

CHAPTER 11

METACOGNITION AND THE REFLECTIVE WRITING PRACTITIONER: AN INTEGRATED KNOWLEDGE APPROACH

Kara Taczak

University of Denver

Liane Robertson

William Paterson University of New Jersey

The eight habits of mind put forward in the *Framework for Success in Postsecondary Writing* (Council of Writing Program Administrators, National Council of Teachers of English, and the National Writing Project, 2011) suggest a balanced approach of the “intellectual and practical” in writing pedagogy. This balanced approach to writing studies is one we have previously advocated in our Teaching for Transfer (TFT) curricular model, which combines knowledge *about* writing with practice *in* writing to encourage students’ transfer (Yancey, Robertson, & Taczak, 2014). Focusing on both the conceptual and the practical involved in writing, students are able to develop the rhetorical knowledge that allows for effective analysis of writing situations and to develop what Anne Beaufort (2007) has referred to as the “conceptual framework” that enables the transfer of writing knowledge and practice (Beaufort, 2007). This conceptual framework helps students not only to learn to transfer, but also to approach writing with the active stance advocated by the *Framework*. For the purposes of this chapter, we focus specifically on the *Framework’s* eighth habit of mind—metacognition—because recent scholarship (Beaufort, 2007, 2016; Taczak, 2015; Tinberg, 2015) indicates metacognition to be a key link to students’ ability to develop the knowledge required for success when repurposed in other writing contexts.

Before we focus on metacognition, we must situate it within a construct of the ways students learn to become the self-aware writers we aim to shepherd. Metacognition is a lynchpin in a larger picture of writing development, and central to that development, and to our writing classes, is the transfer of writing knowledge and practice. We know from transfer research that students are not

as successful at using their knowledge in new contexts when they have nothing to transfer into (Sommers & Saltz, 2004). When students have no context for further transfer, or perhaps don't *recognize* a context as one they might be able to transfer existing knowledge into, transfer often fails or is only partly successful. Further, for students to be able to transfer what they know about writing from one context to another, they have to understand not only the context for which their writing is destined, but also the context from which the knowledge is abstracted. In order to achieve high-road or mindful transfer (Perkins & Salomon, 1992), we suggest a model in which students utilize the abstraction of knowledge, the mindfulness, and the metacognition required for this kind of transfer (see also Beaufort, 2007, 2016). We refer to our model as *integrated knowledge*.

We use the term *integrated knowledge* to describe a robust approach to developing knowledge, including how writers understand what they know and how they know it, how they continue to build on what they know in school, work, and outside experiences through communities of practice, and how they use what they know in particular contexts and how they know it to be appropriate for that context. When this complex array of knowledge is integrated, and writers understand what they have as a resource or repertoire of knowledge capability, they can develop a greater sense of agency as writers. Self-agency for writers allows for continual development, for enculturation in communities of practice—defined as groups of people or communities made up of people who learn through shared experiences and information—(Lave & Wenger, 1991), and for successful utilization or repurposing of knowledge in multiple contexts.

An integrated knowledge model as we define it, includes (1) the concepts of cognition, metacognition, and reflection; (2) prior knowledge, attitudes, and beliefs students bring into their writing and that impact existing and new knowledge; (3) concurrent knowledge or experiential knowledge students develop in the workplace or other contexts outside of the classroom; and (4) dispositions that vary among individual students and which impact their learning. As instructors, our awareness of all these different types of knowledge that students have access to, helps us provide students with ways to think about and think with these types of knowledge. Central to our thinking, then, is that when cognition and metacognition are accessed together through reflection, students are able to assess themselves as writers, including their own understanding of these different types of knowledge, allowing them to adopt the active stance in their own learning advocated by the Framework.

Understanding this integrated knowledge model, or how students might access and make use of various types of knowledge as learners and writers, is valuable for both students and instructors to consider in writing courses. In this chapter, we'll discuss the ways in which students and instructors can tap into and

make use of the integrated knowledge model as a way to help facilitate transfer. We will address the roles of cognition, metacognition, and reflection in students' writing development and in the teaching of writing. When these three concepts are defined and explored as interconnecting and unique parts of a writer's development, they contribute to writing instruction that aims at students becoming reflective writing practitioners—writers more equipped with the knowledge and practices necessary for future writing tasks. By developing such knowledge and practices that allow for transfer, students can better cultivate the habits of mind that lead to increased success in college.



Figure 11.1. Integrated knowledge model.

COGNITION, METACOGNITION, AND REFLECTION: TOWARD INTEGRATED KNOWLEDGE

To fully understand what metacognition means for transfer, we must also discuss cognition and reflection because, as we note above, these three concepts contribute to the integrated knowledge development that can help students successfully transfer knowledge and practices to other writing contexts, and help them learn to become the reflective writing practitioners they need to be in order to continue to grow as thinkers and writers. All three of these concepts have been defined and redefined many times in our field, and in using these terms we draw upon a variety of disciplines including, but not limited to, education, psychology, linguistics, neuroscience, and philosophy, for example; for our purpose here, we

draw upon what is most relevant to our model.

As reflective writing practitioners, students learn to develop the repertoire of integrated knowledge useful for future writing situations (whether that situation is for another college course, everyday writing practices, or a current or future job). The roles of cognition, metacognition, and reflection in students' writing development and in the teaching of writing, are interconnected; although different, each contributes toward a writer's development in cultivating the habits of mind suggested by the *Framework*.

When cognition, metacognition, and reflection are developed by students and understood by them as contributing to integrated knowledge, these concepts help foster growth in writing knowledge and practice that goes beyond mere awareness or ability. Understanding that integrated knowledge can be developed by considering all three of these concepts, along with other contributors to student learning, means that deeper conceptual mastery and greater capacity for agency in one's learning can be cultivated.

COGNITION

In 1966, The Dartmouth Conference effected change about how writing instruction in college was viewed, and as part of this conference, scholars looked at what research was suggesting about cognitive processes and their relationship to writing. Fifteen years later, and after a multitude of scholars had discussed, analyzed, and theorized about composing processes, Linda Flower and John R. Hayes (1981) presented their cognitive process theory of writing, which influenced much of our field's understanding about how students think through and about writing, having implications even today (for a more comprehensive historical overview of cognition in Writing Studies see Ellen Carillo's work in this volume). We know, and we have known for some time, that cognition (i.e., cognitive processes) is extremely important in writing. Research today on cognition expands upon how we understand it to include both "inside the skull" and "outside the skull" (to use Dylan Dryer's [2015] terms). This means that writing is "always a social and rhetorical act, [and] it necessarily involves cognition" (Dryer, 2015, p. 71). And we keep expanding this understanding with insights from neurology (and its many sub-fields):

. . . insights from the social turn and insights from what some are calling the *neurological turn* appear to be converging, as can be seen in this recent definition from two cognitive researchers: "The writing process is supported by a single system—the writer's internal mind-brain interacting with the

external environment (including technology tools).” (Beringer & Winn, 2006, p. 108). (Dryer, 2015, p. 73)

Thus, cognition continues to impact our understanding of writing because “writing is a full act of the mind, drawing on the full resources of our nervous system, formulating communicative impulses into thoughts and words, and transcribing through the work of the fingers” (Bazerman & Tinberg, 2015, p. 74).

We know that writers draw on their cognitive processes, and Howard Tinberg (2015) explains how and when they do. He characterizes writers’ cognitive processes in terms of the following actions they undertake:

- demonstrate an understanding of the question;
- deploy accurately and purposefully concepts, knowledge sets, and terms that reveal genuine expertise;
- meet the needs of their audience;
- fulfill the requirements of genre; or
- exhibit a control over language, grammar, and mechanics.

But as he also explains, this takes time and it requires that students use their metacognitive abilities as well (Tinberg, 2015, p. 76). This indicates that cognition and metacognition relate and connect together, and that how they connect together, and how students use them together, impacts writers’ ability to successfully learn.

For the purposes of our chapter, and building on previous scholarship, we define cognition as the internal or external or social process of assimilating knowledge as a way to recognize what is happening in a particular writing moment (see also Taczak, 2015).

METACOGNITION

Metacognition has been defined simply as “thinking about thinking” (see, for example, Beaufort, 2007 or Berthoff, 1990). But the *Framework for Success in Postsecondary Writing* (CWPA et al., 2011) furthers this definition by referring to metacognition as “the ability to reflect on one’s own thinking as well as on the individual and cultural processes used to structure knowledge” (p. 5). More recently, Howard Tinberg (2015) innovatively and accurately indicates that “metacognition is not cognition” explaining that “performance, however thoughtful, is not the same as awareness of how that performance came to be” (p. 75). Metacognition, as Tinberg describes it, has an important connection to writing, specifically to students’ ability to reflect on their processes and their knowledge.

Perhaps more significantly, and as the research team behind “Cultivating Constructive Metacognition: A New Taxonomy for Writing Studies” (Gorzelsky, Driscoll, Hayes, & Jones, 2016) suggests, there’s recent research further supporting the connection between metacognition and transfer that other scholars have identified (Adler-Kassner, Clark, Robertson, Taczak, & Yancey, 2016; Beaufort, 2007, 2016; Nowacek, 2011; Reiff & Bawarshi, 2011; Taczak, 2015; Wardle, 2009). The Gwen Gorzelsky, Dana Lynn Driscoll, Carol Hayes, and Ed Jones study (this collection) argues for a specific type of metacognition—constructive metacognition (drawing upon Kathleen Blake Yancey’s [1998] constructive reflection)—which is “a metacognitive move that demonstrates a critically reflective stance likely to support transfer of writing knowledge across contexts” (2016, p. 218) and more explicitly it calls for “reflection across writing tasks and contexts, using writing and rhetorical concepts to explain choices and evaluations and to construct a writerly identity” (Gorzelsky et al., 2016, p. 227). The Gorzelsky et al. study conveys the hope that constructive metacognition will “provide an important tool for helping students to cultivate metacognitive capacities that support writing development” and, as its authors conclude, helps to support the transfer of knowledge and practices (2016, p. 244).

While Gorzelsky et al.’s study focuses more on a specific type of metacognition than on metacognition overall, it does align with research reported by the National Research Council’s volume *How People Learn*, which claims that “metacognitive approaches to instruction have been shown to increase the degree to which students will transfer to new situations” (Bransford, Pellegrino, & Donovan, 2000b, p. 67). This reported success with transfer, according to *How People Learn*, is due to the idea that metacognition helps students become “more aware of themselves as learners who actively monitor their learning strategies and resources” (Bransford et al., 2000b, p. 67). Metacognition allows students to “monitor” their learning in different situations; this helps them “regulate” their own understanding of the situations which then helps them to be able to take this understanding and use it in other situations (Bransford et al., 2000b, p. 78).

As we suggest below, scholars and instructors alike often conflate metacognition and reflection, using the terms interchangeably in higher education to describe learning practices students need to be successful. However, as Kathleen Blake Yancey (2016) notes in her edited collection, *A Rhetoric of Reflection*, “As constructs, reflection and metacognition have some overlap, but they also are assigned different attributes and roles in supporting learning” (p. 6). We take a similar approach to reflection and metacognition: they are similar, yet distinct, and separate but interrelated, as we describe in the sections that follow.

Towards that end, we define metacognition as the ability to mindfully monitor and consider why specific choices were made in a particular writing moment,

including, but not limited to, considering the different types of knowledge(s) learned before and acquired during that particular writing moment, and to be able to utilize that knowledge there and elsewhere.

REFLECTION

Definitions and perceptions of reflection across our field have varied widely, just as the concepts of cognition and metacognition are defined somewhat differently across our discipline. Also similar to metacognition and cognition, throughout the years, we have pulled from other fields to help us define reflection (e.g. Schön's *The Reflective Practitioner* [1984]). But definitions and, perhaps more importantly, perceptions of what reflection means with regard to writing, have little consensus among us. There is a perceived understanding that reflection is a staple of any writing classroom, and that students must reflect on writing in order to understand and improve. But beyond that, definitions have ranged widely. Throughout the last 30 years, reflection has been defined in different ways, from the pausing and scanning of one's work (Pianko, 1979) to meditation (Moffett, 1982) to the reframing of a problem through reflection-in-action (Schön, 1984) to changing and transforming (Berthoff, 1990) to helping students become active agents in their own education (Yancey, 1998) to silence (Belanoff, 2001) to using process descriptions to address "how real students argue" (Jung, 2011) to asking students to examine their own beliefs alongside their classmates (Sommers, 2011) to various others. Yancey (2015) recently suggested reflection is "both a central yet productively open term . . . needing better definitions and more sophisticated research" (p. 153).

As Jeff Sommers (2011) noted, reflection allows students to use their own language in ways that enable them to tap into and build on prior knowledge and experiences. Often reflection becomes an "inside the head" activity that does not require the act of writing—it's inductive. And as many of our students have mentioned, they *do* reflect: they reflect on their daily experiences; they reflect on the classes and college life in which they're engaged; and they reflect over the good and bad things that happen in their lives. The challenge for teachers of writing becomes getting students to broaden their notion of reflection so that they "recognize what they are doing in that particular moment (cognition), as well as consider why they made the rhetorical choices they did (metacognition). The combination of cognition and metacognition, accessed through reflection, helps writers begin assessing themselves as writers, recognizing and building on their prior knowledge about writing" (Taczak, 2015, p. 78).

It's also the case that *their reflections*, as the students phrase them, are different from the focused systematic activity we are advocating: a very specific type

of rhetorical reflection similar to that suggested by previous researchers (Bransford, Pellegrino, & Donovan, 2000a, 2000b; Perkins & Salomon, 1992; Taczak, 2011; Yancey, 1998)—that encourages two actions: (1) theorizing about writing, including writing identity, writing practices and processes, and knowledge about writing, and (2) putting learning into practice as a way to move forward in their writing ability (Taczak & Robertson, 2016). Thus, we define reflection as “a mode of inquiry: a deliberate way of systematically recalling writing experiences to [frame or] reframe the current writing situation” (Taczak, 2015, p. 73; also see Adler-Kassner et al., 2016). As Yancey explains, reflection involves thinking about what we’ve chosen to do in a writing situation in order to understand why we chose to do it, and that making sense of that choice improves our performance. But more importantly, “reflecting contributes to self-efficacy precisely because it helps us understand that we have learned (even if not always successfully); how we have learned; and how we might continue to learn” (Yancey, 2016, p. 8). Reflection helps students become self-aware, and as we noted above, it’s the self-awareness that’s helpful in guiding them to successful transfer.

Indeed, reflection has evolved, for many of us in writing studies, into a means by which students better understand how they are making knowledge about writing; by engaging in reflection students are able to learn from each writing context and its exigence in a way that aids their ongoing learning for writing contexts yet to come.

COGNITION, METACOGNITION, AND REFLECTION: OVERLAPPING, CONNECTED CONCEPTS

The complexity that surrounds these three concepts—cognition, metacognition, and reflection—stems from a rich and varied past. They bring with them what we refer to as “historical baggage” or past histories, experiences, issues, definitions, perceptions and understandings that affect the current disposition surrounding the concepts. Historical baggage is what we carry with us into the classroom as teachers, and what students also carry in and are influenced by. It affects how we teach and makes use of these three concepts in our classroom and affects how students comprehend using them inside their thinking and writing processes. Historical baggage influence what we do in the classroom and how our students respond to what we do in the classroom, and what they do in their own writing. Because of rich and varied pasts, historical baggage can be dichotomous: potentially positive or negative, both clear and unclear, seemingly isolated and yet systematic.

We argue that historical baggage *can* be a way to view how integrated knowledge is organized and accessed. For this to occur, though, cognition, metacog-

tion, and reflection must be aimed for in teaching in intentional, overlapping ways. As our definitions of these three concepts suggest, we believe that they connect, creating opportunities to enhance transfer by encouraging cognition in a particular writing moment (whether it be internally, externally, or socially), while encouraging metacognition through mindful monitoring of rhetorical choices in a very deliberate way, recalling the past to reframe the current moment.

HABITS OF MIND: ORGANIZING AND ACCESSING KNOWLEDGE

As instructors of writing and advocates for teaching for transfer, we are always striving to employ effective instruction for students to engage in cognitive, metacognitive, and reflective practices. Throughout the field's history, we have explored each concept's relationship to writing—sometimes together and sometimes not—but it's clear, at various stages, these concepts have helped inform writing instruction and student writing processes (for example see Bazerman & Tinberg, 2015; Beaufort, 2007, 2016; Flower & Hayes, 1981; Gorzelsky et al., 2016; Reiff & Bawarshi, 2011; Taczak, 2015; Tinberg, 2015; Wardle, 2007; Yancey, 1998). However the redefining of these terms is what helps to make them more elusive: reflection, for example, has always been, as Kathleen Blake Yancey (1998) has stated, “slippery”; cognition, as Peter Khost suggests in this collection, can be a “mystifying term”; and Brianna Scott and Matthew Levy (2013) note that metacognition is a “fuzzy concept” (p. 121). Thus, we might argue that figuring out how (and understanding where) these three concepts connect and work within the writing classrooms presents some difficulties. In fact, others agree. Gorzelsky et al. (2016) argue that the field doesn't have “strategies for teaching [the specific components and subcomponents of metacognition], either individually or to promote metacognitive development that supports the transfer of writing-related knowledge across courses and contexts” (p. 217).

Adding to the complexity of these concepts is the fact that metacognition has been underrepresented in the writing classroom (often because it's not clearly understood) and, as we stated above, is sometimes conflated with reflection or mistaken for cognition. Often, we have heard the terms “metacognition” and “reflection” used interchangeably, as Yancey also suggests (2016, p. 6), as if they are perceived as one and the same. We argue to the contrary: they are not one and the same, and in fact offer two different, yet connected roles in the writing classroom. In order to promote transfer, both metacognition and reflection must be understood and taught as separate concepts, encouraged through different types of directed activities and assignments. As the Gorzelsky et al. study claims, “instructors need information on how to teach metacognitive components in

ways that promote transfer” (2016, p. 218) and as we argued alongside Yancey in *Writing Across Contexts* (Yancey et al., 2014), the same is true for reflection.

These three seemingly important and grounding concepts in our field, specifically to our pedagogies and our ability to encourage transfer, carry with them historical baggage. As instructors and scholars, how do we respond to the past histories, experiences, issues, definitions, and understandings that comprise historical baggage and that affect the current dispositions surrounding cognition, metacognition, and reflection?

In the following sections, we outline our response to this question first in terms of the teaching of writing, and second, in terms of students’ ability to use it as a way to become active, engaged reflective writing practitioners.

TEACHING OF WRITING

For teachers of writing, an understanding of how students use the knowledge they bring to the classroom, develop in the classroom, and develop concurrently while enrolled in our classes, is critical. Even more critical is an instructor’s role in helping students develop the ability to transfer that knowledge to new writing contexts.

Although developing integrated knowledge, as we have outlined above, helps students understand how to organize what they are learning, it is the multiple contexts in which they learn and adapt knowledge that creates an environment in which that knowledge can move forward. From a frame or an awareness level to a more robust understanding, it is within multiple writing contexts that students develop a sense of agency they can use to approach writing and to gain a sense of where their writing fits within their other academic work as well as outside pursuits. Students learn in *communities of practice*, or shared circumstances, in which collaboration, over time, contributes to one’s knowledge development. “Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly” (Lave & Wenger, 1991). One community of practice is the college writing classroom, but it doesn’t exist in a bubble; it is influenced by or is a part of the larger communities of practice in the college environment, and the still larger communities of practice in which students are engaged concurrently, across college or in a workplace or volunteer role, or other aspects of life.

But these communities of practice don’t exist merely because students work together in a writing classroom. A community of practice involves shared values for learning and engaging in its practices, which our writing classrooms don’t necessarily emulate (Lave & Wenger, 1991; Wenger, 1998). In fact, many approaches to teaching writing, especially first-year writing, favor a dispersed ar-

ray of content, such as process-based writing instruction or instruction focused on a particular theme, which are not representative of what is taught in other classrooms across the country or beyond (Robertson, 2011). Without a more unified model or a consensus approach to teaching writing, we don't create a community of practice of writing course classrooms. However, we can acknowledge the communities of practice that exist for our students and to which we can integrate our classrooms to some degree, or at least help our students to understand and access. For example, we can help students relate to their work in our classes the knowledge about writing that comes into play in a student's major discipline, or that student's job or internship for which she must perform some writing task. The student's knowledge can be integrated across those contexts; or rather she can learn to integrate her knowledge across all of her contexts for writing, as her writing knowledge and understanding of writing—in *each* context but also *about* context as a concept to consider in tailoring writing to situations or audiences—continues to develop. In other words, as she develops self-agency with her increasingly integrated knowledge from various contexts, she can increase her effectiveness at the decision-making that undergirds her repurposing of writing knowledge appropriately for each context she faces.

STUDENTS AS REFLECTIVE WRITING PRACTITIONERS

Building on earlier research on reflection (specifically Schön, 1984; Taczak, 2011; Yancey, 1998, 2015, 2016), we describe a reflective writing practitioner as primarily a problem-solver, or a writer who utilizes reflection in these ways: (1) to understand the rhetorical situation and what a writer needs to do in response to it, (2) to develop a reflective framework for approaching writing situations, and in so doing, (3) draw on integrated knowledge that informs the reflective framework, while (4) organizing and accessing their knowledge in a way that allows them to thrive in a writing context and within their own writerly identities.

Drawing specifically upon Donald Schön's theory (1984) on reflective practice for the professional and Yancey's theory of reflection for the writing classroom (1998), we characterize a reflective writing practitioner as someone who is continually exposed to different writing situations and develops, through those situations, a repertoire of knowledge that can be integrated and repurposed. This characterization allows for reflection as a theory, as a practice, and as a means for encouraging transfer.

The utility of one's ability to become a reflective writing practitioner is primarily that so many professions use reflection as part of their practices: artists, social workers, scientists, educators, just to name a few. Doctors, specifically surgeons, are one such example: they build reflection into their practice as a

way to better understand why a surgical procedure might have gone wrong, when they attend regularly scheduled morbidity and mortality conferences (see Yancey, Robertson, and Taczak, 2014, pp. 120-121). Students in our writing classrooms can develop knowledge in the same way, to understand how writing works well in one context, perhaps not appropriately in the next context, and ultimately how to approach each context with a repertoire of knowledge that can be drawn upon for success at writing in a current context. As Yancey writes, through reflective practice, “we see similarities in difference; difference in similarity; affinity in juxtaposition and affinity as part of the whole; arrangement and rearrangement as means of discovery; ready made and newly made” which why it’s critical for students to learn it (or extend their learning): it helps them see things such as “similarities in difference; difference in similarity” and so on (Yancey, K. B., personal communication, September 15, 2015). It provides a space for them as students (and later on as employees and workers) to make sense of what they are doing, why they are doing it, and what it means, and in this way reflection connects directly to cognition and metacognition.

To connect reflection to cognition and metacognition for students, we advocate for the reflective framework discussed in our recent publication (with Kathleen Blake Yancey), *Writing Across Contexts: Transfer, Composition, and Sites of Writing* (Yancey et al., 2014). Our three-pronged framework includes reflective theory, reflective activities, and reflective assignments, all of which create opportunities for students to use both cognition and metacognition (see also Taczak & Robertson, 2016). To expect this kind of development from students, reflection is a reiterative practice woven through the curriculum as a key term, one that is referred to explicitly and defined for the students through the reading of different key theorists and examples of the key term in practice. It is also fostered through different types of reflective activities and assignments that move the students toward becoming reflective writing practitioners. There are several moments in which students encounter “certain types of [writing] situations again and again,” aiding this development (Schön, 1984, p. 60).

As reflective writing practitioners, students can develop the repertoire we mention above, which involves integrated knowledge and different experiences with writing. This means that their attitudes, beliefs, and understandings of writing are a part of their repertoire, too, because students define their experiences with writing based on these areas. Dana Lynn Driscoll (2011) argues that students’ attitudes are an important part of their ability to successfully transfer knowledge. As well, we have previously argued along with Kathleen Blake Yancey (Robertson, Taczak, & Yancey, 2012; Yancey et al., 2014) that prior knowledge impacts students’ ability to successfully transfer in a multitude of complex and interesting ways. As scholars researching transfer argue, we must

acknowledge students' past relationships with writing because it directly affects how they learn, what they learn, how they develop as writers, and what they can transfer forward (Bransford et al., 2000a, Driscoll, 2011; Perkins & Solomon, 1992; Robertson et al., 2012). The repertoire provides students with a list of capabilities connecting to their writing practices, allowing them to begin to make an *active* move in their understanding of writing: from simply writing as a means to fulfill an assignment and receive a grade, to writing as a means of thinking about rhetorical moves and attempting to enact these rhetorical moves in their writing and in future writings.

We create assignments and activities that ask students to *think* like reflective writing practitioners in hopes that it will lead to them *becoming* reflective writing practitioners. The emphasis must be on encouraging students to move from *thinking* to *enacting*. This move is challenging because students (and some instructors) believe that reflection happens naturally rather than developmentally. Some students may not be developmentally ready to engage in reflection of this kind, and some instructors mistakenly believe they already engage students in this type of and level of reflection. But as Donald Schön (1984) claimed, practitioners use reflection as a way to solve problems—the problem of composing/writing a text and the problem of defining composing/writing—two different problems, but two problems with similar goals: to figure out how to compose/write better and to figure out what it is she *is* composing/writing.

Therefore, the reflective writing practitioner uses reflection to understand who she is as a writer, a very challenging question for any writer. Who am I as a writer? What do I believe about writing? What do I understand about writing? What do I know about writing from previous experiences? How do I write/compose in different situations? Do I write the same way in all situations? How can I use what I learn from one context to the next? Exposing students to different activities and assignments involving this type of reflection helps them develop the repertoire needed to encourage transfer.

We argue that when reflection is taught in this intentional way (using the reflective framework from the Teaching for Transfer curriculum), students become active constructors of their own knowledge about effective rhetorical practices; they can become reflective writing practitioners, integrating knowledge across contexts. But we are arguing for a very specific type of reflection—one that connects cognition with metacognition in deliberate ways:

a practice that serves as both process and product; theory and practice; before-the-fact activity, during-the-fact activity, and after-the-fact activity. This type of reflection includes reflecting both inwardly—through the act of thinking about writing

practice—and outwardly—through the act of writing about those writing practices. Thinking about writing gets at the *why* of a writer’s rhetorical choices, which allows for deeper reflection on the act of writing than reflecting only on the *what* of a writer’s actions. Likewise, when reflection is practiced as only an after-the-fact activity or as merely looking backward on what has been written, the writer focuses primarily on *what has been written*. (Taczak & Robertson, 2016, pp. 43-44)

Later, when students who are reflective writing practitioners enter new rhetorical situations, they can not only transfer what they’ve learned appropriately to a new context, but also teach themselves what they don’t already know about what is needed to construct effective rhetorical responses in these new situations. Reflective writing practitioners can transfer more readily because they understand how to make use of their repertoire of knowledge and practices of composing; they are aware of how to frame or reframe different composing situations.

A TEACHING FRAMEWORK: REFLECTION AND METACOGNITION

In some of our previous work together and in our work with Yancey (see Taczak & Robertson, 2016; Yancey et al., 2014;) we have suggested our TFT (Teaching for Transfer) curricular model as an approach that integrates knowledge about and practice in writing to encourage transfer. Here we suggest that further integrating knowledge (and practice as part of that overall knowledge) into the ways we approach the teaching of writing is also critical. Part of that curricular approach involves the reflective framework we suggest is necessary for a writer to become a reflective writing practitioner and this type of reflection is different from the common practice of reflection in the writing classroom, as discussed above. We see the role of reflection as one that is a systematic, reiterative approach to thinking about writing in ways that contribute to a student’s understanding of not only the process of writing, but also the conceptual framework of writing knowledge they develop in a course specifically designed for metacognition and transfer. Of course, no writing class can guarantee delivery on such a promise, but it can be designed to foster these attributes as much as possible. If we understand and account for the integrated knowledge students might work with in our classrooms, we are much closer to achieving the systematic reflection, cognition, and metacognition that we hope our students can develop in order to transfer their knowledge and practices.

We’re assuming here that transfer is the goal of all teaching of writing. We can’t

imagine why it wouldn't be; no matter one's stance on the content of a writing course or one's opinion on the best approach to teaching writing, we assume that all teachers of writing want their students to be able to utilize elsewhere what they learn in the writing classroom. Therefore, we won't argue for transfer here. We will argue, however, for the consideration that students' knowledge about writing is critical to their development as writers, and that instructing students in just the practice of writing is only one part of teaching them to become better writers.

Engaging students in understanding, utilizing, and repurposing all the types of knowledge they bring to our classrooms requires that we teach with a framework in mind. This teaching framework, like a student's reflective framework or framework of conceptual knowledge, should provide our students with direction for organizing their knowledge, not only from the course but also from outside. We know from the National Research Council's *How People Learn*, that the relationship between noviceship and expertise is important to understanding how students make use of what we teach them, and that part of what helps them move toward expertise is the ability to discern patterns of information, to organize the content knowledge they learn in ways that let them develop deep understanding, and to be able to access and repurpose knowledge appropriately in new contexts (Bransford et al., 2000a, p. 31). There are other factors as well, but the three just mentioned are relevant to providing a framework for our teaching that helps students develop integrated knowledge on the way to becoming experts.

We also know from research in writing transfer that students bring dispositions to their learning and writing in college. Defined by Dana Driscoll and Jennifer Wells (2012) as "qualities that determine how learners use and adapt their knowledge" (n.p.), dispositions are part of a much larger system of an individual's approach to thinking. Dispositions include but are not limited to intellectual ability, skill, capacity for learning, motivation, or inclination; rather, they are all of these attributes, coupled with the ways individuals might utilize them.

And we know from research that students bring prior knowledge to their learning that can act as both help and hindrance depending on whether they know what to do with that knowledge or where it might be appropriate to use. When students bring prior knowledge (as well as prior beliefs/attitudes/dispositions) to a writing class, they integrate it with new and other knowledge. This framework of prior and new writing knowledge, as well as concurrent knowledge they might be developing in other courses or outside contexts, help them make sense of their entire repertoire of knowledge. And when metacognition is engaged in doing so, it can ultimately enable students to transfer what they've learned to the writing contexts they'll encounter across the university and beyond.

Regardless of the types of knowledge or attitudes, etc., and the similarities or differences between them, the common thread throughout is the need for

writing teachers to help students organize and make sense of what they know so they might use it effectively. This focus, we argue should be as much our role as teachers as the processes, ways of expression, and techniques for writing long represented in our field.

Students are enculturated as learners, taking cues experientially and through the influences of much more of their lives than we see in any one writing course. An effective teacher of writing must tap into these experiences, along with the prior knowledge, dispositions, and any other factors impacting students' approach to writing, by providing a framework for students that engages them in becoming reflective writing practitioners aiming for metacognition and, ultimately, transfer.

Teaching writing with such a framework means we need to help students see the big picture, not just the writing that works in our classrooms. We must help students understand similarities and differences, to see the patterns of meaning that experts understand, and to be able to make effective selections from their repertoire of integrated knowledge to repurpose in new contexts.

INTEGRATED KNOWLEDGE, METACOGNITION, AND THE REFLECTIVE WRITING PRACTITIONER

Helping students develop self-agency as writers, by encouraging them to utilize integrated knowledge, to work to become reflective writing practitioners, and to understand and develop the capacity for metacognition—this is the framework for teaching writing that will best represent our abilities and their potential. Key to developing self-agency is metacognition, via reflection. By becoming reflective writing practitioners, and by understanding how to integrate knowledge, students can develop the capacity for metacognition that will propel them toward self-agency. As they continue to develop toward self-agency, they will become better writers overall because they will be able to understand the choices available in each context, based on integrated knowledge they know how to access and utilize. As teachers of writing, we can and should help them develop their sense of agency, so they can continue on their own in developing greater self-agency, increased metacognition, and ultimately to transfer what they know appropriately across contexts as writers in college and throughout their entire lives.

REFERENCES

- Adler-Kassner, L., Clark, I., Robertson, L., Taczak, K., & Yancey, K. B. (2016). Assembling knowledge: The role of threshold concepts in facilitating transfer. In J. L. Moore & C. M. Anson (Eds.), *Critical transitions: Writing and the question of trans-*

- fer (pp. 17-48). Fort Collins, Co: The WAC Clearinghouse and University Press of Colorado. Retrieved from <https://wac.colostate.edu/books/ansonmoore/>
- Bazerman, C., & Tinberg, H. (2015). Writing is an expression of embodied cognition. In L. Adler-Kassner & E. Wardle (Eds.), *Naming what we know: Threshold concepts of writing studies* (pp. 74-75). Logan, UT: Utah State University Press.
- Beaufort, A. (2007). *College writing and beyond: A new framework for university writing instruction*. Logan, UT: Utah State University Press.
- Beaufort, A. (2016). Reflection: The metacognitive move towards transfer of learning. In K. Yancey (Ed), *A rhetoric of reflection* (pp. 23-41). Logan, UT: Utah State University Press.
- Belanoff, P. (2001). Silence: Reflection, literacy, learning, and teaching. *College Composition and Communication*, 52(3), 399-428.
- Berninger, V. W., & Winn, W. D. (2006). Implications of advancements in brain research and technology for writing development, writing instruction, and educational evolution. In C. McArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of Writing Research* (pp. 96-114). New York: Guilford.
- Berthoff, A. E. (1990). *Sense of learning: The making of meaning*. Portsmouth, NH: Boynton/Cook.
- Bransford, J. D., Pellegrino, J.W., & Donovan, S. (Eds.) (2000a). How experts differ from novices. In J. D. Bransford, A. L. Brown, & R. R. Cocking (Eds.), *How people learn: Brain, mind, experience, and school: expanded edition* (pp. 31-50). Washington, DC: National Academies Press.
- Bransford, J. D., Pellegrino, J. W., & Donovan, S. (Eds.) (2000b) Learning and transfer. In J. D. Bransford, A. L. Brown, & R. R. Cocking (Eds.), *How people learn: Brain, mind, experience, and school: expanded edition* (pp. 51-78). Washington, DC: National Academies Press.
- Council of Writing Program Administrators, National Council of Teachers of English, and the National Writing Project (2011). *Framework for success in postsecondary writing*. Retrieved from <http://wpcouncil.org/files/framework-for-success-postsecondary-writing.pdf>
- Driscoll, D. L. (2011). Connected, disconnected, or uncertain: Student attitudes about future writing contexts and perceptions of transfer from first year writing to the disciplines. *Across the Disciplines*, 8(2). Retrieved from <https://wac.colostate.edu/atd/articles/driscoll2011/index.cfm>
- Driscoll, D. L., & Wells, J. M. (2012) Beyond knowledge and skills: Writing transfer and the role of student dispositions. *Composition Forum*, 26 Retrieved from <http://compositionforum.com/issue/26/beyond-knowledge-skills.php>
- Dryer, D. (2015). Writing is (also always) a cognitive activity. In L. Adler-Kassner & E. Wardle (Eds.), *Naming what we know: Threshold concepts of writing studies* (pp. 70-74). Logan: Utah State University Press.
- Flower, L., & Hayes, J. (1981). A cognitive process theory of writing. *College Composition and Communication*, 32(4), 365-387.
- Gorzelsky, G., Driscoll, D., Hayes, C., & Jones, E. (2016). Cultivating constructive metacognition: A new taxonomy for writing studies. In J. L. Moore & C. M. Anson

- (Eds.), *Critical transitions: Writing and the question of transfer* (pp. 217-250.). Fort Collins, CO: The WAC Clearinghouse and University Press of Colorado. Retrieved from <https://wac.colostate.edu/books/ansonmoore/>
- Jung, J. (2011). Reflective writing's synecdochic imperative: Process descriptions re-described. *College English*, 73(6), 628-647.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.
- Moffett, J. (1982). Writing, inner speech, and meditation. *College English*, 44(3), 231-246.
- Nowacek, R. S. (2011). *Agents of integration: Understanding transfer as a rhetorical act*. Carbondale, IL: Southern Illinois University Press.
- Perkins, D. N., & Salomon, G. (1992). Transfer of learning. *International encyclopedia of education*, 2, 6452-6457.
- Pianko, S. (1979). Reflection: A critical component of the composing process. *College Composition and Communication*, 30(3), 275-278.
- Reiff, M. J., & Bawarshi, A. (2011). Tracing discursive resources: How students use prior genre knowledge to negotiate new writing contexts in first-year composition. *Written Communication*, 28(3), 312-37.
- Robertson, L. (2011). *The significance of course content in the transfer of writing knowledge from first-year composition to other academic writing contexts*. (Doctoral dissertation). PhD diss., Florida State University.
- Robertson, L., Taczak, K., & Yancey, K. B. (2012). Notes toward a theory of prior knowledge and its role in college composers' transfer of knowledge and practice. *Composition Forum*, 26. Retrieved from <http://compositionforum.com/issue/26/prior-knowledge-transfer.php>
- Schön, D. A. (1984). *The reflective practitioner*. New York: Basic Books.
- Scott, B. M., & Levy, M. G. (2013). Metacognition: Examining the components of a fuzzy concept. *Educational Research*, 2(2), 120-131.
- Sommers, J. (2011). Reflection revisited: The class collage. *Journal of Basic Writing*, 30(1), 99-129.
- Sommers, N., & Saltz, L. (2004). The novice as expert: Writing the freshman year. *College Composition and Communication*, 56(1), 124-149.
- Taczak, K. (2011). *Connecting the dots: Does reflection foster transfer?* (Doctoral dissertation). PhD diss., Florida State University.
- Taczak, K. (2015). Reflection is critical in the development of writers. In L. Adler-Kassner & E. Wardle (Eds.), *Naming what we know: Threshold concepts of writing studies* (pp. 78-79). Logan, UT: Utah State University Press.
- Taczak, K., & Robertson, L. (2016). Reiterative reflection in the twenty-first-century writing classroom: An integrated approach to teaching for transfer. In K.B. Yancey, (Ed.), *A Rhetoric of Reflection* (pp. 42-63). Logan, UT: Utah State University Press.
- Tinberg, H. (2015). Metacognition is not cognition. In L. Adler-Kassner & E. Wardle (Eds.), *Naming what we know: Threshold concepts of writing studies* (pp. 75-76). Logan, UT: Utah State University Press.

- Wardle, E. (2007). Understanding “transfer” from FYC: Preliminary results from a longitudinal study. *WPA: Writing Program Administration*, 31(1-2): 65-85.
- Wardle, E. (2009). “Mutt genres” and the goal of FYC: Can we help students write the genres of the university? *College Composition and Communication*, 60(4): 765-89.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, UK: Cambridge University Press.
- Yancey, K. B. (1998). *Reflection in the writing classroom*. Logan, UT: Utah State University Press.
- Yancey, K. B. (2015). Reflection. In P. Heilker & P. Vandenberg (Eds.), *Keywords in Writing Studies* (pp. 150-154). Logan: Utah State University Press.
- Yancey, K. B. (Ed.). (2016). *A Rhetoric of reflection*. Logan, UT: Utah State University Press.
- Yancey, K. B., Robertson, L., & Taczak, K. (2014). *Writing across contexts: Transfer, composition, and sites of writing*. Logan, UT: Utah State University Press.