701 (479) 575-4301
 Principal Researcher: Jonathan M. Green Faculty Advisor: Patrick J. Slattery

INVITATION TO PARTICIPATE

You are invited to participate in a research study to evaluate the effectiveness of Perfect Practice and Writing, a special topics Composition II course at the University of Arkansas. The researcher hopes to use your course materials and feedback to demonstrate the successes and shortcomings of the course and to improve the course for the future.

WHAT YOU SHOULD KNOW ABOUT THE STUDY

Who is the principal researcher?

Jonathan M. Green
 Ph.D. student in Rhetoric and Composition
 Department of English
 University of Arkansas
 236 Kimpel Hall
 Fayetteville, AR 72701
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 jmg002@uark.edu

Who is the faculty advisor?

Dr. Patrick J. Slattery
 Associate Professor of English
 Department of English
 University of Arkansas
 717 Kimpel Hall
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What is the purpose of this study?

The purpose of this study is to investigate the teaching methods employed in this course, Perfect Practice and Writing, and to assess the methods' successes, shortcomings, and opportunities for composition theory and practices.

What am I being asked to do?

Signing this form means that you are willing for any of your written work done for this course (major writing assignments, peer review worksheets, and daily journal entries) to be collected and used for the purpose stated above.

Six students who have signed this form will be invited to participate in end-of-semester interviews. These interviews will resemble our previous conferences, except in these meetings, the researcher will use an audio recording device to record the conversation. Your responses may be as long as you wish, and you may decline to answer any questions you don't want to answer. If invited, you may decline to participate in the end-of-semester interview even if you've signed this form. The interview is expected to last approximately 30 minutes.

You don't have to complete extra assignments if you agree to participate, and participating will have no effect on your grade in the course. Your participation in this study is **entirely voluntary**.

What are the risks to me?

There are no anticipated risks involved in participating in this study. Your grade will not be affected by your decision to participate.

How will my confidentiality be protected?

All information will be kept confidential to the extent allowed by law and University of Arkansas policy. Collected data will be kept in a locked office and on a password-protected computer. The researcher will refer to you by a pseudonym when referencing anything you write or say. The researcher will also use a pseudonym for other students in the course you happen to refer to in your interview or written assignments.

How will I benefit from participating?

You will benefit from reflecting on the writing you've done throughout the semester. The end-of-semester interview will give you another opportunity to reflect on the work you've done. Research suggests that thinking about your own practices is one of the hallmarks of experts—in any subject!

How long will the study last?

This study will last for the duration of the Spring 2017 semester. Your written assignments will be collected throughout the semester, and the end-of-semester interviews will be held during the last two weeks of the semester (5/1/17—5/12/17).

What if I don't want to participate?

If you don't sign this form, or if you sign this form but later change your mind and notify the researcher, your written assignments will not be used in the study, nor will you be asked to participate in the end-of-semester interview. You may decline to participate at any time after the study begins.

Will I know the results?

Throughout the study, the researcher may share interpretations of the data with you to ensure that your responses are being accurately represented. However, the researcher will not share information that identifies other students in the class.

What do I do if I have questions about the study?

You are encouraged to address any questions or concerns you have about the study with the researcher at any point during the semester. You may also contact the Faculty Advisor (indicated above) with or without notifying the researcher. You may also contact the University of Arkansas Research Compliance office listed below if you have concerns about your rights as a participant or about the study.

Ro Windwalker, CIP
Institutional Review Board Coordinator
Research Compliance

University of Arkansas
109 MLKG Building
Fayetteville, AR 72701
(479) 575-2208
irb@uark.edu

I have read and understand the above statements and am aware of the purpose of this study as well as its potential benefits and risks. I understand that my participation in this study is voluntary, and I understand that no rights have been waived by signing this consent form.

Printed name of participant

Signature of participant

Date

Printed name of principal researcher

Signature of principal researcher

Date

Appendix C: Course Syllabus

English 1013: Composition I Course Syllabus

Note: This syllabus is subject to change. I will advise you of any changes to the syllabus.

UNIT 1: How do you WANT to Write—and why?

Wednesday, 1/18/17

- Introduction to course
- Conversation: As of today, what's your idea of "good" writing—and why?*

Friday, 1/20/17

- Review policies/procedures and syllabus
- Conversation: What are your writing strengths and weaknesses—and why?*

Monday, 1/23/17

- Discuss Assignment 1 (Goal Inventory)
- Prepare for conferences
- Conversation: What discourse communities are you a part of—and why?*

Wednesday, 1/25/17

- Read and discuss "Best 100 Authors"
- Conversation: Who are the writers you admire the most—and why?*

Friday, 1/27/17

- Read and discuss Jory Mackay's "Dear Writing, I hate you"
- Conversation: What kind of writing do you like/hate to do—and why?*

Monday, 1/30/17

- Conferences to discuss Assignment 1

Wednesday, 2/1/17

- Conferences to discuss Assignment 1

Friday, 2/3/17

- Conferences to discuss Assignment 1

Monday, 2/6/17

- Read and discuss excerpts from Richard Straub's "Responding—Really Responding..."
- Conversation: What has been your experience with peer review—and why?*

Wednesday, 2/8/17

-Workshops for Assignment 1

Friday, 2/10/17

-Assignment 1 (Goal Inventory) due in class and to SafeAssign by 11:59 p.m.

-Poster Day for Assignment 1

UNIT 2: How DO you write—and why?

Monday, 2/13/17

-Discuss Assignment 2 (Writing Profile)

-*Conversation: What's the hardest/easiest part about writing for you—and why?*

Wednesday, 2/15/17

-Read and discuss Anne Lamott's "Shitty First Drafts"

-*Conversation: How do you start your writing projects—and why?*

Friday, 2/17/17

-Read and discuss Junot Diaz's "Becoming a Writer"

-*Conversation: What has been a writing success or "failure" for you—and why?*

Monday, 2/20/17

-Prepare for conferences

-Read and discuss excerpts from Stephen King's *On Writing*

-*Conversation: Do you agree with King that writing is a "meeting of the minds"—and why?*

Wednesday, 2/22/17

-Read and discuss excerpts from "Famous Advice on Writing"

-*Conversation: What do you think about these authors' advice—and why?*

Friday, 2/24/17

-Watch and discuss Sarah Lewis's "Embrace the Near Win"

-*Conversation: How do you feel when you think you've made an error—and why?*

Monday, 2/27/17

-Conferences to discuss Assignment 2

Wednesday, 3/1/17

-Conferences to discuss Assignment 2

Friday, 3/3/17

-Conferences to discuss Assignment 2

Monday, 3/6/17

- Read and discuss excerpts from “Innate Talents: Reality or Myth?”
- Conversation: Do you think there’s such a thing as a natural-born writer—and why?*

Wednesday, 3/8/17

- Workshops for Assignment 2

Friday, 3/10/17

- Assignment 2 (Writing Profile) due in class and to SafeAssign by 11:59 p.m.**
- Presentation Day for Assignment 2

UNIT 3: How DID you learn to write—and why?

Monday, 3/13/17

- Discuss Assignment 3 (Writing Biography)
- Discuss the concept of “literacy sponsor”
- Conversation: Who have been some of your literacy sponsors—and why?*

Wednesday, 3/15/17

- No class. Homework: Read Malcolm X’s “Learning to Read” in *Writing About Writing* and email Mr. Green a one-page double-spaced paper in which you answer the following question: What/who were some of Malcolm X’s literacy sponsors, and how did each one influence the development of his literacy? This paper must be received by 11:59 p.m. on 3/15/17 to receive full credit.

Friday, 3/17/17

- No class. Homework: Read Sherman Alexie’s “The Joy of Reading and Writing” in *Writing About Writing* and email Mr. Green a one-page double-spaced paper in which you answer the following question: What/who were some of Alexie’s literacy sponsors, and how did each one influence the development of his literacy? This paper must be received by 11:59 p.m. on 3/17/17 to receive full credit.

Monday, 3/20/17

- Spring Break (no class)

Wednesday, 3/22/17

- Spring Break (no class)

Friday, 3/24/17

- Spring Break (no class)

Monday, 3/27/17

- Discuss Malcolm X’s “Learning to Read”

Wednesday, 3/29/17

-Discuss Sherman Alexie's "The Joy of Reading and Writing"

Friday, 3/31/17

-No class. Homework: Read excerpts from *Narrative of the Life of Frederick Douglass* (posted on Blackboard) and email Mr. Green a one-page double-spaced paper in which you answer the following question: What/who were some of Douglass's literacy sponsors, and how did each one influence the development of his literacy? This paper must be received by 11:59 p.m. on 3/31/17 to receive full credit.

Monday, 4/3/17

-Read and discuss excerpts from *Narrative of the Life of Frederick Douglass*

Wednesday, 4/5/17

-Workshops for Assignment 3

Friday, 4/7/17

-Assignment 3 (Writing Biography) due in class and to SafeAssign by 11:59 p.m.

-Poster Day for Assignment 3

UNIT 4: How would you tell OTHER people to write—and why?

Monday, 4/10/17

-Discuss Assignment 4 (Writing Guide)

-*Conversation: What sorts of things do you think should go in your guide—and why?*

Wednesday, 4/12/17

-Read and discuss excerpts from Strunk and White's *The Elements of Style*

-*Conversation: Which of Strunk and White's tips do you agree/disagree with—and why?*

Friday, 4/14/17

-Read and discuss excerpts from Joe Glaser's *Understanding Style*

-*Conversation: Which of Glaser's tips do you agree/disagree with—and why?*

Monday, 4/17/17

-Read and discuss excerpts from "10 top writing tips" and "General Essay Writing Tips"

-Prepare for conferences

-*Conversation: Which of these tips do you agree/disagree with—and why?*

Wednesday, 4/19/17

-Watch and discuss "How to Write an Effective Essay" and other videos

-*Conversation: Do you agree/disagree with the methods prescribed in these videos—and why?*

Friday, 4/21/17

-*Conversation: Has your answer to "what is good writing" changed—and why?*

Monday, 4/24/17

-Conferences to discuss Assignment 4

Wednesday, 4/26/17

-Conferences to discuss Assignment 4

Friday, 4/28/17

-Conferences to discuss Assignment 4

Monday, 5/1/17

-Workshops for Assignment 4

Wednesday, 5/3/17

-Final draft of Assignment 4 due in class and to SafeAssign by 11:59 p.m.

-Presentation Day for Assignment 4

Friday, 5/5/17

-Dead Day (no class)

Note: There is no final exam scheduled for this course.

Intellectual Property: Tape-recording and/or any other form of electronic capturing of lectures is expressly forbidden. Be aware that this is a legal matter involving intellectual property rights as described below:

*State common law and federal copyright law protect my syllabus and lectures. They are my own original expression and I may record my lectures at the same time that I deliver them in order to secure protection. Whereas you are authorized to take notes in class thereby creating derivative work from my lecture, the authorization extends only to making one set of notes for your own personal use and no other use. **You are not authorized to record my lectures, to provide your notes to anyone else or to make any commercial use of them without expressed, prior permission from me.***

Persons authorized to take notes for the *Center for Educational Access*, for the benefit of students registered with the Center, will be permitted to do so, but such use still is limited to personal, non-commercial use. Similarly, you are permitted to reproduce notes for a student in this class who has missed class due to authorized travel, absence due to illness, etc. To be clear: use of notes is restricted to personal, classroom purposes and may not be shared for any other purpose.

Appendix D: Assignment 1 (Goal Inventory) Prompt

For your first assignment, you will do three things:

1. Write a 3-4 page Goal Inventory paper in which you explain the writing goals you've set for the class and—more importantly—*why* you've set them.
2. Write a 2 page Meta-Analysis to accompany the paper in which you explain, step-by-step, how you completed the assignment.
3. Create a visual artifact on a poster board showcasing the contents of your Goal Inventory.

The writing goals you set should be realistically achievable, although they can be either short-term or long-term goals. They should also be relevant to your interests, whether those interests are academic (e.g., your major) or extracurricular (e.g., a hobby). Before your project is due, you will meet with me individually so we can make sure you're choosing relevant, realistic goals.

Suggestions for the Goal Inventory:

-Your Goal Inventory should reflect both the short-term goals and the long-term goals you've set. An example of a short-term goal is "learning how to use commas properly." An example of a long-term goal is "publishing an academic article."

-Don't just list your goals! Explain *why* you set them—why is this something you want to accomplish in the first place? How do you expect this goal to make you a better writer?

-Your Goal Inventory should describe a few writers that you particularly admire—and why you admire them. How do you think these writers embody the writing goals you've set? Remember, a "writer" does not have to be a published author. It could be someone whose blog you read, a journalist, or even someone you personally know.

-Your Goal Inventory should also describe a few of your favorite texts (books, websites you read, etc.) and explanations as to why you enjoy reading them. How do you think these texts embody the writing goals you've set?

Suggestions for the Meta-Analysis:

- In addition to saying *what* you did to complete the Goal Inventory, explain *why* you did it. *Metacognition* means "thinking about thinking," so think about what you were thinking!

-Don't say you wrote a certain way "just because." Tell us everything that was going on in your head—even if it seems embarrassing or unimportant, or even if you can't fully explain it right now.

-Follow a chronological order; describe the process from beginning to end. The “beginning” is before you started writing (in fact, it’s as soon as you got this assignment prompt). The “end” is the very last thing you did before clicking “Submit” on Blackboard (and possibly even what you did afterward).

-Don’t be afraid to talk about interesting or unexpected things that happened during the process. Did you change your mind on something? Did you have an epiphany? Did you struggle with the assignment, or was it pretty easy?

Suggestions for the Visual Artifact:

-You have a lot of creative freedom with the visual artifact. You should obviously list your goals, but do so in a creative way (e.g., make them different sizes, make them different colors, position them in an interesting way). If you can think of a way to visually represent your goals, go for it!

-You should use pictures (e.g., pictures of your favorite writers or favorite texts), but each picture should also be accompanied by a short caption explaining what it is and how it fits into your goals.

Learning Goals:

Presentation (6 points possible): You clearly articulate both your short-term and long-term goals through your Goal Inventory and your visual artifact. The visual artifact presents your goals in a creative, interesting way.

Practicality (6 points possible): You have set goals that are realistically achievable and relevant to your interests—and you’ve explained *how* those goals are relevant to your interests.

Metacognition (8 points possible): In your Goal Inventory, you clearly explain the reasons you chose those goals and how you expect those goals to improve you as a writer. Your accompanying Meta-Analysis clearly explains how you completed the Goal Inventory from beginning to end, not just explaining *what* you did but *why* you did it.

Suggested length:

- The Goal Inventory should be about 3-4 pages (double-spaced).
- The Meta-Analysis should be about 2 pages (double-spaced).
- The visual artifact should be on one side of a poster board (exact size will vary).

Due date: The Goal Inventory and Meta-Analysis are due to SafeAssign by 11:59 p.m. on Friday, 2/10/17. Bring the visual artifact to class with you on Friday, 2/10/17.

Grade value: 10% of the final grade

Appendix E: Assignment 2 (Writing Profile) Prompt

The second assignment consists of three parts:

1. The Writing Profile, a 5-6 page research paper in which you not only examine how you write but compare and contrast your own writing strategies with those of other writers.
2. Like the Goal Inventory, your Writing Profile will be accompanied by a 2 page Meta-Analysis, but you will write it collaboratively with your group mates. Use the first person plural (e.g., “We did this”) instead of *I*. However, if different members of your group did different things, refer to them by name (e.g., “Jon was in charge of proofreading”).
3. A PowerPoint presentation on your findings, which you will deliver on Friday, 3/10/17.

You will conduct primary research in the form of polls, surveys, and interviews to get an idea of how other writers write. These “other writers” should represent a diversity of skill level; some should be inexperienced (e.g., first-year college students) while others should be experienced (e.g., upper-level students, graduate students, or even faculty).

Suggestions for Doing Research:

-Ask your respondents open-ended questions with “why”/“how.” For example, instead of asking, “Do you brainstorm?”, ask, “How do you brainstorm?” You will get more useful data this way.

-Be considerate of people’s time. Surveys should take respondents no more than 10 minutes to complete (if you ask about 5 open-ended questions), and interviews should last no longer than 15 minutes (if you ask about 5 open-ended questions). You can do phone and email interviews, too.

-Consider distributing your polls and surveys online rather than in person. You can use Survey Monkey, Google Docs, or a similar method to make things most convenient.

Suggestions for the Writing Profile:

-Begin by explaining your methodology. Did you do polls, surveys, or interviews? How did you distribute them? What type of people constituted your pool of respondents? How did you choose those people? Attach a copy of your questions to the end of your paper as an Appendix.

-Now, compare and contrast the writing strategies of each member of your group. When each of you writes something...

- What part of writing is easiest for you? What is hardest?
- What do you usually spend the longest time on? The shortest time?
- What is most important to you when you write? Least important?
- Which writing strategies do you use, and how extensively do you use them?
- What is your favorite kind of thing to write? Least favorite?

-The scope of writing strategies you discuss is up to you, but here are some writing strategies you could discuss in your paper:

Prewriting Strategies:

Brainstorming
 Research
 Time Management
 Asking for Help
 Outlining

Drafting Strategies:

Introduction Writing
 Conclusion Writing
 Organization
 Incorporating Sources
 Transitioning

Revision Strategies:

Editing
 Proofreading
 Peer Review/Asking for Feedback
 Reflecting on Feedback
 Revising for Concision

-You will also compare and contrast your writing strategies with those of the people you polled, surveyed, and/or interviewed. You don't have to do this for every single respondent, but find several similarities and differences that seem most interesting to you.

-Use quantitative data when applicable (e.g., "73% of respondents said they write outlines").

-You must do more than just say *that* these similarities and differences exist. You must say (or at least theorize) *why* they exist. For example, if you tend to write your introductions first while someone else writes his introductions last, why does each of you do what you do?

-Conclude by stating what you learned from this project. Which similarities and differences were most interesting to you? Think you might start using someone else's writing strategy yourself?

Learning Goals:

Presentation (6 points possible): In both your Writing Profile and your presentation to the class, you clearly synthesize the writing strategies of your group mates with each other and with your poll/survey/interview respondents. Your presentation is no longer than 7 minutes.

Research (6 points possible): You attach a copy of your poll/survey/interview questions in the Appendix. Your questions are open-ended and useful. You use quantitative data effectively.

Metacognition (8 points possible): In the Writing Profile, in addition to explaining *what* similarities and differences exist, you attempt to explain *why* they exist. Your Meta-Analysis explains how you completed the Writing Profile, not just explaining *what* you did but *why*.

Suggested length:

- The Writing Profile should be about 5-6 pages (double-spaced), not including Appendix.
- The Meta-Analysis should be about 2 pages (double-spaced).
- The presentation should take no longer than 7 minutes. You'll lose points for going over.

Due date: The Writing Profile and Meta-Analysis are due to SafeAssign by 11:59 p.m. on Friday, 3/10/17. Your presentation will be in class on Friday, 3/10/17.

Grade value: 15% of the final grade

Appendix F: Assignment 3 (Writing Biography)

For your third assignment, you will write a 5-6 page Writing Biography in which you explain where you acquired some of your writing strategies. You will also create a visual artifact showcasing the contents of your Writing Biography.

As always, your paper will be accompanied by a 2 page Meta-Analysis in which you explain how you went about completing the Writing Biography.

Suggestions for the Writing Biography:

-Think about what literacy sponsors played a role in your writing education. Remember that literacy sponsors can be any people, places, or things that shaped the way you write. Possibilities include:

Family	Other Writers	Hobbies
Friends	Certain Texts	Mentors/Tutors
Classmates	Speakers	Online Communities
Teachers	Organizations/Clubs	Social Media

-Answer the following questions about each literacy sponsor you identify:

- Do you think this sponsor had an overall positive or negative effect on your writing practices? Why?
- Do you think this sponsor had a temporary or permanent effect on your writing practices? In other words, are you still using the writing strategy you learned from this sponsor?
- Was that effect immediate, or did it take some time to materialize? Why?
- In what ways has this sponsor either helped or hindered you from reaching your writing goals?
- How did this sponsor help shape your definition of “good writing” or “bad writing”?

-Now, compare your own experiences with those of at least two other writers. “Other writers” could include famous writers like those we’ve discussed in class, your classmates, or even the respondents to your research methods in Paper 2. Do you see any interesting similarities and differences between how you learned to write and how they learned to write? How might you explain those similarities and differences?

-As always, the *why* or *how* question is more important than the *what* question. You must go beyond simply identifying your literacy sponsors. In addition to identifying them, attempt to explain how exactly they shaped you as a writer (e.g., instead of, “My eighth grade English teacher was a big influence on how I write,” say, “My eighth grade English teacher taught me the value of peer review”). The more specific you can be, the better.

-Conclude by explaining what you learned from doing this assignment. Did you discover anything interesting or surprising by analyzing your literacy sponsors? How might learning more about why you write the way you do help you become a better writer?

Suggestions for the visual artifact:

-The visual artifact should showcase your literacy sponsors, but it should do so in a creative way. Use different text sizes, colors, and images to make your artifact visually appealing.

-You may also use your visual artifact to show any overlap between your literacy sponsors or writing strategies and those of other writers.

-You should use pictures to illustrate some of your literacy sponsors, but accompany each visual with a short caption that describes it.

Learning Goals:

Presentation (6 points possible): Your Writing Biography and visual artifact clearly identify the literacy sponsors that shaped your writing strategies. The visual artifact presents your literacy sponsors in a creative, interesting way.

Synthesis (6 points possible): You clearly compare and contrast your literacy sponsors with those of other writers. In concluding, you acknowledge the value of doing this assignment.

Metacognition (8 points possible): In your Writing Biography, you clearly explain (or at least attempt to explain) how your literacy sponsors influenced your writing strategies. Your accompanying Meta-Analysis clearly explains how you completed the Writing Biography from beginning to end, not just explaining *what* you did but *why* you did it.

Suggested page length:

- The Writing Biography should be about 5-6 pages (double-spaced).
- The Meta-Analysis should be about 2 pages (double-spaced).
- The visual artifact should fit on one side of a poster board (exact size will vary).

Due date: The Writing Biography and Meta-Analysis are due to SafeAssign by 11:59 p.m. on Friday, 4/7/17. Bring the visual artifact with you to class on Friday, 4/7/17.

Grade value: 20% of the final grade

Appendix G: Assignment 4 (Writing Guide) Prompt

For your last assignment, you'll work with two of your classmates to produce a comprehensive Writing Guide in which you help members of an audience of your choice learn how to successfully do whatever kind of writing they most often do. This audience may be members of your academic discipline, participants in a hobby/extracurricular activity, working professionals, incoming freshmen, or any other body of people who need to know how to write.

Since the members of your group probably all have different ideas of what makes good writing, you'll have to work together to reach a consensus on what goes into your Writing Guide. But keep in mind that this is not meant to be a prescriptive document—you are not handing down “rules” about writing. Instead, think of your Writing Guide as a collection of writing strategies that your selected audience could potentially use.

As always, you will accompany your Writing Guide with a 2 page Meta-Analysis in which you explain how you completed the project. Since this is a collaborative project, use the first person plural (e.g., “We did this”) rather than the singular *I*. However, refer to individuals by name when necessary (e.g., “Jon was in charge of ___”).

You will present a 7 minute overview of your Writing Guide to the class on Wednesday, 5/3/17.

Suggestions for the Writing Guide:

- Your Writing Guide does not necessarily need to follow the traditional “paper” format. Depending on your audience, you may find it more useful to put it in the form of a pamphlet, a blog post, a style guide (such as Joe Glaser’s *Understanding Style*), etc.
- Regardless of the genre you choose, you should use visual design to make the document more appealing. Feel free to use different font sizes, creative white space, and visuals to make your Writing Guide fit whatever genre you choose for it.
- The strategies you include should be relevant to your audience, whomever that audience may be.
- Don’t just list your strategies. Your Writing Guide should also explain to your readers *why* those strategies are useful. For example, don’t just tell a new business student to write with a professional tone; explain why professional tone is valued in business writing in the first place!
- Include plenty of examples for your readers. For example, if your audience needs to know how to write concisely, model how to do this (e.g., give examples of concise writing versus wordy writing).
- As always, remember that in the Meta-Analysis, it’s not enough to just list all the steps you followed to complete the assignment. You need to attempt to explain why you did things that way. How else *could* you have done it, and why *didn’t* you do it that way?

Suggestions for the presentation:

-For this presentation, you should not only walk us through the strategies you included in the document but explain how you decided to include them and why you feel they would be valuable for the readers. Each member of the group should get about equal speaking time.

-Bring your Writing Guide with you so your classmates can follow along with you. If possible, bring a copy for every student in the class, or put it on a PowerPoint slideshow.

-Be aware of your time management. Rehearse your presentation beforehand to ensure it does not go over 7 minutes.

Learning Goals:

Presentation (6 points possible): Your text, visuals, and verbal explanation on Presentation Day all contribute to explaining the strategies you include in your Writing Guide. Your strategies are relevant to the needs of your audience, and your guide clearly explains to the readers why they are relevant.

Design (6 points possible): Your Writing Guide is attractive and well put together. Although there is certainly more than one way to do this, in general, your Writing Guide is easy to read, follows a logical progression, and is more than just a simple text-form list of strategies. Be informative, but also be creative!

Metacognition (8 points possible): During your presentation, you clearly articulate not just the content of your Writing Guide but how you decided—as a group—what to include versus what to exclude and why you feel the contents would be relevant to your audience. Your Meta-Analysis thoroughly describes the steps you used to complete the assignment from beginning to end, not just listing the steps but explaining metacognitively *why* you followed them.

Suggested length:

- In its entirety, the Writing Guide should be between 5 and 7 pages in its physical form. Exact length will vary from project to project.
- The accompanying Meta-Analysis should be about 2 pages (double-spaced).
- Your presentation to the class should last no longer than 7 minutes.

Due date: The Writing Guide and Meta-Analysis are due to SafeAssign by 11:59 p.m. on Wednesday, 5/3/17. Presentations will be held in class on Wednesday, 5/3/17.

Grade value: 25% of the final grade

Appendix H: Coding Scoring Guide

Learning Objectives and (Data Sources Coded)	Highlight pink	Highlight yellow	Highlight green	Highlight blue
Setting Effective Short-Term and Long-Term Goals—SEG (Journal Entries, Assignment 1, Interviews)	The student sets a short or long-term goal that is specific, realistic, and relevant to his/her interests.	The student sets a short or long-term goal that meets two of these criteria: specific, realistic, and relevant to his/her interests.	The student sets a short or long-term goal that meets one of these criteria: specific, realistic, and relevant to his/her interests.	The student sets a short or long-term goal that is vague, unrealistic, and irrelevant to his/her interests.
Setting Effective Operational Goals—SOG (Journal Entries, Meta-Analyses, Interviews)	The student sets an operational goal that is specific, realistic, and relevant to the assignment.	The student sets an operational goal that meets two of these criteria: specific, realistic, and relevant to the assignment.	The student sets an operational goal that meets one of these criteria: specific, realistic, and relevant to the assignment.	The student sets an operational goal that is vague, unrealistic, and irrelevant to the assignment.
Maintaining Appropriate Challenge—MAC (Journal Entries, Meta-Analyses, Interviews)	The student comments that he/she found an assignment (or another aspect of the course) challenging.	The student comments that he/she found an assignment (or another aspect of the course) unchallenging.	The student comments that he/she challenged himself/herself on an assignment (or another aspect of the course).	The student comments that he/she avoided a challenge on an assignment (or in another aspect of the course).
Acknowledging and Appreciating Error/Failure—AEF (Journal Entries, Meta-Analyses, Interviews)	The student comments that he/she experienced a writing failure or error but valued it as a possible means to improvement.	The student comments that he/she experienced a writing failure or error but did not value it as a possible means to improvement.	The student comments that he/she experienced a writing failure or error but makes no judgment as to its value.	
Evaluating Feedback – EF (Journal Entries, Meta-Analyses, Interviews)	The student comments that he/she received feedback from the instructor and indicates that he/she thoughtfully considered whether to incorporate it into a revision.	The student comments that he/she received feedback from the instructor but does not indicate if he/she thoughtfully considered whether to incorporate it into a revision.	The student comments that he/she received feedback from peers (or other non-instructor sources) and indicates that he/she thoughtfully considered whether to incorporate it into a revision.	The student comments that he/she received feedback from peers (or other non-instructor sources) but does not indicate if he/she thoughtfully considered whether to incorporate it into a revision.

Appendix H (Cont.)

Thinking Metacognitively —TM (Journal Entries, Meta-Analyses, Interviews)	The student explains <i>why</i> he/she followed a writing strategy, explains <i>how</i> he/she followed that writing strategy, and evaluates the effectiveness of that writing strategy.	The student does two of the following: explains <i>why</i> he/she followed a writing strategy, explains <i>how</i> he/she followed that writing strategy, and evaluates the effectiveness of that writing strategy.	The student does one of the following: explains <i>why</i> he/she followed a writing strategy, explains <i>how</i> he/she followed that writing strategy, and evaluates the effectiveness of that writing strategy.	The student comments on a writing strategy but does not explain <i>why</i> he/she followed that strategy, does not explain <i>how</i> he/she followed that strategy, and does not evaluate its effectiveness.
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