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"Because I Actually Want to Write It":

A Longitudinal Study of the Relationship between FYW curriculum, Knowledge

Generalization, and Students' Consequential Transitions

A dissertation submitted in partial satisfaction of the

requirements for the degree Doctor of Philosophy

in Education

by

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### Abstract

## "Because I Actually Want to Write It":

A Longitudinal Study of the Relationship between FYW curriculum, Knowledge Generalization, and Students' Consequential Transitions

### By

## Andrew J Ogilvie

The idea of transfer—that individuals use knowledge beyond the context of the initial learning site—is generally considered to be the fundamental aim of all educational systems.Writing instructors in college teach their students ideas about argument, structure, and grammar based off of the idea that students will use this knowledge when they write in other courses and in the workplace beyond college.

Yet despite these kinds of pervasive and ubiquitous assumptions that educational systems prepare students for tasks, vocations and careers beyond the classroom context, there is little agreement that transfer actually occurs (Bransford & Schwartz, 1999: DeCorte, 2003). Over a century of transfer research has failed to produce any firm conclusions on whether transfer can actually happen, how it should be defined, or whether it can be taught.

Doubts and concerns about the viability of transfer and the value of college seem to be particularly acute within the field of writing studies. Elizabeth Wardle (2007) has argued the field's practitioners "would be irresponsible not to engage the issue of transfer" (p.66). The present study takes up the question of transfer in studying how two students, Clare and Sara, potentially generalize prior knowledge from a first-year writing course in writing situations in six subsuquent semesters. This project is built upon the idea that transfer is idiosyncratic and incremental, that it is shaped by the interaction of an individual and the individual's perception of the environment's affordances, and that a broader conception of the term transfer is needed to broaden how it is studied.

In the present study I draw on Beach (2003) in reconceptualizing transfer as generalization, which can occur in two forms. The first is the explicit application of prior knowledge, a form of knowledge use that is visible and conscious. The other form of generalization is implicit propagation, the tacit continuation of prior knowledge in ways that are neither explicit nor clear. These two forms of generalization comprise key parts of my generalization framework, which helps me operationalize my definition of transfer for this study. The generalization framework examines potential evidence of generalization through three different knowledge elements: knowledge similarity, knowledge influence, and knowledge frequency. Together, these three framework elements help me clarify, refine, and evaluate the specific nature of any generalization in looking at what kind of knowledge is generalized (knowledge similarity), how influential that knowledge is as part of a writing situation (knowledge frequency).

I use the generalization framework to study if any knowledge from the transfercentric FYW course is generalized in Clare and Sara's thinking as they negotiate new writing situations in semesters 2-7. In addition to looking for generalization, I also develop accounts of the personal connections Clare and Sara make of writing situations, specifically in terms of how they perceive and assign value to the writing situation. In the next chapter, I articulate what I mean by a transfer-centric FYW course by locating the

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course's curriculum within previous approaches to curriculum that supports and facilitates future knowledge transfer.

This study's findings suggest that generalization can occur though there are significant qualifications to this positive claim of generalization. One is that while Clare and Sara did at times apply and propagate prior knowledge what is clear is that the environment plays a significant role in whether or not generalization occurs.

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### Chapter 1: Introduction and Rationale

The idea of transfer—that individuals use knowledge beyond the context of initial learning initial learning site—is generally considered to be the fundamental aim of all educational systems. Elementary school science teachers presume students will apply their learning about gravity when they later take a physics course. Algebra teachers believe that students will use their understanding of slope when they take calculus. University presidents argue that graduates of their institutions will apply their college learning in the real world. Writing instructors in college teach their students ideas about argument, structure, and grammar based off of the idea that students will use this knowledge when they write in other courses and in the workplace beyond college.

Yet despite these kinds of pervasive and ubiquitous assumptions that educational systems prepare students for tasks, vocations and careers beyond the classroom context, there is little agreement that transfer actually occurs (Bransford & Schwartz, 1999: DeCorte, 2003). Over a century of transfer research has failed to produce any firm conclusions on whether transfer can actually happen, how it should be defined, or whether it can be taught.

The stakes of the transfer discourse are relatively significant: how can a defense be made of the money and time invested in education if there appears to be little evidence that proves classroom learning has any real value beyond the classroom? For higher education, the anxiety over the inability to answer the transfer questions is only heightened within an increasingly assessment-dominated atmosphere. Texts like Arum and Roska's (2011) *Academically Adrift: Limited Learning on College Campuses,* credential-focused organizations like the Lumina Foundation, and competency-based

approaches to higher education are all indices of an increasingly prominent discourse around how college should be assessed and what college should 'do' for students.

Doubts and concerns about the viability of transfer and the value of college seem to be particularly acute within the field of writing studies. Elizabeth Wardle (2007) has argued the field's practitioners "would be irresponsible not to engage the issue of transfer" (p.66). In light of the significant attention given to the question of transfer over the past decade, it seems apparent that writing studies scholars have taken up Wardle's charge. Yancey, Robertson and Taczak's (2014) *Writing Across Contexts: Transfer, Composition, and Sites of Writing,* Anson and Moore's (2016) *Critical Transitions: Writing and the Question of Transfer,* and the transfer-based research associated with the Elon University seminar "Writing and the Question of Transfer" are just a few examples that illustrate the field's increased focus on transfer.

Yet despite the field's engagement with transfer, there is still little known about transfer, as many scholars have noted (e.g., Donahue, 2012; Wardle & Mercer Clement, 2016; Anson, 2016). One apt way to perhaps describe the writing transfer research conducted thus far is that it is eclectic. The question of transfer on its face appears to be relatively direct, yet the approaches, angles, and inquiries that have been made have been relatively diverse. Here, I sketch the broad outlines of some key insights into what has been learned about transfer from these various research approaches in order to situate my own study within this ongoing discourse of transfer. In my literature review, I go more deeply into the literature around transfer focused FYW curriculum, historical evolution of transfer research, and writing transfer research grounded in expansive conceptions of transfer.

Important contributions about transfer have been made by longitudinal studies whose central focus was on the question of how students developed as writers through college. Lucille McCarthy's (1987) study of the writing development of one student, Dave, as he wrote in three courses—freshman composition, poetry, and cell biology— makes visible significant features of student writing in college. A critical conclusion of her study for transfer research is her conceptualization of Dave as a "stranger in a strange land" and her finding that in "each new class Dave believed that the writing he was doing was totally unlike anything he had ever done before" (p. 234). What McCarthy's metaphor highlighted was the idea that students were not automatically transferring knowledge about writing between classes, which had been a tacit assumption shared by many composition teachers and scholars.

In *Time to Know Them*, Marilyn Sternglass (1997) extends McCarthy's longitudinal, case study approach to understanding how students grow as writers during college. Sternglass' case studies of nine students from a diverse urban population over a six year period looked at students' lives both inside and outside the academic setting. She found that the students in her study did develop as writers though their experience was shaped idiosyncratically, though often significantly, by the way students' lives outside of school interacted with their in-school lives. Lee Ann Carroll's (2002) study of twenty undergraduate students at Pepperdine University was, like McCarthy and Sternglass focused on writing development, but her insights into students' experiences as they go through college are important for transfer. Carroll observed that students in her study didn't necessarily become 'better' writers, but that students learned to write differently, and that they "became better able to juggle the multiple literacy acts often required by the

commonplace writing assignments of college courses" (p.xii). Carroll's insight that development as a writer involves becoming more flexible suggests that one aim of a writing course would be to give students knowledge that would aid their likelihood and ability to be adaptable in future writing situations.

Bergmann and Zepernick (2007) approach the question of transfer in focusing not necessarily on whether transfer occurs but on what variables might influence knowledge transfer. They found that the way students perceived their FYW courses shaped, and in some cases limited, the ways that they would or would not draw upon the writing knowledge and experiences from the course. For the students in their study, the writing they did in FYW was defined as "personal and expressive rather than academic or professional" (p.132) and described as not having the authority nor the set of rules or conventions that furnish disciplinary writing with a sense of professionalism. The students did, though, believe that writing knowledge could transfer from one course to another if the initial course was perceived as disciplinary. FYW courses, according to these students however, did not convey that authority and thus students did not feel that the knowledge was transferable. A similar insight is made by Jarratt, Mack, Sartor, & Watson (2009) who found that some students perceived the less-rigid writing in their humanities-based FYW as significantly different than their upper-level science writing. Because of this perception, these students reported that they found no reason to try to connect knowledge between the two courses. For transfer researchers, these studies illuminate the need to take into account not just the curriculum of an FYW course, or the course or context that follows the initial learning, but whether the students understand and believe that what they are learning is intended to support them in future writing

situations. Thus, how students perceive the relationship between FYW and future courses could be a key variable in both the study of transfer as well as how FYW courses can be designed to facilitate transfer.

The complex role that context (e.g., classroom and institution) play in student perceptions and dispositions is a focal point of Wardle's (2012) examination of the interaction between educational settings and student attitudes. Rejecting the reductive, linear model of transfer wherein students mechanically absorb-and-apply knowledge, Wardle problematizes the term "transfer" and instead suggest a more generative term is "repurposing," which describes the creative act of transforming what is already known to solve a new problem. Wardle's critique of the term transfer and its narrow definition as the application of knowledge is also extended by others in transfer research (Beach, 1988; Smart & Brown 2002; Brent, 2011, 2012). Drawing on Bourdieu's theory of habitus and field, Wardle envisions the "repurposing" of prior knowledge as occurring within the dynamic relationship between the dispositions of educational systems and student's individual dispositions. The dispositions of educational institutions, she suggests, can foster two different types of dispositions: "problem-exploring dispositions," which encourage students to look for creative solutions to challenges, and "answer-getting dispositions" which discourages such repurposing.

The conclusions of the particular studies briefly discussed here include several key ideas about writing and learning that inform the present study. One is that writing development is idiosyncratic, incremental, and multi-directional. An assumption can be made that writing transfer is similarly likely to be idiosyncratic, incremental, and recursive; Clara and Sara, the two subjects of my study, might not learn the same things

in the FYW course and they're not likely to generalize what they've learned in the same ways. An interrelated insight from these studies is that students and their writing experiences cannot be separated from the environments they inhabit; as both Sternglass and Wardle noted, the environments students inhabit create affordances that will influence how students react and respond. Driscoll and Wells' study helps foreground the subjective nature of environments; understanding how students view, understand, and perceive the various environments they encounter is an important way of considering how transfer does or does not happen. Lastly, Wardle's reconceptualization of transfer as "repurposing" also echoes what many others have said about the need for new language for thinking about and examining transfer. In light of the narrowness and limited scope of the term transfer, Wardle argues that a broader, more expansive understanding of transfer and how it occurs is needed. The present study draws upon these ideas that transfer is idiosyncratic and incremental, that it is shaped by the interaction of an individual and the individual's perception of the environment's affordances, and that a broader conception of the term transfer is needed to broaden how it is studied.

While the literature review offers a more robust explication of how the present study more specifically fits into and responds to existing research around transfer, these studies illustrate a few key general elements that inform this study's research questions:

1) What do students learn about writing over one semester in a transfer-focused FYW course whose curriculum focuses on WAW and Beaufort's (2007) five knowledge domains (Semester I)?

2) Given that these five knowledge domains and a more situated understanding of writing are supposed to help students negotiate writing tasks in college, is there any evidence that the students generalized their knowledge from semester 1 in their thinking as they negotiated writing situations in semester 2-7?

3) Does this longitudinal study of students' perceptions and approaches to writing provide insight into the nature of transfer between FYW courses and subsequent writing tasks?

In the present study I draw on Beach (2003) in reconceptualizing transfer as generalization, which can occur in two forms. The first is the explicit application of prior knowledge, a form of knowledge use that is visible and conscious. The other form of generalization is implicit propagation, the tacit continuation of prior knowledge in ways that are neither explicit nor clear. These two forms of generalization comprise key parts of my generalization framework, which helps me operationalize my definition of transfer for this study. The generalization framework examines potential evidence of generalization through three different knowledge elements: *knowledge similarity*, *knowledge influence*, and *knowledge frequency*. Together, these three framework elements help me clarify, refine, and evaluate the specific nature of any generalization in looking at what kind of knowledge is generalized (*knowledge influence*), and how frequently that knowledge is generalized (*knowledge frequency*).

I use the generalization framework to study if any knowledge from the transfercentric FYW course is generalized in Clare and Sara's thinking as they negotiate new writing situations in semesters 2-7. In addition to looking for generalization, I also develop accounts of the personal connections Clare and Sara make of writing situations, specifically in terms of how they perceive and assign value to the writing situation. In the next chapter, I articulate what I mean by a transfer-centric FYW course by locating the course's curriculum within previous approaches to curriculum that supports and facilitates future knowledge transfer.

#### Chapter 2: Literature Review

## Introduction

The aim of this literature review is to demonstrate how the conceptual and methodological approaches used in previous studies of transfer have informed this study's framework for examining transfer and its three central research questions:

1) What do students learn about writing over one semester in a transfer-focused FYW course whose curriculum focuses on WAW and Beaufort's (2007) five knowledge domains (Semester I)?

2) Given that these five knowledge domains and a more situated understanding of writing are supposed to help students negotiate writing tasks in college, is there any evidence that the students generalize their knowledge from semester 1 in their perceptions and approaches involved in writing activities in semester 2-7?

3) Does this longitudinal study of students' perceptions and approaches to writing provide insight into the nature of transfer between FYW courses and subsequent writing tasks?

The literature review attempts to show how these three questions are aligned and to also demonstrate how they respond to ongoing debates about transfer within writing studies and in education research more broadly. The literature specific to each aspect of the question is included in the chapter that focuses primarily on that question. In the rest of

chapter 2 I discuss how writing studies scholars have addressed critiques of FYW curricula in developing new approaches to FYW courses so that these courses are conceived with the goal of facilitating transfer. The goal of chapter 2 is to make visible key similarities and differences between the present study's transfer-centric curriculum and the ideas about curriculum developed by Dew (2003) ,Wardle and Downs (2007), Beaufort (2009) and Yancey, Robertson and Taczak (2014). In chapter 3, I offer a brief history of transfer research and how transfer has been defined in and out of writing studies. Additionally, I describe how recent studies of writing transfer have drawn upon sociocultural theories of learning to develop more expansive conceptions of transfer as a way of addressing some of the limitations of previous theories of transfer that have dominated throughout the 20<sup>th</sup> century. In chapter 4 I explore a specific subset of writing research into transfer that examine the effects of transfer-based FYW courses and look at the ways other writing studies researchers have studied transfer more broadly as transformation.

### The Design of a Transfer-Centric Course

Over the past decade, writing studies scholars have increasingly taken up the question of what students learn as a result of taking a first year writing course. As many have noted (e.g., Smit, 1995, 2004; Russell, 1995; Wardle, 2007) the existence of the first-year writing course is based on the assumption that the course is important because students take what they have learned and subsequently apply it to future writing assignments and tasks. The value and effectiveness of the FYW course, however, has been questioned within writing studies. As Connors (1995) describes, criticism of the

FYW course has been around since the inception of compulsory writing courses in the late 19<sup>th</sup> century (p.3). Early criticism was rooted in several different arguments. Some critics of the required writing course felt that students should have learned to write in high school, others argued that teaching writing was too labor-intensive, and some noted that students intensely disliked the course (Connors, 1995, p.11). Connors highlights a 1932 study of English composition by Alvin Eurich, whose pretest and posttest examination of student essays in a first-year composition course at the University of Minnesota found that "no measurable improvement in composition was apparent after three months of practice" (Eurich quoted in Connors, p.11). Eurich rated student essays from the course using the Van Wagenenen English composition, an assessment tool Connors describes Eurich as using in order to make the grading of the writing as scientific as possible. Eurich's conclusion that the first year writing course be abandoned in favor of a collaborative approach between writing teachers and content-based faculty prefigured much of the ideas that animated late 20th century WAC philosophies.

More contemporary criticism of FYW courses is primarily organized around a critique of the inherent limitations of what researchers like Russell and Smit have called a "General Writing Skills Instruction (GWSI)" approach in FYW. GWSI refers to the belief that "writing is a set of rhetorical skills that can be mastered through formal instruction (Petraglia, 1995, p. xi). Russell (2005) draws upon activity theory to argue that it is not impossible to teach general writing skills because writing is a tool that cannot be separated from the social functions and social contexts of its use (p.57). To illustrate this critique of GWSI, he develops the metaphor of attempting to teach someone general ball-handling skills that could then be used to play tennis, basketball or soccer

(p.57). Russell notes that there is no way to teach a general ball-handling ability that could be used in a variety of sports like basketball or tennis just as there is no way that one FYW course can teach a student how to write in a way that would apply universally to the myriad writing contexts like a biology or history course students encounter beyond the FYW course. Russell concludes FYW courses are burdened with the "unrealistic expectations" of the "teaching or improvement of all writing" (p.60).

Smit (2007) agrees with Russell's critique of the GWSI approach in FYW curricula and draws on transfer research to conclude that it can't be assumed that students are automatically transferring writing knowledge from FYW courses: "the evidence suggests that learners do not necessarily transfer the kinds of knowledge and skills they have learned previously to new tasks. If such transfer occurs at all, it is largely unpredictable and depends on the learners' background and experience, factors over which teachers have little control" (Smit, 2007, p. 119). Given that transfer doesn't seem to happen naturally, Smit concludes that while it is not necessary to eliminate FYW courses, it is clear that first-year writing courses should be reconfigured to "explicitly teach the transfer of knowledge and skills" (p.134).

In response to the claims about transfer made by critics of FYW like Russell and Smit, new curricula have been theorized and developed over the past 15 years. While these approaches all have different emphases and distinguishing features, they are more similar than different in that they share two interrelated and central beliefs: one, FYW courses should be designed to facilitate transfer, and two, the content of FYW courses should be writing and related areas of rhetoric, language, and writing practices. These two principles represent a significant departure from some of the previous conceptions of

FYW, specifically in terms of the assumptions that the goal of first year writing instruction was to teach students how to write. Part of this belief that writing courses could teach students to write was that they could accomplish this goal by teaching students a universal template for writing that would work in all situations and contexts. Beaufort (2007) critiques this idea of a single writing formula in her discussion of the arhetorical and decontextualized nature of FYW assignments described as an "academic essay" or "textual analysis," which are "taught as if they were universal standards for communicating in all disciplines" (p.12-13). As will be discussed, the reimagined FYW curricula reject the idea of a singular approach to writing or a universal genre and instead moved towards encouraging students to see the contextual, situated nature of writing.

## Early Reformations of FYW

One of the earliest reconceptualizations of FYW curriculum was developed by Debra Dew (2003), whose "Writing-with-specific-content" (WWSC) theorization of first year writing instruction at University of Colorado-Colorado Springs (UCCS) explicitly attempts to move beyond "the instrumental function of general skills writing instruction" (p.87). In addition to addressing the GWSI approach, the curricula Dew develops also offers a response to an earlier critique of FYW by Kaufer and Young's (1993) that writing courses lacked disciplinary integrity because they had no clear content. Four key conceptual features characterize the WWSC curricula. The first is that the course has a clear and explicit content –rhetoric and writing studies, though there are smaller units of this content that are taught like "multicultural rhetoric and language practices; language and technology; language and literacy; pop culture and language practices" (p.95). It is

not just that the content focuses on language, but as Dew notes in her description of WWSC's second feature the course content helps also students understand the relationship between language and disciplinarity and how the structures and formats of texts are shaped discourse community. This pedagogical approach differs from the previous versions of the FYW courses that taught the structures and organization of academic writing as a set of fixed or universal templates. Third, the emphasis on language meant that the course now focused on students' writing abilities at the sentence-level, which at UCCS had previously had been the responsibility of an ancillary course offered in the writing center. Lastly, the centering of rhetoric and writing studies as the content of the course meant that the course now could in some sense approximate the perception of disciplinary rigor of courses in other more established disciplines.

### *Teaching-for-Transfer*

While the FYW curricula developed by Dew was designed to support transfer, Yancey, Robertson and Taczak's "Teaching for Transfer" curriculum echoes Dew's emphasis on writing but is more directly focused in a curricular sense on giving students a writing vocabulary that they would transfer. Like Dew's curricula, the TFT course design is informed by Russell's critique of GWSI instruction and by Smit's doubts about the viability of writing transfer from FYW courses. The conceptualization of the TFT curricula, as compared to Dew's approach, places a larger significance on supporting students' future transfer through two central conceptual ideas. The first is that the course encourages students to develop their own theory of writing through an introduction to a writing vocabulary made up of eleven terms. Students are introduced to terms like

audience, genre, and rhetorical situation and then asked to analyze and use the terms throughout the semester. The second and interrelated way they attempt to facilitate transfer is a deep and sustained focus on reflection; students are continuously asked to reflect on the eleven writing terms, their theory of writing, and how the terms and theory can help them in future writing situations. In this way, students are encouraged to project into the future how what they are learning in the TFT course will help them, an approach built on Perkins and Salomon's (1988) theory of bridging. Bridging is a pedagogical approach to transfer that involves teachers asking students to consider how what they are learning could potentially be used in different contexts (Perkins & Salomon, 1988, p.28). A bridging approach attempts to aid in decontextualizing knowledge so that students don't too concretely associate that knowledge with the context within which it was learned. That students can see some knowledge as context-bound is a phenomena that has been observed by Bergmann and Zepernick (2007) who found that students didn't see the relevance of their FYW writing course content outside of the writing course. Through bridging, Yancey, Robertson, and Taczak theorize that students will not just develop an understanding of these writing concepts but also know how to use them in the future. As a result of developing a theory of writing and reflecting upon that theory, Yancey, Robertson, and Taczak believe that students will develop a "conceptual passport or travel guide" (p.35) that they can draw upon when they write in new contexts.

Yancey, Robertson, and Taczak's TFT curricula is different from Dew's in two minor ways. First, the TFT course involves a more refined and precise articulation of writing content in the form of its eleven conceptual terms. Second, reflection is more than just a supplementary part of the course; instead, it is a content area students are asked to

analyze. Despite these two differences, the two curricula are quite similar in their shared conceptual belief that the study of writing, language, and rhetoric should function as the organizing content of an FYW curricula.

### WAW

Like Dew's WWCP approach and Yancey, Robertson and Taczak's TFT course, Writing about Writing (WAW) was conceived as a theoretical framework in response to critiques of FYW courses by Smit, Russell and others. Russell's argument critiquing the effectiveness GWSI in some ways forms the backbone of the three central principles that anchor the theories and conceptualizations of WAW. The first is that writing cannot be taught independent of subject matter. An instructor with a background in writing studies, Wardle and Downs argue, is an expert on the methods, theories and research of rhetoric and composition and thus should teach the content of the field. A FYW course that focuses on literature and requires students to do literary analysis of imaginative texts helps students develop an understanding of how to write for English courses. The course does not necessarily prepare students to understand how to adapt to a diverse array of writing tasks beyond a literature-based FYW course. Wardle and Downs posit instead that a course that puts writing research and the discipline of writing studies at the center of its curriculum is more likely to enable the transfer of writing knowledge in future writing situations. Wardle and Downs' WAW approach addresses this critique by arguing that content does indeed matter and that the content of an FYW course should be writing.

The second principle that informs the WAW approach rejects ideas that FYW courses can teach students 'how to write' and replaces that aim with the idea that writing

instruction must help students understand how writing works in society and how the purposes, features and conventions that shape writing are determined by particular communities. While the goal of transfer runs throughout the three principles of a WAW theoretical framework, it is this second principle where transfer is most prominent. In describing how WAW supports transfer, Wardle and Downs begin by diagnosing how previous theoretical FYW approaches were less likely to facilitate transfer for three reasons. One, these approaches involved the assumption that students could be taught a universal academic discourse they could apply in all writing contexts. Second, they assumed that writing is a fundamental skill that once learned would function consistently across an array of writing situations. Lastly, Downs and Wardle describe how these approaches also included the belief that transfer would happen naturally, if not automatically (p.554).

In contrast, a WAW approach attempts to facilitate transfer in increasing the complexity with which students see and understand writing, introducing them to the idea that writing is a socially-situated activity, and moving them to a deep understanding that good writing is defined by audience. If students can see writing as more complex and dynamic—as shaped by audience, purpose, and context—they will then use that understanding to interpret and negotiate the reality of new writing situations that are, in fact, grounded in audience, context, and purpose, among other significant variables.

To do this, a WAW approach encourages students to transform prior conceptions of school writing that are narrow, fixed, and monolithic. As Downs and Robertson (2014) have noted, students often bring to college perceptions about writing that are onedimensional; students can believe that "writing is formulaic, or writing in one context is

universal in all contexts" (p.111). Moreover, the writing that students often do in high school is primarily experienced by students as 'writing for a grade' rather than writing more purposefully as a way of participating in a particular discourse community. Moreover, findings by Yancey, Robertson, and Taczak (2013) shed light on the key role of transforming students' prior knowledge. They found that as result of primarily reading fiction throughout K-12, their students primarily associated good writing with expressive, creative prose. Students, they noted, seemed to have limited experience reading or working with academic or non-fiction texts. A WAW orientation believes that students will likely struggle if they bring limited understandings of writing to the different writing contexts they negotiate and they will struggle if they believe that they will only need to write in one, universal way. Students leaving a WAW course ideally have a more complex understanding of writing and a conceptual framework that they will use when they have to approach, evaluate, and fulfill writing performances.

The third principle that guides the WAW theoretical framework is that student agency as an expert and writer is foregrounded. Wardle and Downs note that within a WAW approach, "students learn to recognize the need for expert opinion and cite it where necessary, but they also learn to claim their own situational expertise and write from it as expert writers do" (p.560). Although WAW introduces students to disciplinary knowledge from writing studies, as an approach it resists passive notions of learning and instead encourages students to see themselves and their own writing lives as valid and worthwhile areas of inquiry.

While these three principles form the broader, theoretical framework of WAW, Downs and Wardle have developed specific curricular approaches that animate those

broader WAW principles. One way this is done is that course readings are drawn from the field of writing studies and related fields like applied linguistics, education, and literacy. These readings are contextualized within the students' own writing lives and introduced as a way of making sense of their own writing experiences. Similarly, assignments are introduced to students as a process of inquiry organized around writingbased questions that examine how "good writing" is defined in particular genres and discourse communities, how writing functions in the professions of particular organizations and communities, and how particular writing processes shape text production. And in writing about writing, the course helps to elevate, or re-frame, the perception of writing for students from a subject seen as peripheral or non-disciplinary, lacking the weight and history of biology, English, or philosophy, to a discipline in itself worthy of examination and critical to the overall project of higher education.

Together, these three principles --the content of a writing course should be writing, writing is a social activity, and student agency is critical in writing development -- form a theoretical framework that aims to facilitate transfer and help students more effectively fulfill the array of writing tasks they will confront moving beyond the FYW course.

## Beaufort's Five Knowledge Domain Framework

Like Downs and Wardle, Beaufort's research (2007, 2012) has also addressed issues around writing instruction and transfer in first-year writing courses. In her self-described "blended hybrid of ethnography and argument" (p.6), *College Writing and Beyond: A New Framework for College Writing Instruction*, Beaufort draws upon her

own longitudinal studies to articulate new ways of thinking about how FYW can support transfer. Her central research inquiry is organized around "developing writing curricula that will prepare students with the analytic skills and rhetorical skills to write clear, convincing arguments, as well as give students knowledge of the fundamental concepts necessary to be able to adapt, change, and add writing skills in new contexts for writing" (n.p., 2012). The central conceptual approach that she develops shares Yancey, Robertson and Taczak's emphasis on introducing students to a conceptual language for writing that students can draw upon as they approach new writing situations. Beaufort's version takes the form of a composite, domain-based model of writing expertise that she conceived as a result of conducting of ethnographic research into expert writers. These domains -discourse community knowledge, rhetorical knowledge, genre knowledge, process knowledge, and subject matter knowledge -- comprise a framework that expert writers must draw upon to successfully approach and fulfill writing tasks. Beaufort sees the five knowledge domains as providing a curricular foundation for a transfer-focused FYW course:

to aid positive transfer of learning, writers should be taught a conceptual model such as the five part schema I have laid out here for the "problem space" of a writing task, i.e., the five knowledge domains they will need to draw from to complete the task. Then, they can work through each aspect of the writing task in a thorough manner, looking for what in the current situation is similar to past writing tasks, or analyzing new tasks with appropriate 'mental grippers' [or concepts] for understanding. (p.152)

Beaufort draws on prior transfer research from Perkins and Solomon to describe how these five knowledge domains act as mental grippers that "organize general domains of knowledge that can then be applied in local circumstances" (p.151).

Beaufort conceptualizes these five domains as distinct, though they all overlap and are interrelated. Among the five, Beaufort situates discourse community as the most significant domain and locates the other four within discourse community, a "particular community of writers who dialogue across texts, argue, and build on each other's work" (p.18). A student who has been introduced to these five knowledge domains, she contends, can use them to negotiate a writing assignment. The student would perhaps approach the assignment first by examining the discourse community, determining who they are, what they value, and the kinds of language they use. Once the discourse community is identified, the writer would then move on to the other four domains. The writer would need to know the appropriate genre for their assignment, and then analyze the genre in order to determine its purpose, conventions, features, and rules. Additionally, the writer would use her understanding of rhetoric to determine how arguments, evidence, and persuasion work in this genre and are appropriate for the discourse community. At the same time, the writer would be developing an understanding of the range of relevant subject matter for the genre based on her knowledge of the discourse community and the genre. For process knowledge, the writer would have to determine how the genre and the discourse community would shape how she fulfills the assignment, including the kinds of revision and editing resources available as well as time affordances. Together, the assumption is that the student's understanding of these five knowledge domains increases the likelihood that they will more effectively and knowingly make sense of and fulfill a writing task. Specifically, they will know they need to write in response to a particular audience, and they will have conceptual tools -

rhetorical knowledge, genre knowledge, etc.—to know how the text should be composed to meet that audience's needs.

### The Transfer-Focused Curricula of the Present Study

The curricula of the FYW that is part of the present study was significantly informed by both the WAW approach and Beaufort's five knowledge domains, though it also shares some features of the curricula of Dew and Yancey, Robertson, and Taczak. At the course's center are the two beliefs that the content of the first-year writing course should be about the study and analysis of writing, rhetoric, and language and that the course should facilitate the student's future use of the knowledge gained in the course. While a fuller articulation of the course is found in the methods section, here I'll briefly highlight the connections between WAW and Beaufort's five knowledge domains.

A WAW philosophy furnishes the course with its theoretical architecture, its readings, and the assignments. In order to understand that writing is situated and social, students first read articles from our field that explore this principle like Gee's "Literacy, Discourse, and Linguistics: Introduction" and Brandt's (1999) "Literacy, Opportunity, and Economic Change." Students also conduct literacy case studies of three friends or family members in order to see how writing, and writing abilities, function in social situations and the workplace, and how important it is to be able to adapt to new writing contexts. In analyzing two genres –an op-ed and an academic article—they see how audiences' needs and purposes shape the features, rules, and structures of genres, an idea that echoes Dew's (2003) curricular emphasis on the relationship between language and disciplinarity. Beaufort's five knowledge domains are integrated with the WAW elements of the course in providing a conceptual vocabulary that illuminates the big writing

concepts and ideas that students are negotiating in the writing-centric readings and the assignments. Beaufort's five knowledge domains function, in a similar way as Yancey, Robertson and Taczak's (2013) eleven terms, as a conceptual language for writing. Students were not just introduced to the five knowledge domains, but the course was designed so they had to use the domains with the hopes that the knowledge would form part of the students' new and perhaps more multi-dimensional understanding of writing. The logic of the course involves a the hypothesis that the five knowledge domains, along with the student's understanding of writing as situated through the readings and assignments, form knowledge that students would draw upon in the future as they negotiate new writing tasks.

# Conclusion

Three key interrelated ideas emerge from this overview of these transfer-focused curricula for FYW. The first is that all of them explicitly focus on the idea that the purpose of FYW is to help support students negotiate future writing situations in that a goal of FYW curricula is to create transferable knowledge. The second observation is that all of these curricular theories are organized around the idea that in order to facilitate students' future knowledge transfer, the course must teach students about writing. Lastly, it is important to note that the study of the efficacy of these curricula is in its infancy; with the exception of Wardle (2007) and Yancey, Robertson and Taczak (2014), there has been little research into how these curricula have worked or what kinds of effects they have had on students future writing performances. The present study attempts to contribute new research into how we might design FYW courses in order to meet the

goals of facilitating transfer. What is critical, however, at first is to situate this overview of transfer-focused curricula within the larger historical context of transfer research, which the next chapter does in addition to explaining how I define transfer.

### Chapter 3: Roots of Transfer

In the previous chapter I discussed how writing studies scholars over the past decade have developed new ways of creating curriculum designed to promote transfer from FYW. Here, I look at the history of transfer research in order to trace how particular shifts, ideas, and approaches have informed how this study and its research questions have developed.

### The Origins of Transfer Research: Thorndike and Judd

The roots of transfer research are generally considered to be located in two seminal studies from the early 20th century conducted by Thorndike (1939; Thorndike & Woodwirth, 1901) and Judd (1936). Thorndike wanted to test the idea of formal discipline, a prevailing educational theory at that time that assumed that the brain functioned like a mental muscle. The theory follows that training this mental muscle in any subject—Latin, for example—would enhance performance in other subjects like geometry or history. Thorndike, however, found that there was no evidence to suggest that the theory of formal discipline was accurate. He posited that the knowledge that a student develops in one subject could only be applied to another subject if there were "shared-common stimulus-response elements" (Singley &Anderson, 1989, p.3). Thorndike concluded "One mental function or activity improves others insofar as and because they are in part identical with it, because it contains elements common to them. Addition improves multiplication because multiplication is largely addition; knowledge of Latin gives increased the ability to learn French because of many of the facts learned in the one case are needed in the other" (Thorndike, 1906, p.243). Thorndike's theory of identical elements thus suggests that transfer, if it does it happen, occurs only in a very narrow and limited sense.

Judd (1939) disagreed with Thorndike's notion that knowledge transfer only occurs within specific contexts that share similar attributes. Judd believed that knowledge wasn't necessarily context-bound and that what individuals learn in an initial learning site (Site A) can significantly impact how they negotiate the subsequent performance site (Site B). In his own study, Judd compared the performance of two groups of students who were asked to throw darts at a target underwater. The first group was given a lecture about the principles of refraction theory and the second group was only asked to practice. After a series of practice throws, Judd found that students who knew the theory of refraction were able to adapt their throws more quickly and as a result were far more accurate in their performance than the group who had not been given information on refraction theory. Judd concluded that the students who had received the lecture had abstracted the general principles of refraction from the lecture and applied it in their throwing strategies. Subsequently, for Judd, transfer can occur across different contexts not because there are fixed and identifiable surface elements between the domains, but because the individual perceives in Site A and Site B "underlying shared causal principles or deep structure" (Lobato, 2006, p.433). The critical difference between Judd and Thorndike's views of transfer is that Judd emphasizes the agency of the learner in identifying similarities between contexts, whereas Thorndike imputes agency for transfer to fixed, identical elements in the environment. As will be discussed later, these complex

questions around how transfer is conceptualized and how agency is assigned for transfer continue to circulate in transfer research today.

### Approaches to Transfer: Classical Studies of Transfer vs Contextual- Sociocultural

The conceptualization and methodologies for examining transfer continue to inform what is often described as the cognitivist tradition of transfer research. This approach is sometimes also referred to as the classical transfer perspective, mainstream cognitive perspective, or traditional approach (Lobato, 2006; Day & Goldstone, 2012). Researchers operating from this cognitivist perspective form one of two groups that have defined transfer research throughout the 20th century. The other transfer tradition that emerged in the late 20th century is the socio-historic or sociocultural approach (Greeno, Collins, & Resnick, 1999, p.22). While cognitive and sociocultural traditions are different in many important ways, they both share the deeply held belief that the question of transfer is important because it exists at the very nexus of education and its role in society. How do our educational institutions prepare people for life? If educational institutions and researchers believe, as Lobato (2006) argues, that a "central and enduring goal of education is to provide learning experiences that are useful beyond the specific conditions of initial learning" (p.443), it is clear that more must be known about the processes, variables, and factors by which learning and knowledge might live on when courses and degrees have commenced. Over the past century of transfer research, however, researchers have recognized that while transfer is a clearly important site of inquiry, there are significant challenges involved in studying it. Transfer research has been and continues to be freighted with thorny theoretical, conceptual, and

methodological questions. As will be discussed in this chapter, the present study approaches the study of transfer by drawing primarily from a sociocultural approach but also takes some ideas from the cognitive tradition.

# Cognitive, or Classical, Views of Transfer

While the past three decades have seen the emergence of what I call "contextual," or sociocultural approaches to transfer, the predominant transfer tradition over the 20th century has been the mainstream cognitive approach (Lobato, 2012, p.233). Within the broader category of the mainstream cognitive tradition exist multiple subgroups; however, parsing the various strands of cognitive transfer research is beyond the scope of this study. For the purposes of this project, I focus specifically on two central characteristics of the mainstream cognitive tradition: how this group has defined transfer and what kinds of methodologies they use to study this definition of transfer.

# Definitions of transfer

From a mainstream cognitive perspective, transfer is defined as "how knowledge acquired from one task or situation can be applied to a different one" (Nokes, 2009, p. 2). This definition within a transfer study involves the researcher looking for whether the individual takes the learning from Site A, also known as an initial learning site, and applies it to a performance task in Site B. Importantly, many cognitive studies conceive transfer as not merely the application of knowledge from one site, but the application of the right knowledge in the correct way (e.g. Rittle-Johnson, Siegler, & Alibali, 2001; Anderson, 1996). Transfer is thus found when an individual takes what is learned from

Site A and accurately solves the task in Site B using the learning from Site A. Gick and Holyoak's (1980) study of transfer in problem solving situations is illustrative of a cognitive approach that uses this application transfer definition. The researchers wanted to see how individuals did or did not apply a solution learned in an initial learning site to a similarly constructed problem in a subsequent site. In site A, participants read a story about a military general successfully attacking a castle by sending small numbers of troops down multiple roads. These same participants were then asked in site B to solve a problem about a doctor attempting to destroy a tumor without destroying the surrounding healthy tissue. The correct performance, as defined by Gick and Holyoak, would involve the subjects applying the "convergence solution" from Site A to the task in Site B. Gick and Holyaok found that only 30% of the participants applied ideas from the military story in Site A to solve the radiation problem in Site B. This result led them to the conclusion that individuals don't automatically transfer prior knowledge in new situations. Gick and Holyoak's study is in in many ways illustrative of cognitive definitions of transfer more broadly, which define transfer as a process by which a specific kind of knowledge from an initial learning site is correctly applied to a task in a performance site. If the individual doesn't apply the right solution, there is thus a lack of evidence of transfer.

# Methodological Aspects of Studying Transfer from a Classical Approach

In addition to defining transfer as the explicit application of knowledge across two different contexts, the mainstream cognitive perspective often approaches studying knowledge transfer in controlled experimental studies. Singley and Anderson (1989) articulate how many cognitive studies are designed: first, participants are taught a concept or solution in an initial learning site (site A) and are then asked to figure out a solution for a task in a performance site (site B). The researchers design the two sites so that they share some common structural characteristics but that they have different surface features. In the Gick and Holyaok, for example, site A and site B share the same narrative structure wherein the story involves a problem that requires a solution. The content and domain of each site are different, however. The researchers then observe whether the participants are able to correctly apply the predetermined solution from site A to Site B. Next, the results are compared with a control group who are asked to solve the task in Site B but not taught the solution in Site A. While this is not the only way that cognitive studies have examined transfer, it is in many ways representative of cognitive studies (Bransford & Schwartz, 2001; Lobato, 2006, 2012).

#### Conclusions about Transfer Research from the Cognitive Perspective

What has been learned about transfer from the mainstream cognitive perspective is simultaneously informative, nuanced and inconclusive. There are some who believe that cognitive research has failed to provide any evidence that transfer occurs. One of the earliest researchers who found little evidence for transfer, as discussed earlier, was Thorndike, who concluded that "[t]he mind is so specialized into a multitude of independent capacities that we alter human nature only in small spots, and any special school training has a much narrower influence upon the mind... than has commonly been supposed" (Thorndike, 1906, pp. 246–247). Detterman's (1993) survey of the field of transfer decades later echoes Thorndike's view: "Reviewers are in almost total agreement that little transfer occurs" (p. 8). Schooler extends Detterman and Thorndike's pessimism

over the likelihood of transfer: "The question for which we do have some empirical answers has to do with how generalizable cognitive training is from one subject area to another. As of now, the answer is not very much" (1989, p. 11). Singley and Anderson (1989) posit that it is not just that there is little evidence of transfer, but that there is a broader ambiguity around whether or not transfer is even a valid phenomena: "What then is the current status of the notion of general transfer? Is it dead, or very much alive?" (p. 25). Barnet and Ceci (2002) are less equivocal: "there is little agreement in the scholarly community about the nature of transfer, the extent to which it occurs, and the nature of its underlying mechanisms" (Barnett & Ceci, 2002, p.612).

At the same time, the complexity associated around what is known about transfer can perhaps partly be attributed to how transfer is defined and studied within the classical perspective. Viewed from a relatively narrow perspective of transfer, one could conclude from Gick and Holyoak's study that there is little evidence of transfer. Participants rarely applied the convergence solution from site A to site B. However, there is more nuance to their study. When Gick and Holyoak hinted to the participants that there was a solution from site A that was applicable to Site B, 70% of the participants correctly applied the convergence solution, as compared to 20% of students without a hint. This begs the question—does Gick and Holyoak's study actually prove transfer happens in some way(s)? If one accepts the researcher's act of hinting to participants as a valid part of how transfer is defined, then the answer is yes—transfer does occur. However, if one feels that the methodological decision to cue participants to a potential solution does not accord with a rigorous definition of transfer as the application of learning from one site to another, then perhaps the answer is no—there is no evidence of transfer. Additionally,

more importantly than whether or not Gick and Holyoak's study offers evidence of transfer is their research's illustration of the critical link between conceptions of transfer and methods for studying it, a point that will run throughout this literature review and dissertation.

One explanation for the ambiguity around transfer in mainstream cognitive research, Barnett and Ceci (2002) argue, is that there is a "lack of a clearly operational definition" (p. 216) for transfer. As a result, they argue, transfer researchers "often seem to be talking at cross-purposes—comparing apples and oranges" (p.216). What follows from the lack of an explicit definition of transfer is ambiguity in how studies would approach studying transfer. Lobato emphasizes this issue as well, arguing that when "conceptual problems are conflated with methodological problems, then it is easy to make minor methodological adjustments without responding to the more serious concerns raised regarding the conceptual roots of transfer" (Lobato, 2006, p.434). Lobato underscores a critical aspect of studying transfer, which is the idea that how transfer is defined will shape how it is studied; modifying a study to potentially reveal more evidence of transfer, as Lobato notes, doesn't necessarily solve conceptual issues that emanate from how transfer was initially defined in the study.

# Critiques of Cognitive Approach

In light of the myriad conclusions about transfer, some researchers' doubts about whether it can happen, and the heterogeneous nature of how it has been defined within mainstream cognitive studies, many transfer scholars have developed several critiques of

the classical approach. One major insight is that the definition of transfer as the application of prior knowledge is too narrow, linear, and mechanistic. Lave (1988) argues that the cognitive perspective treats thinking and knowing as the "literal, uniform transportation of tools for thinking from one situation to the next "(p.37). Bransford and Schwartz similarly critique the cognitive conception of transfer in characterizing it as operating from a "Direct Application" theory of transfer, which presumes that transfer involves "the ability to directly apply one's previous learning to a new setting or problem"(p.9). The problem with a DA theory of transfer, according to this way of thinking, is that it tends to lead researchers to "focus primarily on deficiencies in problem solving when novice learners are compared to experts" (p.10). Studying whether or not individuals directly apply previous knowledge, Bransford and Schwartz contend, is important but it is only "part of the picture" (p.35). The term "transfer," in leading researchers to look for solely the direct application of knowledge, is thus too "restrictive a framework for studying issues of transfer" (Bransford, Schwartz, & Sears, p.7, 2004). Extending Bransford and Schwartz' analysis of the limited scope of the term transfer, Beach (1999) levies a strong critique against the way cognitive studies have both conceptualized and studied transfer. Beach contends that individuals do indeed negotiate new situations with prior knowledge and experience but that the dominant ways this phenomenon has been studied have too narrowly conceived the phenomenon. Cognitive studies, to Beach, operate on the assumption that knowledge is portable. In enlisting this definition of knowledge these studies have too heavily imputed agency for transfer on the individual. For Beach, knowledge is not a static property that exists within the individual, nor is knowledge something that retains its shape uniformly over time and across

contexts. Rather, knowledge is socially constructed and distributed across actors, tasks, and contexts.

One corollary aspect of the assumption that knowledge is portable, Beach notes, is that the term transfer, as used and operationalized in cognitive studies, promotes the idea that individuals are launched from the initial learning site into a future site. This belief "implies that earlier learning determines the trajectory of later learning because later environmental influence on learning is minimal" (1999, p.109). Beach points to the discourse around the skills gap in the workplace as an example of the problems of the launch metaphor: rather than both schools and workplaces being places where learning happens, the launch metaphor frames it as the idea that "schools are where learning occurs, and failure in the workplace is largely a function of inadequate learning in school" (p.109). The aggregate effect of this criticism, for Beach, leads to the conclusion that the term transfer and the influence its metaphorical weight has on how learning, knowledge, and development are studied requires serious reconsideration.

An interrelated criticism of the limited and constraining influence of the term transfer, as it used in mainstream cognitive research, are the methods used to study the application of prior knowledge. Bransford and Schwartz describe these methods as Sequestered Problem Solving (SPS):

Just as juries are often sequestered in order to protect them from possible exposure to "contaminating" information, subjects in experiments are sequestered during tests of transfer. There are no opportunities for them to demonstrate their abilities to learn to solve new problems by seeking help from other resources such

as texts or colleagues or by trying things out, receiving feedback and getting opportunities to revise (p.10).

In sequestering individuals, critics like Bransford and Schwartz contend some cognitive studies are studying transfer in unnatural settings and conditions. Additionally, as noted before, SPS-oriented studies assume that the initial learning site is far more influential on an individual's knowledge than the performance site, or Site B; yet, as Beach notes, "there is no a priori reason to assume that later tasks and situations are "sealed off" from their influence on learning" concluding that "earlier learning contexts do not inoculate the person against learning in a new context" (p. 10).

Lobato (2006) enriches Beach's analysis of the role new contexts play in identifying a key methodological aspect that classical transfer models overlook, which is that classical models "often interpret context as the task presented to students and analyze the structure of tasks independently of the students' purposes and construction of meaning in situations" (p.434). Lobato argues that rather than seeking more holistic accounts of how students develop constructions, associations, and interpretations between contexts and tasks, many cognitive studies are primarily focused on identifying positive evidence of transfer "defined a priori as being the "right" mappings (p.434). This focus on studying whether or not students applied the correct solution can lead to experiments that Lave (1988) describes as "an unnatural laboratory game in which the task becomes to get the subject to match the experimenter's expectations" (p.20). Echoing Lave's description of the artificial nature of some cognitive studies, Bronfenbrenner and Morris (2006) characterize the cognitive methodological approach as the study of the "strange behavior of children in strange situations for the briefest possible period of time" (qtd in

Slomp, 2012, p.749) Beach argues that what is needed in terms of methodology is a way to account for the complex interactions between individuals, activities, and social environments, which integrates the "creation and interlinking of tasks and situations as well as the continuity and transformation of individuals" (1999, p.109).

In addition, some critics see an important relationship between the conceptual and methodological framework of the mainstream cognitive tradition and conclusions that there is little evidence that transfer occurs. Hatano and Greeno (1999) contend "transfer researchers may have stacked the deck against positive results by adopting an inappropriately narrow criterion of successful transfer and by arranging experiments so that productive learning was not encouraged" (p. 651). Bransford and Schwartz similarly center their critique on the recursive relationship of theory and method, arguing "SPS methodology and the accompanying DA theory of transfer are responsible for much of the pessimism about evidence for transfer" (p. 7). Implicit in these critiques is the idea that theoretical and methodological innovation is needed. Bransford and Schwartz (1999) contend "transfer is often difficult to find because we tend to think about it from a perspective that blinds us to its presence. Prevailing theories and methods of measuring transfer work well for studying full blown expertise, but they represent too blunt an instrument for smaller changes in learning that lead to the development of expertise" (p. 66). Similarly, Campione et al. (1995), discussing SPS approaches, argued that methodologically the' 'training' phase in the majority of laboratory studies is very brief, allowing little opportunity for the development of any true understanding that would mediate transfer. ... Transfer must be demonstrated by the participant in a specific way and at the whim of the experimenter: transfer now, or forever be seen as a nontransferrer.

We believe that this leads to an underestimation of the transfer or understanding capabilities of all" (p.38-39). What emerges from an overview of these critiques is that there is a critical interrelationship of three elements within transfer research -- the definition of transfer, the methodology for studying that definition, and the conclusions that can be drawn as a result of using that definition and methodology. Each element recursively influences and shapes the other. In the case of cognitive studies, there is significant agreement that a narrow definition of transfer and lab-based methodological approaches have perhaps significantly shaped conclusions that knowledge transfer occurs infrequently or does not occur at all.

### Cognitive Traditions and the Present Study

Despite the various critiques of the mainstream cognitive perspective and its limits, the present study does partially draw upon the cognitivist approach in two nuanced ways. I acknowledge within my conceptualization of transfer that it's valuable to see if Clare and Sara are explicitly applying or using prior knowledge. I qualify the use of this definition, however, in a few ways. Unlike cognitive studies that look at only two sites, site A and site B, I look at site A (the transfer-centric FYW course in semester 1) and not just at site B but more broadly at multiple writing sites over six semesters. In addition, I don't presume, as many cognitive studies do in assuming a launch model of learning, that Clare and Sara's development of writing knowledge ends after semester 1; beyond semester 1 Clare and Sara will have new writing assignments and will be exposed to writing instruction. It is likely that any knowledge from semester 1 will invariably interact with these new writing experiences. Thus, rather than look for the application of

knowledge from only Site A, I am continually looking to see how Clare and Sara might transfer prior knowledge in new situations from any writing site or context from semester 1 to semester 7. For example, Clare might apply writing knowledge she got from a friend in semester 3 to an assignment she has in semester 4.

Additionally, while I do not study whether Clare and Sara explicitly apply predetermined cognitive targets, as Gick and Holyoak did with their "convergence solution," I do want to see whether Clare and Sara are applying or using any knowledge they might have developed from semester 1 about the situated nature of writing and any conceptual understanding of Beaufort's five knowledge domains. In this way, I am loosely mirroring cognitive studies that study how specific knowledge developed in an initial learning site is applied in future tasks. Although these two aspects of the classical tradition do to some degree inform this study, there are significant theoretical and methodological differences that will be examined in the rest of this chapter. One of the most significant differences, as will be discussed later, is that I study individuals negotiating tasks and activities in natural settings rather than study transfer by designing problems for individuals to solve in lab environments.

# Contextual-Sociocultural Approaches to Transfer

In the 1980s and 1990s, educational theorists from what I characterize here as socio-cultural and socio-historical perspectives developed new conceptualizations of transfer as a way of addressing what they believed were the aforementioned conceptual and methodological problems within cognitive studies of transfer. Their ideas also inform the model for studying transfer used here. In this study, I use the word contextual as an

umbrella term to describe these socio-cultural and socio-historic theorists who, while in some ways different, all theorized that new ideas about transfer were needed (Lave, 1988; 1993, Wenger, 1999: Hatano & Greeno, 1999; Beach, 1999, 2003; Tuomi-Grohn & Engestrom, 2003). An organizing principle around which these new theories were developed was that the context, or social environment (including tools, artifacts, and people) plays a key role in how knowledge is used by individuals. This belief that the social context plays a key role in transfer animates two important dimensions that aptly characterize the contextual approach: first, they propose a broader and more holistic conceptualization of transfer and two, many often foreground the personal experience of the individual in their methodological approaches as a way of attempting to create richer and more multifaceted accounts of how, why, and under what conditions individuals might draw upon or enlist prior knowledge in new situations.

#### New Conceptualizations of Transfer

A key premise of the more multi-dimensional conceptualizations of transfer involves its proponents' views of the processes of learning and knowledge development. Lave's (1998) theory of situated cognition is in many ways central for these reconceptualizations. Her theory contends that knowledge, learners, learning, and environment exist in recursive relationship to one another. Rather than assume that learners are insulated from environmental influences, Lave argues that thinking is "distributed seamlessly across persons, activity, and setting" and is thus "situated in socially and culturally structured time and space" (p.171). A conceptualization of transfer that corresponds with the notion of situated cognition must then in some sense amplify

the ideas that if we are to study how knowledge is transferred we have to create conceptual tools for accounting for the fluid, situated, and distributed ways that knowledge operates within the joint-mediated activity of individuals, activities and social environments.

Taking up this contextualist paradigm, Hatano and Greeno (1999) replace the term transfer with the term "productivity," which they define as the "extent to which learning in some activity has effects in subsequent activities of different kinds" (p.653). Instead of seeing student knowledge as portable and immutable, their term productivity is informed by the contextual idea that that "human competence in daily life is heavily dependent on the continuous interaction with other people and tools" (p.649). Productivity, Hatano and Greeno contend, describes how transfer involves the process by which individuals use knowledge in ways that is socially valuable and meaningful. Wenger (1988) similarly foregrounds the ways that social communities and organizations structure individual knowledge and development in his concept of brokering, which involves individuals creating and cultivating new connections between and among different communities of practice. Wenger describes the process by which brokers bring ideas between communities as "import-export" (p.109), though this process of importexport is not fixed: rather, brokering "involves processes of translation, coordination, and alignment between perspectives" (Wenger, 1998, p. 109). Tuomi-Grohn and Engestrom's (2003) activity-system based articulation of transfer echoes the emphasis that Wenger places on borders, spaces, and systems in redescribing transfer as "expansive learning" (p.30). Using the collective activity system as their unit of analysis (p.30), they

define expansive learning as a series of processes by which individuals construct new knowledge through their evolving participation in different interacting activity systems.

Beach's (1999, 2003) reconceptualization of transfer as generalization extends Lave's (1988) theory that knowledge is fluid, dynamic, and situated by the ways individuals interpret and negotiate new tasks and contexts. For Beach, generalization is "the continuity and transformation of knowledge across forms of social organization" which "involves multiple interrelated processes rather than a single general procedure" (p.40). Knowledge generalization, Beach contends, occurs when an individual propagates prior knowledge in the form of "active constructions" (p.41) as she moves within and across new situations. Importantly, these active constructions are always situated within and mediated by a social activity or organization. Beach's conceptualization departs from the application-based idea of transfer in the cognitive tradition and its de-emphasis on the role that the context can play in how prior knowledge is used.

Beach theorizes that the kinds of perceptions—personal meaning, value, and importance—individuals bring to activities and practices of these social organizations can have a significant effect on the kinds of generalization that occurs. When the task or activity is part of what Beach calls a "consequential transition," there is perhaps greater likelihood for observing evidence of generalization. These transitions are natural movements that individuals make in their lives. For Beach, these transitions are consequential when they have significant meaning for the individuals because it involves a change in their social identity: "learning algebra after years of studying arithmetic, becoming a machinist, [or]...negotiating your identity as an Asian-American between your home and the school (p.42). He argues that these transitions "involve propagation;

the construction of new knowledge, identities, ways of knowing, and new positionings of oneself in the world. They are consequential for the individual and are developmental in nature, located in the changing relations between individuals and social activities" (p.42). Rather than looking at a narrow slice of learning in the form of application on a single task, regardless of what that task might mean for the individual's goals, Beach suggests researchers look for the propagation of prior knowledge in the actual lived experience of individuals and how that propagation enables individuals to fulfill goals and desires.

Beach breaks down the concept of consequential transitions into four primary forms: lateral, collateral, encompassing, and meditational (p.114). Lateral transitions are unidirectional in that they resemble traditional forms of transfer. An example would be the movement within a sequenced, history curriculum in which courses move from broad to more narrow in terms of content. Collateral transitions involve multidirectional activity between simultaneous activities, like the movement from school to an after-school job. Encompassing transitions involves a more adaptive process in that the change occurring involves a single social organization's activity; an example from writing studies would be a writing instructor transforming their pedagogy in order to account for the rapid change education is experiencing due to technological innovation of computers, social media, and the Internet. Mediational transitions occur as a result of social activities such as apprenticeships or internships that model future participation in particular communities. FYW courses that combine community-based learning and writing instruction are examples of the kinds of spaces within which meditational transitions might occur. This articulation of different kinds of transitions complicates the notion of a monolithic

understanding of context and provides a more complex way of thinking of how individuals and environments interact dynamically to shape generalization.

# Studying Transfer from the Perspective of the Individual

The second key way that contextual approaches differ from classical models involves their attempt to collapse the gap between their definitions of transfer and how they study that definition in conceptually valid ways. Given that these contextual conceptualizations of transfer are built on the idea that knowledge is embedded within an individual's dynamic and ongoing interaction with social organizations and communities, this multifaceted conceptualization means researchers must look beyond experimental studies in laboratories and use methods that capture the individual's lived experience and the social context within which that experience occurs. Lave (1988) touches on this in her suggestion that a contextual approach to transfer should seek understanding of the "processes employed as people naturally bring their knowledge to bear on novel problems" (Lave, 1988, p.20). Similarly, De Corte (1987) describes the importance of seeing individuals within their social contexts and argues that ethnographic studies can do this by "contribut[ing] to a theory of situations, what Scribner and Cole (1981) call "cultural practices," that help shape what people in a culture read as the tasks or problems facing them in a situation" (p.56). According to De Corte, studying transfer involves understanding how people "read" new situations and activities as opposed to evaluating whether or not they apply the correct solution from an initial learning situation. De Corte argues that any a priori definition of what constitutes appropriate transfer is "socioculturally defined for particular purposes, tasks, and thinking situations" (p.57).

For De Corte, transfer is idiosyncratic and influenced by whether the individual thinks the task is worthy of the cognitive output required and whether the new task resembles previous experiences or similar tasks (p.57). The goal of transfer research is thus finding methods that allow researchers to see how the individual reads new situations as texts "with multiple possible interpretations according to the thinker's culturally influenced categorizations system of problem types" (p.58).

Lobato's (2006, 2008, 2012) actor-oriented transfer perspective (AOT) builds upon De Corte's proposal that transfer needs to be studied by attempting to understand the kinds of knowledge and experience that might be involved in how an individual reads, sees, and interprets novel situations. An actor-oriented perspective can "illuminate unexpected ways in which people generalize their learning experiences" (p. 236) and "places greater emphasis on the interpretive nature of knowing than is present in many studies conducted from a mainstream cognitive perspective" (p. 234). Lobato draws on Beach's notion of generalization for her definition of transfer, which she describes as the generalization of learning or the " influence of a learner's prior activities on her activity in novel situations" (Lobato, 2008a).

Rather than study transfer "against a particular cognitive or behavioral target" (p.235), as an observer-oriented approach does, an actor-oriented perspective involves foregrounding how students experience a new task or writing situation. A central benefit of the AOT approach is that in looking beyond binaries like correct/incorrect, or transfer/no transfer, it helps develop more multi-dimensional accounts of learning and knowledge. Many mainstream cognitive approaches examine a transfer situation solely with the question: "Is there transfer?" The multi-dimensional AOT approach involves

asking that question but additionally asks, "What is going on in the student's mind when they negotiate the transfer situation?" as well as other emic-oriented questions like "What does this task mean for the student and her goals?" and "What kind of motivation does the student bring to this task?" Answers to these kinds of questions can potentially illuminate whether or not transfer is occurring in ways that are more generative than only looking for evidence of transfer.

An AOT perspective asks these kinds of questions in an attempt to develop "holistic conceptualizations" (p.237) of generalization using ethnographic tools. There are disadvantages to studying transfer using qualitative methods, Lobato notes. The sample size is smaller, the results are less generalizable, which impacts the kinds of claims that can be made about what is found. Despite these limitations, Lobato argues, there are significant advantages to looking at transfer from the perspective of the student, specifically the ability to "capture the often unexpected nature of reasoning on transfer tasks, interpretative meanings of learning activities, and personal connections constructed between learning and transfer situations" (p.239).

One of Lobato's own studies (Lobato, Ellis, & Munoz, 2003) illustrates the value of an actor-oriented perspective in contrast to previous, mainstream cognitive approaches. In the study, researchers observed a ninth-grade algebra classroom whose curricular unit focused on mathematical knowledge of slope and rise over run. They hypothesized that once students developed knowledge and experience of this mathematical knowledge in several real-world situations, they would be more likely to draw upon this knowledge in new transfer situations. What they found, however, was that high-performing students could successfully and consistently determine slope in the context of the class but could

not do it in a subsequent interview task. This led the researchers to initially believe that the students' knowledge of slope was context-bound and that their initial learning was not transferring. From the observer-oriented perspective, this would be described as the absence of transfer -- students did not apply the correct knowledge from the initial learning site.

Because the researchers took an actor-oriented perspective, however, they were able to illuminate important idiosyncratic aspects of the students' performance that indicated that students were in fact generalizing prior knowledge, wherein generalization is defined as the influence of prior learning. Students weren't transferring, or applying the correct knowledge, yet they did appear to be thinking with their prior learning As classroom videotapes confirmed, students were propagating the teacher's repeated use in the initial learning site of the phrase of "goes up by" and her classroom practice. In the class sessions, the teacher had pointed to single quantities of slope but not to the ratio of quantities. Students were generalizing their math knowledge from the initial learning site, but that knowledge was their interpretation of what the teacher was saying about slope in class and her phrase "goes up by." That interpretation involved seeing slope as single quantities, not as the ratio of quantities. The AOT focus on student interpretations and classroom context in this study enabled a richer, formative understanding of how students were generalizing and why they weren't able to successfully perform in the transfer task. It also offered the math teachers insight into how they might examine how they teach mathematical knowledge in ways that are more likely to facilitate the generalization of that knowledge. For the present study, this example illustrates the value of looking beyond binary evaluations of transfer and attempting to understanding how students are

perceiving situations rather than just if they are performing correctly or simply transferring specific kinds of knowledge.

# This Study's Approach to Transfer

The present study is informed by two central ideas that attempt to negotiate some of the key gaps in transfer research thus far. One of those problems is that transfer has been studied too narrowly as the direct application of prior knowledge (Bransford & Schwartz, 2002). This study responds to this problem by expanding how transfer is studied in looking for generalization, which is defined as the explicit application of prior knowledge and the implicit propagation of prior knowledge. The second problem this study addresses is that the narrow approach of previous studies of transfer meant that there was little understanding of why, how, or under what conditions transfer did or did not occur. This study draws upon Lobato's AOT perspective to look beyond binary conclusions about transfer in developing accounts of the personal connections students make of new writing situations as a way of seeking what Lobato calls "holistic conceptualizations" (p.237) of learning and knowledge. This means that in addition to looking at students' thinking as they negotiate new writing situations, I'm also interested in their personal connections to these writing situations. Specifically, I look at their perceptions of the writing situation and the kinds of personal meanings they assign to these writing situations. The logic behind looking at the personal connections students construct around writing situations is that their perceptions and valuing of the writing situation might be influencing whether or not they are generalizing prior knowledge.

The first part of this study involves evaluating what kinds of knowledge Sara and Clare develop as a result of taking the transfer-centric FYW in semester 1. I attempt to identify what they learned in the class by analyzing three surveys, the course assignments, and our e-mail correspondence. Next, I look for whether this semester 1 knowledge is generalized –explicitly applied or implicitly propagated—in Sara and Clare's thinking as they negotiate new writing situations in semesters 2-7. In order to look for any variables that might be influencing whether Sara or Clare generalize prior knowledge from semester 1, I also look at the personal connections Sara and Clare make of the writing situations; specifically, I look at how they perceive the writing situation and what kind of value they assign to it.

# Defining this Study's Key Terms

It is helpful first to define several of this study's central terms so that their use throughout the study is clear and understood. *Knowledge*, a concept that anchors my research questions and my analysis, is defined here as an "individual's personal stock of information, skills, experiences, beliefs, and memories" (Alexander, Schallert, & Hare; 1991). This study draws upon Alexander, Schallert, and Reynolds' (2009) definition of *learning*, which is conceived as "a multidimensional process that results in a relatively enduring change in a person or persons, and consequently how that person or persons will perceive the world and reciprocally respond to its affordances physically, psychologically, and socially" (p.186). Key in this definition for this project is the idea of a "relatively enduring change in a person" (p.186), which conveys the idea that learning involves a transition and difference in how a learner thinks about a particular

phenomenon. Additionally, Alexander, Schallert and Reynolds' definition is comprised of nine principles of learning, three of which are particularly important for this study. The first principle is that "learning is change" and that the change that occurs exists on a spectrum from the nearly unobservable to the significant and explicit. This definition makes clear the wide scope of how learning is defined within this study. A second facet of this definition of learning is that evidence of learning does not require the individual to be able to explicitly articulate that learning; rather, evidence of learning is multifaceted and can be explicit and self-aware as well as unconscious and submerged. This definition is especially important for studies of transfer, where some have speculated that transfer is occurring yet evidence of it is not visible (Broudy, 1977; Brent, 2011, 2012). While educational research is not conclusive on how visible learning is or could be, there are some who argue that up to 90% of all learning is implicit (qtd. in Bargh and Chartrand 1999, p.179). This challenge of 'seeing' learning is related to the final principle that this study draws upon for its definition of learning, which describes the process of learning as developmental and involving processes and products that reflect changes in knowledge. This is especially important for this longitudinal study, which is informed by the idea that writing development is slow and uneven and that the lack of demonstrable learning within a visible product (e.g. a student text) does not mean that learning is not occurring. Rather, learning includes what is occurring within a "set of operations progressing" through time" (p.180).

The term *writing situation* refers to a specific writing task and any of the potential contexts within which that writing task might operate. A writing task is defined as any

text that Sara and Sara must compose and are required to submit to an audience. For example, Sara might have a literature review to write in a psychology course in her first year as part of her general education requirement at the first college she attended, St. John's. The term writing situation can thus refer to how Sara reflects on her thinking for writing the literature review for psychology, and also can refer to the personal connections she makes of the multiple contexts of that literature review: what does she describe as the purpose of the literature review is, what are her perceptions of the psychology course, what does she say about her attitudes towards her general education courses, and how does she describe her experience in college at St. John's? While it's not possible to account for every personal connection they might make of these contexts in every writing situation, the AOT perspective leads this study to be sensitive and attuned to how Sara's perception or valuing of any of these contexts-the professor, the course, the course's place in her major or general education requirements-might be influencing whether she is or is not generalizing prior knowledge and how she is thinking about negotiating writing situations.

Defining a writing situation naturally leads to a definition of what is meant by *thinking* involved in a writing situation. Thinking is defined as any ideas, knowledge, concepts, approaches, or actions that Sara and Clare describe in explaining how they are or have negotiated a writing situation. To get at Clare and Sara's thinking involved in negotiating writing situations, I asked questions like: What's going on in your head as you write this? Why did you do this in the intro/conclusion? Why did you choose that as a source of evidence? What's your plan for writing this paper? What do you have to do to

complete this paper? How did you come up with that thesis? These questions, and similar ones, are framed so as to develop an understanding of any knowledge that Clare and Sara might be explicitly applying or implicitly propagating.

# A More Expansive Definition of Transfer

In the present study I evaluate Clare and Sara's thinking in these writing situations by drawing upon Beach's idea of generalization in place of transfer. Generalization is defined as both the explicit application of prior knowledge and as the implicit propagation of prior knowledge. Cognitive studies, as discussed previously, primarily defined transfer solely as the application of prior knowledge, which Bransford and Schwartz described as the Direct Application theory of transfer and refers to the "ability to directly apply one's previous learning to a new setting or problem" (p.9).

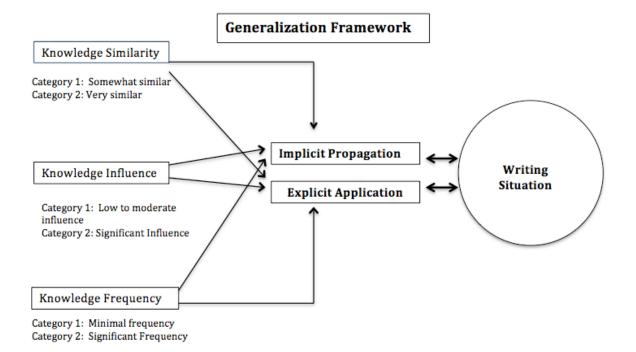
I believe that knowing whether students are directly applying knowledge is important, though if it is the only way transfer is defined and studied it limits what can be known about transfer and what can be observed about how the initial learning site might have supported learning. Thus in addition to studying transfer as the application or use of prior knowledge, I expand how I look, where I look, and what I look for in examining if Clare and Sara are implicitly propagating prior knowledge in new writing situations. This involves looking for how knowledge from semester 1 might be implicitly continued in their thinking as they approach writing situations. In addition to looking for the application and propagation of prior knowledge in Clare and Sara's description of their thinking when they negotiate writing situations over semesters 2-7, I also seek out the personal connections Clare and Sara make as they negotiate writing situations they

encounter. This account of their personal connections is made up of two areas; the first is the perceptions they make of the writing situation, and the second is the way they assign meaning to these writing situations.

### Generalization Framework

As has been discussed, there has been little clarity or consistency across writing studies in regards to how transfer is defined. This ambiguity over how transfer is conceptualized has been noted in transfer research in writing studies as well (Wardle, 2007; Moore, 2013; Anson, 2016). In order to address the lack of clarity around what transfer is, this study draws uses a generalization framework in order to pursue two aims. The first aim is that the generalization framework attempts to develop a sense of precision around what is and what is not transfer. This precision not only helps differentiate between what is and what is not considered transfer, but it also helps refine any positive evidence of transfer in order to have a better understanding of what is being transferred and what that transfer means for the students' negotiation of the writing situation. The second aim of the generalization framework is to provide a way of more carefully identifying and comparing transfer examples within this study and in addition offers a way of comparing examples of transfer across different studies. Next, I explain how the three framework elements-knowledge similarity, knowledge influence, and knowledge frequency-are used to evaluate and analyze potential examples of both the explicit application and implicit propagation of prior knowledge.

### Figure 1: Generalization Framework



## Generalization Form One: Explicit Application of Prior Knowledge

Generalization as the explicit and conscious application of prior knowledge occurs when the individual knowingly applies prior knowledge from semester 1 in her description of her thinking when she negotiates a writing situation. This form of generalization differs from implicit propagation in that the explicit application of prior knowledge is visible and conscious. I'll use a hypothetical example as a way of demonstrating how the generalization framework helps me illuminate what explicit application looks like in the data and how I identify it.

In semester 1, Clare might have stated that she learned about rhetoric and could explain it and give examples: "One thing I learned in this class that is helpful is rhetoric.

Rhetoric is about persuading your audience and using the right kind of evidence to get your audience to do what you want them to do." This knowledge could be described as baseline knowledge, or the knowledge that Clare appeared to learn in semester 1. In semester 5, Clare might respond to a question about how she is thinking about writing a memo to her boss for a business course and appear to explicitly apply her baseline knowledge of rhetoric from semester 1: "I have to write this sort of memo and I need to persuade my boss that we have to change our marketing strategy for a new target market. So I'm thinking about rhetoric from the writing class and how it's about figuring out how you're going to persuade someone with evidence. Now I'm trying to organize my memo so the boss would agree with my new marketing idea."

This is where the generalization framework is helpful. Rather than broadly and ambiguously identify this as evidence of transfer, I would apply the generalization framework elements to refine what makes this example evidence of the application of transfer but also move towards a better answer to questions about the nature of transfer.

#### Framework Element 1: Knowledge Similarity

Looking at this hypothetical example of Clare's explicit application of rhetoric knowledge one in terms of *knowledge similarity* involves examining her semester 1 knowledge of rhetoric alongside the semester 5 application of rhetoric. What I am looking for in comparing the semester 1 knowledge and the semester 5 knowledge is how closely they both express ideas about rhetoric. Additionally, does the rhetoric knowledge she describe in semester 1 seem to be the same knowledge from semester 5, and is it applied in the same form? The element of knowledge similarity is needed because it

attempts to establish that there is an identifiable connection between the prior knowledge and the knowledge that is transferred.

To be more specific in evaluating the similarity between the initial learning and the future application, I categorize the knowledge similarity using two categories. Category one describes a kind of explicit application where the knowledge is only somewhat similar. Category two, in contrast, codes the explicit application to describe a nearly identical alignment between the two knowledge sites. This hypothetical example would be given a code 2 given how similar ideas, words, and the meaning of rhetoric are found in both the baseline knowledge in semester 1 and the applied knowledge in semester 5. This example seems to reveal that Clare would have applied the knowledge in relatively specific and direct ways from semester 1 to her approach to the writing situation in semester 5.

#### Framework Element 2: Knowledge Influence

The purpose of element three, *knowledge influence*, in studying the application of prior knowledge is to help determine whether the potential application of prior knowledge is playing a significant role in the students' thinking as they negotiate the writing situation: was the knowledge that was applied influential in how Clare thought about and approached the situation? For understanding the nature of generalization it is important to know if the prior knowledge is applied in a way that is entirely peripheral or in contrast, is significantly shaping how Clare is thinking about the writing situation.

Using the hypothetical example to illustrate how element three works, an analysis would reveal that the rhetoric knowledge from semester 1 is being applied in her thinking

in a way that is influential and significant. The concept of rhetoric would seem to guide her thinking in terms of persuasion, evidence, audience, and the interrelationship of those elements. Two categories help distinguish the degree of influence; category 1 would mean that the knowledge was minimally to moderately influential to how she negotiated the writing situation. Category two would refer to knowledge that was significantly influential. Were Clare to have said something in semester 5 like "I guess you could say it's kind of like rhetoric but I'm not really sure how," the example would be identified as a category one for *knowledge influence*. In category one, there is a description of the prior knowledge and potentially its application but the prior knowledge is not substantively shaping Clare's thinking. Element three helps push the question over whether there is transfer further; rather than simply ask, is there transfer, element 3 also involves asking, is there transfer and is it significant to how the individual writes?

## Framework Element 3: Knowledge Frequency

Examining an example of the application of prior knowledge through element three, *knowledge frequency*, helps answer the question of whether the example is an outlier or is part of a broader pattern of her frequently applying the knowledge. Given that I look at how Clare and Sara describe their thinking about writing situations over semesters 2-7, it seems significant for this study if they were to consistently apply a particular kind of prior knowledge. Two categories help illuminate the *knowledge frequency* element. Category one refers to application that occurs relatively infrequently or only once. Category two describes application that appears to have happen more than once or twice and is perhaps part of a broader pattern in Clare or Sara's thinking.

# Generalization Form Two: Implicit Propagation

The explicit application of prior knowledge is one of two forms of generalization that this study examines. The other form of generalization I look at is the implicit propagation of prior knowledge. Whereas identifying evidence of the explicit, conscious application of knowledge is in some ways a relatively straightforward endeavor because of the overt similarity between the prior knowledge and its future application, identifying the implicit propagation is arguably more challenging. Yet, as illustrated by over a century of transfer research, looking only for the explicit application of knowledge often yields little data or insight (Hatano & Greeno; 1999). In writing studies, the argument that there is a need to study forms of transfer beyond the specific application of knowledge has been made by many scholars (Wardle, 2007; Brent, 2011; DePalma & Ringer, 2013). One helpful way of approaching studying tacit knowledge, as has been noted by Bransford and Schwartz, is Broudy's (1977) theory of interpretive knowledge. Broudy's conceptualization of interpretive knowledge builds upon Polanyi's (1966) theory of tacit knowing; "I shall reconsider human knowledge by starting from the fact that we can know more than we can tell." (p. 4). Broudy defines interpretive knowledge as the kind we aren't always able to describe or name as "knowing with" knowledge, which describes how an individual "thinks, perceives and judges with everything that he has studied in school, even though he cannot recall these learnings on demand" (p. 12).

An example of the generalization of what Broudy would characterize as "knowing with" knowledge from my own life involved in designing this study is helpful in explaining in more detail what "knowing with" can look like and why it's a helpful theory of knowledge for studying transfer. In creating the course for this study, I wanted to have the students compose what in my mind I was calling authentic genres, which in my thinking involves having students write in genres that they might find beyond the context of school. These genres, because of their authentic social reality, have clear purposes and audiences so students would have real models for writing their texts and a better understanding of the social context of writing. Were someone to ask me where I learned about authentic genres, or whether I was transferring knowledge in the process of thinking about and developing assignments that were authentic genres, I would have not known how to answer. I couldn't remember exactly where I had gotten the idea of authentic assignments. If I were to think deeply I might have said I read about the idea in a Russell article or perhaps a Devitt article, but I wasn't really sure. More reflection made me realize that my idea of authentic assignments wasn't just solely about authentic genres but my thinking about authentic genres was embedded in a knowledge ecology comprised of a complex blend of interrelated sources that included ideas about writing assignments from Gottsschalk and Hjortshoj's *Elements of Teaching Writing* (2003). I was certainly "knowing with" this idea of authentic genres even if I couldn't identify its origins or define it that clearly. Yet, someone who was well read in genres and writing assignments could ask me about my thinking as I was designing the writing assignments and, drawing upon the theory of intuitive knowledge, could potentially infer from the underlying concepts that I was expressing in my thinking that I was "knowing with" the conceptual

ideas of Prior's notion of "genres in the wild," which I learned about when I read Soliday's *Everyday Genres*. This person could have analyzed the terms and ideas I was using about designing writing assignments to see what kinds of underlying conceptions were being propagated and then make inferences about how closely those underlying concepts approximate the idea of "genres in the wild."

Two key aspects of my own example of implicit knowledge propagation are helpful in understanding why learning experiences (like reading a text) can be propagated beyond the initial learning experience in ways that are not explicit or identifiable. One is that I couldn't accurately remember the specific origins and details of my ideas about "authentic genres" because it had been several years since I had read Soliday's *Everyday* Genres. While I had forgotten specific details and terms from the book, I continued to implicitly propagate the concepts and ideas about writing assignments in new teaching situations. The knowledge I had gained from Soliday's text was influential in my thinking despite the fact I could not recall her text or name the concept of "genres in the wild" correctly. Second, as noted earlier, after I read Everyday Genres I continued to read more about genres and writing assignments (e.g. Russell, Devitt, Gottsschalk and Hjortshoj), and as I read more I integrated these various sources into my general thinking about writing assignments in overlapping and interpenetrating ways. This "more than the sum of its parts" aspect of my knowledge development made the recall of the original intelligible form of learning challenging. Additionally, until I was composing my dissertation there was no reason for me to need to recall where I got this idea of authentic genres. That I was never prompted to consider the origins of my knowledge only contributed to the blurring and blending of that knowledge and its origins into general

knowledge ecology. As a result of reading multiple texts about genres and writing assignments over the years, how I think about these topics has been continuously reconstituted over time and in new situations, and each reconstitution in some sense makes it more difficult to identify the nature of my initial learning. Rather than seeing my thinking as reducible to easily indexed, individuated units of knowledge, my knowledge is perhaps more accurately described as a continuous interaction and collision of amorphous strips of knowledge.

Subsequently, the passage of time and the propagation of my learning from *Everyday Genres* in the form of new knowledge connections and products has left me less capable of assigning or attributing specific parts of my current thinking to specific learning experiences from my past. Yet despite my inability to assign or attribute particular origins to my current thinking about writing assignments, it does not does not mean that my reading of *Everyday Genres* was a worthless activity. I was implicitly propagating ideas about "genres in the wild" from the book but as result of that propagation in new situations the original form of my understanding of "genres in the wild" had changed. My "thinking with" the idea of "genres in the wild" was not, as Lave has noted, the "literal, uniform transportation of tools for thinking from one situation to the next "(p. 37). Rather, it was more expansively what Beach calls generalization, or "the continuity and transformation of knowledge across forms of social organization" (p.41).

In this study, propagation is defined as the continuation, or "knowing with" of prior knowledge in new situations. There are three elements that aid in evaluating whether or not there is sufficient evidence to warrant any claim that Clare and Sara might

be "knowing with" previous knowledge from semester 1. I look at how all three elements are or are not operating in how they negotiate a writing situation to come to any conclusion over whether or not there seems to be evidence of propagation. Given the complexity of looking for the implicit propagation of knowledge, closely analyzing each potential example of propagation with these three framework elements helps in developing richer inferences from the data.

### Implicit Propagation Element 1: Knowledge Similarity

The first element in analyzing a writing situation for evidence of implicit propagation is examining how Clare or Sara's descriptions of their thinking appear to suggest they are they are thinking with concepts or knowledge from semester 1. Studying and identifying implicit propagation is a complex hermeneutic challenge that involves drawing inferences from data about how knowledge can be used in forms that no longer resemble the knowledge's original initial shape. The original knowledge, as a result of being propagated and continued in a new context, has taken on a different shape though it retains conceptual ideas that link it to the original knowledge.

A hypothetical example of Clare writing a lab report in semester 4 helps illustrate how element one works. In semester 1, the data might suggest that Clare developed knowledge about discourse community. In the survey, she might have written that discourse community knowledge involves "understanding a community's values and beliefs and learning how to use their jargon. It's not just about knowing your audience, it's about knowing what your audience's values and language are and then shaping your own language to fit theirs." Later in semester 4 her thinking about a biology lab report

might suggest that she's implicitly propagating this understanding of discourse community that she articulated in semester 1: "I've realized that my biology report requires me to sort of write like a biologist, so for the lab report I have to use their words like photosynthesis and try to write in a formal way... like I can't use I." This hypothetical example suggests that Clare's reflection on her thinking about this writing situation would mean she appears to enact her discourse community knowledge from semester 1: she is interpreting this situation with knowledge that prompts her to adapt to the language of her biology course and the discipline of biology.

Two categories help refine the analysis of knowledge similarity. Category 1 describes a situation where the knowledge in the two different semesters is only slightly similar. There appears to be some links between the two forms of knowledge but it they are only relatively similar. Category 2 describes a stronger and more significant sense of similarity. This would be the case for this hypothetical example of Clare propagating discourse community. While the knowledge is propagated implicitly and Clare does not explicitly say "I'm using discourse community knowledge," there does seem to be evidence that the discourse community is propagated in how she talks about her thinking in writing the lab report. In semester 5 she says she needs to "sort of write like a biologist" which is aligned with her idea from semester 1 that discourse community knowledge involves "shaping your own language to fit theirs." She is aware in semester 5 that she needs to know and use the discourse community's terminology "use words like photosynthesis," which echoes her idea from semester 1 that she needs to "use their jargon."

### Implicit Propagation Element Two: Knowledge Influence

The second element involved in looking for propagation builds upon element one in evaluating the kind of influence the implicit knowledge appears to have on Clare and Sara's thinking as they write. That means asking questions of the data like: does the knowledge appear to operate in their thinking in ways that are significant and impactful? Do Clare and Sara's reflections on their thinking reflect that they are the concept affects their thinking in shallow or deep ways? Is the knowledge central, or peripheral, in their thinking as they attempt to compose the text?

There are two categories for element two that help address these kinds of questions and identify the level of influence the knowledge appears to have. Category one suggests that the terms have only a minimal to moderate effect on how Clare and Sara are thinking about a writing situation. The knowledge seems to surface only once or twice and appear to operate in a partial or peripheral way rather than a central role in the choices and decisions Clare and Sara make in the writing situation. Category two for element two indicates the knowledge is central to their thinking and has a significant influence on the ways they appear to be negotiating the writing situation. In category two, there are likely multiple points in Clare and Sara's thinking that reflect these terms and the knowledge embedded in the terms anchor their approach to the writing situation. Part of evaluating knowledge influence is closely considering the terms and their usage in context. Looking at the hypothetical example through element two suggests that Sara's implicit discourse community knowledge helps her think about the writing situation in important ways. There are multiple points in her description that support this idea. The first is that in her reflection on her thinking she appears to see the relationship of writing

and community identity in the phrase "write like a biologist." Another is her linking of "language and terminology" to a set of rules for that community – "I have to use." For *knowledge influence*, this hypothetical example of Clare's discourse community knowledge would be a category 2; her prior discourse community knowledge is influential in how would see and makes sense of the writing situation.

#### Implicit Propagation Element Three: Knowledge Frequency

Examining implicit propagation through element three advances the analysis involved in element one and element two in looking at the kinds of repetition, consistency, and frequency there is in terms of implicit propagation of a particular kind of knowledge. Two categories, category one and category two, help indicate the levels of knowledge frequency. Looking at the hypothetical example of Clare's implicit propagation of discourse community knowledge through the *knowledge frequency* element, an evaluation would be made as to whether or not Clare's apparent implicit continuation of discourse community knowledge from semester 5 occurred anywhere else; did she propagate discourse community knowledge in her lit review for history or her analysis paper in philosophy? If so, is the propagation similar across biology, history, and philosophy in terms of their respective category? For example is Clare's discourse community knowledge more influential in her thinking when she writes in her required biology course than it is in her writing for her philosophy elective? For element three, a category one application would indicate that there are perhaps one or two examples of the implicit propagation of a particular kind of knowledge. Category one for element three would suggest that there is not much propagation of discourse community knowledge

occurring beyond one or two examples. A category two, in contrast, would indicate that there are multiple writing situations wherein Clare is implicitly propagating discourse community knowledge.

To be sure, the existence of this generalization framework does not mean that the complexity and challenge of naming and studying implicit propagation of prior knowledge has been eliminated. What evaluating the data through the three elements of knowledge similarity, knowledge influence, and knowledge frequency does help do, however, is provide a systematic way of making through stronger inferences about the potential evidence of implicit propagation.

### Linking Application and Propagation with Personal Connections

As discussed earlier, cognitive studies have primarily focused on studying whether individuals explicitly apply knowledge in lab-based settings. Contextualsociocultural studies into transfer have sought to expand the way transfer is defined as well as to observe how transfer might actually operate in natural settings. Part of studying transfer in natural settings involves looking at how the personal connections students make to writing situations might be influencing their thinking and subsequently whether or not they are generalizing prior knowledge. A student, for example, might think differently in her approach to fulfilling a writing assignment in an elective course than she would in writing a personal statement for law school. They are different tasks set within different social contexts and perhaps have different meanings for the student. The personal statement for law school has significant implications for her identity while the assignment for her elective course might have very few implications her future goals.

Previous studies of transfer would not take into account the student's perception or valuing of the task. Instead, they primarily only looked for positive or negative evidence of transfer. Only looking for yes or no answers to transfer has the potential to inhibit learning more about the kinds of variables that might be shaping whether or not transfer occurs. In this study, I look at whether Sara and Clare are generalizing prior knowledge in new writing situations and in addition I take an AOT perspective in order to see how Clare and Sara's perceptions and personal valuing of writing situations might be influencing whether or not they generalize prior knowledge.

Below, I define what I mean by looking for personal connections but first I outline some of the key reasons why an AOT approach is helpful for this study. In composition research, some transfer studies have briefly noted the advantages of using an AOT perspective (Navare-Cleary, 2012; DePalma & Ringer, 2014) because of the way it offers an account of transfer that goes beyond looking for only the transfer of prior knowledge. There are, however, multiple reasons why an AOT perspective can enrich, both conceptually and methodologically, transfer studies into writing.

One key benefit of looking at students' personal connections to writing situations is that, as Lobato notes, an AOT perspective is valuable when studying transfer in learning domains that are idiosyncratic, complex, and whose content is "semantically rich" (p.234). There is perhaps little disagreement among writing studies scholars and practitioners that writing is a complex and person-dependent phenomena and fits Lobato's criteria. Another benefit is that, while there are exceptions, much of the recent writing transfer research (e.g. Wardle, 2007, 2009: Beaufort, 2007; Carroll, 2002) involves developing, or novice, writers in college. Novices, as opposed to experts, are

"likely to demonstrate greater variety in their interpretations of learning environments than experts" (Lobato, 2008, p. 235), which makes it even more important to try and understand how diverse interpretations are working when novice writers like Clare and Sara negotiate new writing situations. The AOT approach foregrounds "how learners construe meaning in transfer situations" (p.243). Thus, while in addition to determining the nature of any transfer that might be occurring, or the degree of transfer in a particular situation, an AOT approach aids in creating accounts of the diversity and nature of the kinds of comprehension and understanding students do make in and across various writing situations.

An AOT perspective also can help writing transfer researchers attempt to reconcile the study of how writing knowledge is generalized with the field's core beliefs about writing; in particular, the belief writing is a socio-cultural activity and that all writing situations are shaped by social factors like the writing task and the writing environment. As Roozen (2014) notes, "writers are engaged in the work of making meaning for particular audiences and purposes, and writers are always connected to other people" (p.17). The risk of studying individual writers in isolation, and ignoring the recursive relationship between individual writer and social context, is that only a partial account of transfer is possible. Moreover, writing is a sociocultural activity that is inextricably linked to individuals' dynamic sense of self, a critical point noted by Ivanic (1998), who argues that "writing is an act of identity in which people align themselves with socio-culturally shaped possibilities for self-hood" (p.32). To not attempt to account for the way that writing situations 'mean' for Clare and Sara, or to put it another way, what kinds of meaning Clare and Sara bring to these writing situations, is to restrict what

can be known about knowledge transfer. This is not to say that an AOT perspective can unproblematically recover the multiple variables embedded in the complex interaction of identity and social contexts in every writing performance. An AOT perspective, however, can help encourage in this study an alertness, sensitivity, and awareness of how certain sociocultural factors might be mediating how writers (like Clare and Sara) are thinking about and negotiating new writing tasks.

Given that Lobato doesn't specify exactly how she defines the actor's perspective, in this study I choose to define an actor's perspective as accounts of two overlapping areas: Clare and Sara's perceptions of writing situations and writing in a general sense, and the personal meanings they bring to writing tasks and writing contexts. Below, I define these two areas, explain how I look for them, and explain how they help me enact an AOT perspective in studying generalization.

## Perceptions

I define perceptions in this study as Clare and Sara's descriptions of the kinds of personal understandings they bring to writing situations. Understanding these perceptions helps illuminate how Clare and Sara interpret the social contexts of the writing tasks. To get at these perceptions I ask questions like: what do you feel you are being asked to do in this paper? What is your goal for this assignment? Why do you think you're being asked to write a lit review? How do you feel about the course in general? How do you think this course fits in with your major? How would you prioritize this assignment in relation to work for other classes? These kinds of questions help me develop a richer understanding of the context within which Clare and Sara are negotiating new writing situations.

The importance of understanding students' perceptions about writing tasks and writing environments of college, as I attempt to do here, has been documented in other studies. Carroll (2002) found that many students felt that their college writing assignments did not require them to change their writing approach that they used in high school, which suggests that the students might not feel the need to use any knowledge acquired in FYW. Similarly, as will be discussed in chapter 5, Wardle (2007) found that students did not generalize knowledge from her FYW course though not because they didn't learn anything in FYW. Rather, there was little evidence of generalization because the students' didn't perceive the writing assignments as requiring the use of any prior knowledge from the writing course. Though she doesn't explicitly describe her approach as an AOT perspective, Wardle emphasizes the methodological importance of understanding student's own idiosyncratic views of assignments: "Without interviewing students regarding their perceptions of assigned tasks, I might have incorrectly assumed that no generalizing was taking place and that FYW had no impact on students" (p.74). Whereas Wardle and Carroll found that students' perceptions of assignments influenced how they drew upon prior knowledge, Bergmann and Zepernick (2007) found that students' views of their FYW course shaped the degree to which they felt the course offered knowledge that was worth transferring or not. The writing in FYW courses, to the students in their study, was perceived as "personal, expressive, and creative" (p.140). As a result, students felt that the FYW course content wasn't applicable to the more rigorous

and disciplinarily unambiguous courses in their major. Bergmann and Zepernick's insight offers further proof of the need for an AOT perspective's emphasis on looking at the perceptions students bring to writing tasks and of writing more broadly. Lastly, McCarthy's (1984) observations of how one student, Dave, perceived the writing in each of his courses as completely different is perhaps one of the more effective illustrations of how fruitful it can be to look beyond individual writing tasks in order to get a fuller and more multi-dimensional account of the factors involved in student's negotiation of writing situations.

#### Meaning

In addition to creating accounts of the perceptions Clare and Sara have of writing situations, I also focus on the kinds of personal meaning and value that Clare and Sara assign to their writing activities because they help illuminate, as De Corte notes, factors like interest, motivation, and value that might shape how Clare and Sara are negotiating writing situations. In looking for the kinds of meaning and value that Clare and Sara bring to their writing tasks, I am drawing upon Beach's sociocultural concept of consequential transitions, which describes the potential interrelationship between knowledge propagation and personally meaningful or significant activities. Beach hypothesizes that the occurrence of knowledge propagation is in some ways related to the degree to which a task has significance for an individual's identity: moving from an English major to a bio major, or moving up from a team member to a manager at a job. When students participate in activities that have stakes in important transitions like

changing majors or work promotions, the belief is that generalization could be involved in how students approach and negotiate these high-stakes activities.

One assumption that I make is that Clare and Sara might not approach all of their writing situations across semesters 2-7 with the same kinds of motivation and interest. If there is no evidence that the students are generalizing knowledge on a particular writing situation, it is helpful to try and understand the degree to which Clare and Sara were motivated and interested in that writing situation. For example, I asked questions about how Clare and Sara felt about their general education courses and courses in their major in order to determine whether they assigned different values to the courses. This helped me contextualize how they talked about the writing assignments in those. Additionally, I asked them about how they felt college was going for them in a general sense. These questions opened them to discussing the ways in their experiences with courses, majors and general college experiences or were not aligned with their goals in going to college.

My emphasis on understanding the role that value and identity plays in transfer research accords with Navarre-Cleary's (2013) findings that transfer can be influenced by the meaning writing has for a student's identity. She observed that her study participant Tiffany in some ways resisted the conventions of academic discourse because Tiffany did not value the scholarly identity she felt was being imposed upon her. As a result, Tiffany was less likely to draw upon prior process knowledge when negotiating the new academic writing situations, not because she didn't have that knowledge, but because she didn't find the academic writing consequential enough for how she constructed her identity. From an observer-oriented perspective, it would appear that Tiffany was not generalizing. However, because Navarre-Cleary wanted to understand what the writing in

college meant to Tiffany from her perspective, she was able to develop a richer and more complex picture of what factors were at work as Tiffany was approaching her writing assignments. That identity plays a significant role in how individuals negotiate writing, as the case of Tiffany illustrates, has also been discussed by Lillis (2001) and Ivanic (1994), which underscores the idea that studies of transfer should attempt to include how students impute personal value and importance to writing situations. Further evidence of the role of identity and writing is found in studies of writing development. Rachel, a student in Herrington and Curtis's (2002) longitudinal study of college writers, demonstrated significant growth as a writer when her identity shifted from outsider to participant within her social science major and she began to write more confidently as a member of that community. Beach's linking of knowledge propagation and identity also comports with insights from Carroll (2002), who found that students' transition into their majors was a significant moment in their developmental trajectory as writers.

### Conclusion

This chapter traces the history of transfer research from the cognitive approaches that dominated much of the 20<sup>th</sup> century to the contextual-sociocultural approaches that developed in the 1980s and 1990s. Specifically, I show how this study's transfer framework in many ways reflects the debates and conflicts that continue to be discussed within transfer research. My approach here is to study transfer as generalization using both the cognitive notion of the explicit application of knowledge as well as the sociocultural notion of the implicit propagation of prior knowledge. I look for application and propagation in Clare and Sara's thinking as they negotiate new writing situations and

I also look at their perceptions of these writing situations as a way of contextualizing their thinking. In the next chapter, I discuss how particular studies in rhetoric and composition have taken similar approaches to evaluating the question of transfer.

# Chapter 4: Writing Studies Transfer

## Conceptualizing and Studying Transfer in Writing Studies Research

The same challenges and questions that have characterized debates among the mainstream cognitive and sociocultural transfer research over the last century-- debates over definitions of transfer, questions about methodology, contrasting theories of learning -- are in many ways inflected within transfer research conducted in writing studies over the past fifteen years. As Jessie Moore (2013) notes in her overview of writing transfer research, there is little consensus among the myriad studies about how transfer is defined, how it should be studied, or whether it is in fact achievable. Moore's note of inconclusiveness around transfer in writing studies is echoed by need something here. Anson (2016) describes that transfer research in writing studies "still remains a relatively uncharted territory" (p. 518). A collage might be a fitting metaphor for writing research into transfer in that each study, while broadly examining transfer, offers a different viewpoint, angle, and perspective based on how they conceptualize transfer and what specific aspect they choose to focus on. For the purposes of this study, I narrow my examination to two categories of research that are relevant to this project: first, transfer studies that focus on the effects of a transfer-informed curriculum, and second, studies that employ a sociocultural conception of transfer.

#### Transfer-Informed Curriculum

Three studies by Clark and Hernandez (2011), Wardle (2007), and Yancey, Robertson, and Taczak (2014) share the aim of examining what happens when students take a FYW course that focuses on facilitating transfer. The goal of Clark and Hernandez's FYW curriculum was to support students' development of genre awareness, which they conceptualize as a "metacognitive understanding of genre" in which students are able to "understand writing as a genre" and "view a text in terms of its rhetorical and social purpose" (p.65). Such awareness of genre, they speculate, could allow students to carry ideas and concepts from one writing situation to another and thus write more confidently and effectively write in FYW as well as future courses. To enable this, students were assigned to do genre analyses over the semester of different texts in order to learn more about the interrelation of author, genre, and audience. Using surveys administered at the beginning and end of the semester, Clark and Hernandez found nuanced evidence that students did grow slightly in their understanding of genre awareness across a set of measures. Student surveys revealed that they did become more aware of the important of audience in writing, and they also found students had less anxiety about writing than they did at the beginning of the semester, which Clark and Hernandez argue is perhaps a student belief that students can transfer (p.70). One important finding for this study is that despite the course's focused attention on genre and the students' examination of different genres in writing assignments, students remained relatively committed to their previous writing knowledge in the form of the five paragraph essay. That students did not relinquish in any significant way their perception of the five paragraph is interesting especially because Clark and Hernandez note that an explicit aim of the course was to specifically decrease students' reliance on the fiveparagraph essay. Despite this finding, Clark and Hernandez's study also showed the role that a transfer-course can have on student confidence in writing.

Although Clark and Hernandez's study focused solely on surveys of 20 students from the beginning and end of one semester, their findings about the kinds of impact a course can have on students' knowledge of writing echoes one of the larger conclusions of Wardle's (2007) study of how students' experience in a transfer-based FYW course influenced their future negotiation of writing tasks. Wardle's FYW course, like the present study's course, was built upon curricular principles that, in ways similar to the present study, emphasized students' development of knowledge about writing and examined how students grow in their understanding of how writing functions in society and how texts are shaped by the particular purposes and practices of specific discourse communities. Wardle examined how seven students from her FYW course approached writing situations in three subsequent semesters to see if their knowledge and experience in the FYW course was influencing how they wrote. Wardle's study explicitly used Beach's (1999, 2003) conceptualization of transfer as generalization to study if and how students were drawing upon the FYW course curriculum, as this study does. She defines generalization as including "classical interpretations of transfer-carrying and applying knowledge across tasks—but [generalization] goes beyond them to examine individuals and their social organizations, the ways that individuals construct associations among social organizations, associations that can be continuous and constant or distinctive and contradictory" (p.67).

Wardle found that students were not generalizing in any significant way by using many of the "writing-related behaviors they used in FYW (etc.) in other courses," (p.73) but this was in large part because the courses did not necessarily encourage or move students to perceive that they needed to use their prior knowledge. Students did

acknowledge developing writing knowledge in their FYW course, but they didn't feel the need to enlist that knowledge for various reasons, some of which were what they perceived as the high school-like nature of the writing tasks in other courses, doubts over whether faculty read their papers, and the low expectations of the professor. One student, Bobby, could identify his writing knowledge but described how his assignments didn't really necessitate any significant adaptation.

Although Wardle did not observe any significant evidence of generalization from the FYW course, she did observe a small amount of generalization that students were developing and using as a result of spending two years of college. Students were generalizing knowledge as they negotiated new and different writing tasks. Wardle describes this developing knowledge about writing as meta-awareness, which involves "the ability to analyze assignments, see similarities and differences across assignments, discern what was being required of them, and determine exactly what they needed to do in response to earn the grade they wanted" (p.77). This generalization of meta-awareness of writing was found in the case of Bobby, who describes that he was initially anxious when he was confronted with a challenging paper in a philosophy course. However, upon reflection about his writing experiences, Bobby realized he had written similar kinds of papers and found the confidence to fulfill it. Wardle identifies Bobby's self-monitoring as the generalization of the ability to "reflect on and analyze current and past writing assignments" (p.77). While students did reflect on writing processes and practices in the transfer-focused FYW course, Wardle does not suggest however that the course is solely responsible for the students' meta-awareness about writing. Rather, this meta-awareness

was developed and generalized as a result of an accumulating array of writing experiences Bobby had in different academic contexts over the years (p. 77).

If the observations by Clark and Hernandez and Wardle about the impact of a transfer-focused FYW course are nuanced, the conclusions drawn by Yancey, Robertson and Taczak confer a little more certainty to questions about the ability of an FYW to facilitate transfer. In their experimental study of seven students over two semesters, they found that students who had taken a teaching for transfer (TFT) course were more likely to transfer knowledge than students who had taken two other courses that were not focused on transfer specifically—a cultural studies-themed course and a course they described as Expressionist. This cultural studies and expressionist courses, Yancey, Robertson and Taczak hypothesized, were less likely to provide students with any transferable knowledge because their curricula was not focused on writing. As discussed in Chapter 1, Yancey, Robertson and Taczak's curriculum focused on providing students with a writing vocabulary that by the end of the semester would comprise the students' theory of writing. This theory of writing, Yancey, Robertson, and Taczak believed, could form a passport that they could carry across different contexts and use to negotiate and approach new writing situations.

The authors observed students as they participated in the TFT class and in one subsequent semester and found that of the three study participants from the TFT course, two of them Rick and Clay, did evidence transfer. As a result of the TFT course, both Rick and Clay had developed a "language that facilitated their application and reworking of knowledge and practice from one site to another" (p.99). For Rick, this evidence of transfer involved applying knowledge of genre to make connections between the TFT

course and his chemistry course: "It wasn't until I was making the poster that I realized I was thinking about the context I would present it in, which is like rhetorical situation, and that it was a genre. So I thought about those things and I think it helped. My poster was awesome" (p.98). Here, Rick is discussing the way the concepts of rhetorical situation and genre influenced how he thought about his approach in developing the poster. Clay similarly enlisted his knowledge of audience and context from the TFT course and connected its value and need when he had to fulfill a writing assignment in his meteorology course. In writing his assignment, Clay observed that "Once you understand that writing is all about context you understand how to shape it to whatever the need is. And once you understand that different genres are meant to do different things for different audiences you know more about writing that works for whatever context you're writing in" (p.95). Although Yancey, Robertson, and Taczak only observed students for one semester beyond the TFT course, what they've found about the ability of their TFT course to facilitate future transfer is important. A FYW course can introduce to students' a theory of writing that students will ultimately draw upon when confronted with new writing situations in the future.

Although all three of these studies looked at the effects of an FYW curriculum designed to facilitate transfer, there are two significant differences among these studies that require analysis: how transfer is defined, and how what counts as transfer is developed. Looking at these two dimensions in each of the three studies points to some of the key implications for the present study.

Regarding definition, Moore and Donahue have argued that none of these three studies defined transfer in the same way, nor did they use the same criteria for what

'counts' as transfer. Granted, there are ways that we could envision how different conceptualizations of transfer could be generative; the results of one study's conceptualization could be used to inform the way another study into writing transfer is defined. On the other hand, however, it seems that similar definitions would be prioritized in transfer research given the fact that definitions of transfer matter because they significantly shape how transfer will be studied (Barnet & Ceci, Lobato, 2006). How transfer is defined will determine how it is studied which will determine what counts or doesn't count as evidence of transfer. If the field is to understand with any clarity and certitude what counts as transfer, what is needed is the development of transfer conceptualizations that are informed by similar principles about learning, development and methodology. This is not to say that transfer should be so narrowly conceived as to limit what can be known about it. But what is needed is perhaps a push towards more coherent and comparable definitions so that transfer research in writing studies begins to approach Haswell's (2005) notion of replicable, aggregable, and data-driven research. To date in writing studies there have been no replicated studies of transfer, though to be fair this observation is perhaps somewhat representative of writing research writ large and because transfer research remains in its early stages. Perhaps a more critical reason for more similarly aligned conceptions of transfer involves how transfer research informs how the curriculum of FYW might be conceived. If there's little ability to aggregate conclusions from transfer research, it is more difficult to implement data-driven ideas about transfer into the curriculum.

Wardle offers one substantive illustration of what a comprehensive articulation of transfer might look like, in contrast to Clark and Hernandez, who didn't specify the kind

of transfer they were studying, nor did they conclude that transfer occurred though this is primarily because their study was conducted over one semester. Wardle explicitly articulated that for her study she wanted to move beyond narrow, cognitive constructs of transfer in defining transfer using Beach's sociocultural notion of generalization. Using this term, she found little evidence of generalization. What counted as generalization, for Wardle, was the students' meta-awareness in the form of a growing language and capacity to talk about writing.

Yancey, Robertson, and Taczak review the different ways that transfer has been defined, including Wardle's, though they do not make their own definition of transfer entirely clear. What can be inferred from how they identified evidence of what counts as transfer is that they believe transfer involves the student's explicit and clear use of prior knowledge in a new setting, as illustrated previously in Rick's description of his approach to his post.

That these studies drew upon different conceptualizations of transfer and different ways of identifying positive evidence of transfer point to key differences in method. Clark and Hernandez's study was a one-semester view of students' negotiation of new knowledge using surveys. Wardle's, in contrast, was conducted over four semesters and took a more ethnographic perspective through interviews, the collection of student texts, and foregrounded students' perceptions of writing tasks and the environment. Yancey, Robertson's Taczak and study did not discuss students' perceptions or interactions with the social environment. The study was conducted over two semesters and relied on questionnaires and interviews. The heterogeneity of these studies, both in terms of how transfer is defined and identified and how transfer is studied, points to composition's

challenge in developing stable and consistent notions of what transfer is, what kinds of knowledge can transfer, and how we can identify it. And while they do contribute to the collage of writing transfer research they do so in significantly different ways.

Despite these differences, perhaps the most significant conclusion that can be drawn from these three studies is that although there is likely considerable agreement that there are limits to the kinds of transfer that can be facilitated by a transfer-focused FYW course, there is little known about what those limits might be. The future social contexts of writing that students encounter might be one place to begin looking more closely for an idea of the limits. Wardle says so much in noting that while her course did include self-reflection and has perhaps to some degree supported their development of metaawareness, ultimately the students' meta-awareness of writing was "a skill that these successful honors students had been honing throughout their years of schooling" (p.77). What is needed is a dual understanding of both what students are learning in their writing courses and how that learning interacts with the mediating social factors like the assignment, course, and professor in addition to other social factors that comprise new writing contexts. Beach's notion of generalization and Lobato's AOT perspective offer two key ways of attempting to capture the dual understanding of both what knowledge students develop in an FYW and how the multiple social factors that make up writing situations beyond the FYW might influence the nature or existence of generalization. This focus on the interaction of the learner and the social environment in many ways characterizes the approach taken by the studies I discuss in the next section, which I describe as contextual.

#### The Transformers: Contextual Approaches to Writing Transfer

Other research into transfer in writing studies have explicitly noted that they aim to go beyond cognitive notions of transfer as the explicit application of prior knowledge and employ a broader, more expansive and multidimensional conception of transfer grounded in sociocultural theories of learning. I refer to this group of studies as "the transformers" because of their emphasis on studying how students transform knowledge as opposed to the more cognitive view of look for how students transfer knowledge. Drawing flexibly upon Lave's theory of situated learning, Wenger's notion of communities of practice, and cultural historical activity theory, these studies attempt to include in their account of transfer the complex and recursive relationship between students and contexts—the social organizations, networks, and communities—they move in and out of. I note here that Wardle (2007) is one of the more significant participants in this contextual group, and although I've reviewed her study in the previous section I'll at times link back to it.

One of the first studies to draw upon a contextual-based theory was conducted by Smart and Brown (2002). Studying students who moved from professional writing major as they negotiated the writing tasks of their internships, the authors drew on activity theory and Lave's theory of situated learning to conceptualize transfer as the transformation of prior knowledge and experiences (p.122). Smart and Brown's definition of transfer as transformation emerged from a contradiction they observed in interviewing students about their writing experiences. They found that most students were navigating workplace writing tasks effectively even though the students generally could not identify the previous experiences or learning that aided their effective

negotiation of these tasks. How they knew how to write a technical brief, a memo, or other writing tasks was a question the students weren't able to answer. Unlike Rick and Clay in Yancey, Robertson and Taczak's study, most students in their study could not explicitly state where their thinking originated. As a result of not finding any explicit application of prior knowledge, Smart and Brown wondered "If we discount the cognitivist notion of learning transfer—where school-acquired knowledge and skills are commodity-like entities acquired by an individual, carried into a new environment, and then applied independently by the individual—then how are we to explain the interns' workplace accomplishments?" (p.122).

Rather than conclude, as previous transfer studies have, that students were not transferring any prior knowledge or experience, they argue that students' navigation of their workplace writing activities involved "reinterpreting, enacting and further developing expert practices—with the performance and learning occurring simultaneously" (p.122). These transfer processes are more broadly defined as the "transformation of learning that made possible the reinvention of expert practices" (p.122). Their study's most important finding was that as a result of developing expert writing practices in the activity system of school, students were able to "resituate and extend...or reinvent" these prior experiences when they had to learn how to fulfill new writing tasks as part of the activity system of their internship. They did so by drawing on three kinds of knowledge developed in the PW major curriculum: reader-centered writing, research strategies, and digital technologies.

Smart and Brown found that only one student, Mark, made an explicit connection

between knowledge from his writing courses and his writing in the internship: "So we're writing our documentation for the people at SecuritiesTrader—the programmers, the [database] administrators, the testers there. We're not writing to the everyday guy, Joe Day-Trader. So with the whole concept of reader centered writing—we have to remember that we're writing for advanced to expert-level programmers and people like that" (p.130). Smart and Brown describe Mark's explicit connection of his writing knowledge with the activities of new work environment as Mark's ability to "draw on these previous experiences with reader-centered writing practices to interpret the rhetorical landscape of their worksites"(p.130). And while the example of Mark's use of reader-centered knowledge is an example of a more conscious application of previous knowledge, the bulk of the evidence for transformation in Smart and Brown's study involves observing the students' transformation of tacit knowledge.

One illuminating example of the transfer of tacit knowledge is found in the account of Sally, whose description of her thinking implies that she understands the importance of knowing her audience as she begins to approach a writing task: "First I had to determine who my audience would be. On the one hand, I was creating this lesson for AutoBuild employees. However, I knew that this didn't mean just the plant workers. I was pretty sure that the upper management of AutoBuild would also be taking more than a cursory glance at it" (p.130). Smart and Brown contend that Sally's sensitivity to audience that she evidences in her description points to the transformation of prior experience in the reader-centric curriculum from the professional writing major ; she learned about the importance of audience in her courses and she's now transforming that

knowledge in a new context and for a new purpose, despite the fact that she doesn't explicitly link her use of this audience knowledge to any of her courses.

While Smart and Brown did find that students were transforming prior knowledge, it is important for this study to note that what counts as the transformation or extension of prior writing practices evidence of this transformation of learning is not made entirely clear in Smart and Brown's study. Smart and Brown looked at the students' accounts of writing in the workplace relatively openly. They didn't have a baseline account of what students had learned in a previous course but they still were able to draw assumptions about how the students were able to capably fulfill and manage the new writing tasks.

Like Smart and Brown and Wardle, Brent (2012) foregrounds his contextual study of students' experiences of writing for internships with a critique of cognitive conceptualizations that define transfer as application. Brent defines transfer as Smart and Brown (2002) do, as transformation, which involves processes by "which learners recreate new skills in new contexts by building on foundations laid down in earlier contexts" (p.565). But Brent makes a more explicit case against the narrowing effect that the singular use of a cognitive view of transfer can have on studying transfer: "I can't stress enough what difference a change of one word makes in the sense of what is happening here. If our goal in teaching writing...is to facilitate learning transformation rather than learning transfer, the implications for both research and pedagogy are enormous" (p.561). He points out that much of the uneven and equivocal findings on transfer within cognitive studies are significantly influenced by the experimental and narrow methodological approaches to transfer, which results in studies' "drastic

underestimation of the human ability" to draw upon prior knowledge (p.562). Instead of defining transfer as the direct application of prior knowledge, and risk underestimating students' prior knowledge, Brent's more expansive notion of transformation led him to his key finding: the students in his study confronted workplace writing tasks by drawing on "flexible rhetorical knowledge that can be traced to much more general features of the academic environment than to any particular course in which they were "taught" it" (p. 585). And as Smart and Brown (2002) found, Brent notes that students couldn't necessarily articulate how they knew how they had learned how to negotiate and fulfill the new writing tasks. Despite this inability to describe how their prior knowledge was functioning, Brent observed that students were "drawing on a large repertoire of mental schema and applying them in a variety of situations" (p.589).

Like Smart and Brown, Brent, did find some evidence that students were explicitly applying prior knowledge though it was not significant. One student, Irene, described how her writing process came from prior learning: "Generally, like in all English classes they teach you—teach me how to write out— like I have to write an outline, and you add some points, and you can like develop, and you can just—maybe if you have nowhere to start it you can just like write what you are thinking, just keep typing, and after that—and you can read it again and like see what you have to change" (p.575). Brent describes how here Irene is applying "consciously learned process strategies such as freewriting when stuck, even when writing in a very different genre than she would have practiced in her English courses" (p.575).

Other than a few instances of explicit transfer like the case of Irene, however, Brent describes that what he primarily observed was students' transformation of tacit prior

knowledge. Emma, for example, effectively and adaptively drew upon internalized writing knowledge to negotiate a range of different workplace writing activities, including creating a survey and composing several different genres. Brent notes, however, that Emma "could "not consciously pick apart that rhetorical knowledge and trace its origins seems to indicate how deeply internalized most of it was" (p. 578). She attributed her ability to write effectively in the workplace to a general integration of past experiences, noting "how I think it is a combination of all the information that you learn in life, you know what I mean? And some people pick up knowledge quicker than others just like, you know—I do not know how to describe it exactly. It is probably my best explanation. Just a combination of everything I have learned in life" (p.578).

What counts as evidence of the transformation of knowledge for Brent is the repeated presence of internalized rhetorical knowledge made manifest in students' consistent ability to successfully fulfill a diverse range of challenging and often ill-structured writing tasks. Like Smart and Brown, Brent didn't necessarily see transfer; what they observed was students' relatively consistently ability to successfully manage new writing tasks by transforming previous experiences and knowledge. Both Smart and Brown and Brent's conceptualization of transfer accords with Beach's conception of generalization. As a result of occupying new social environments, they would argue, individuals transform, extend, and generalize prior knowledge in ways that are shaped by the exigencies of these new social contexts.

De Palma and Ringer's (2011) theorization of adaptive transfer in many ways provides a broader conceptual framework to describe the kind of contextual approach that Smart and Brown, Wardle, and Brent use to conceptualize and study transfer. De Palma and Ringer conceive adaptive transfer as an explicit integration of both cognitive approaches and sociocultural approaches. From this blended conceptualization they define transfer "as the conscious or intuitive process of applying or reshaping learned writing knowledge in order to help students negotiate new and potentially unfamiliar writing situations" (p.135).

DePalma and Ringer's definition of adaptive transfer is built on several key beliefs. First, since transfer is "conscious or intuitive" it can involve the individual's explicit awareness of transferring knowledge or a more tacit use of prior knowledge. A second key key belief is that transfer is idiosyncratic, and how it occurs is "unique to individuals and [is] inflected by a range of factors, including language repertoire, race, class, gender, educational history, social setting, and genre knowledge, among others" (p.141). This contrasts starkly with cognitive approaches that have often operated on the assumption that transfer would occur uniformly across individuals. A third belief is that transfer is "cross contextual" and occurs when a student interprets that a new context contains elements or features that are similar to the elements or features of a previous situation. Fourth, DePalma and Ringer theorize that adaptive transfer is rhetorical insofar as it occurs when a student sees the interrelationship of audience, purpose and message and that the transfer is invariably shaped by that student's particular rhetorical goals. That adaptive transfer is multilingual and situated by particular linguistic and discursive exigencies is their fifth belief. Lastly, adaptive transfer is transformative in that

foregrounds the agency of individuals to influence new social contexts with their "ways of doing and knowing" and also that individuals knowledge and writing practices will be influenced by those contexts (p.141).

While DePalma and Ringer don't use the definition of adaptive transfer to explore their own empirical study, they do use it as a way of describing how nurses in a study by Park (2001) reshaped writing knowledge in order to adapt to the contextual realities of a new writing situation. In school, these nurses were taught how to write the genre of the care plan and were encouraged to use simple, non-jargon language for that specific genre. However, when these nurses transitioned to writing the care plan in the hospital, they responded to the different social context of the hospital by adapting that prior knowledge of the care plan genre. In this new genre and this new context they used medical terminology whereas the care plan genre in school discouraged the use of medical terminology. This illustrates the fluid and mutable nature of prior knowledge and how new contexts render new formulations of that prior knowledge. DePalma and Ringer analyze this example of the nurses' transformation of prior genre knowledge through the lens of adaptive transfer as a way of illustrating concrete examples of the dynamic, idiosyncratic, and complex nature of transfer.

Two important insights from these social-oriented studies of transfer can be gleaned that are significant for the present study. The first insight is that these studies suggest that many scholars in writing studies are developing approaches to transfer that emanate from the discourse around cognitive and sociocultural approaches to transfer that were discussed in chapter 4. Specifically, these studies and the present study advance the belief that a more expansive and multi-dimensional conceptualization of transfer is needed. Narrow definitions of transfer often lead to an underestimation of what students actually know and what they can do. Moreover, only looking for the explicit application of knowledge represents a restricted understanding of how learning works and what our FYW courses might actually be able to accomplish. If we look beyond what Bransford and Schwartz call the Direct Application (DA) theory of transfer and see the ways that individuals are dynamically evolving and interacting with new contexts, and see how they generalize— propagate, transform, and adapt—prior knowledge and experiences, it is perhaps possible to generate a much more dynamic and complex portrait of learning and development.

However, a significant challenge in studying transformed knowledge is that it is challenging to try and make visible what is often tacit. To be sure, individuals' knowledge can be explicit and retain its original form in its application, as the accounts of Clay and Rick illustrate in Yancey, Robertson and Taczak's study. Yet what is more common, as evidenced by Smart and Brown, Wardle, and Brent, is that the students are generally unable to describe what they know, how they know it, and how they are fulfilling new writing tasks. The knowledge and experience often transforms and becomes internalized, subconscious, and tacit. That this knowledge is internalized or intuitive, however, does not mean that it is neither insignificant nor impossible to try and understand. For Smart and Brown and Brent, one way to develop an account of student's tacit knowledge of writing is to look for consistent patterns that reveal evidence of a

stable and enduring core understanding or conception of writing. Sally in Smart and Brown's study and Emma in Brent's study both negotiated new writing situations in such a way so as to suggest it was possible for the researchers to conclude that there was no possibility that the students were taking on these tasks tabula rasa. Rather, both students were drawing upon some kind of knowledge platform or foundation in order to make sense of and organize how they would approach these new writing situations. Brent defines that base as students' rhetorical knowledge, which refers to the "sum of institutionalized practices in the postsecondary education system that help a student develop rhetorical knowledge and skill, whether or not those practices are located in specific "writing" courses" (p.559). Although this knowledge base for writing situations is both evolving and often internalized, what Smart and Brown and Brent point to is that this knowledge base can perhaps be made more visible as a result of seeing students' relatively enduring and patterned propagation of that knowledge base in multiple situations and different social contexts.

## Chapter 5: Methods

#### *Purpose of the Study*

As has been articulated in the literature review, the question of transfer currently occupies a central location in writing studies research. Scholars are particularly interested in the ways that the curriculum of an FYW course can equip students with knowledge that they would transfer and use in future writing situations (e.g., Clark & Hernandez, 2011: Yancey, Robertson, & Taczak, 2014). Other scholars are interested in examining the site of knowledge transfer and studying the kinds of variables that might shape if and how students are drawing upon their knowledge developed in a FYW course (e.g., Jarrat, Mack, & Sartor, 2009; Bergmann & Zepernick, 2007).

This dissertation in its own way operates at the nexus of these two research areas. The study was designed to see if and how two students, Clare and Sara, generalize knowledge they develop in a FYW course in their thinking as they negotiate future writing situations. In examining the interrelationship of curriculum and generalization, this study hopes to hope to contribute to discussions about the content and curricula of FYW courses, the way transfer is conceptualized, and what we know about how students negotiate writing situations beyond the FYW course.

#### Research Questions

The three research questions that anchor this study grew out of a complex web of thinking about my own teaching, the purpose of FYW courses, and what happens to students' knowledge once they leave writing courses. Additionally, my thinking around these questions was shaped by conversations about curriculum, learning and assessment I had with fellow teachers and administrators at various colleges. Part of these conversations often involved me discussing with fellow teachers and administrators the idea that we need students to understand that there is no such thing as good writing and that our goal as writing teachers is to help students become better writers by making them more flexible writers. Yet I wasn't totally sure if it was true that we could help students become more flexible writers nor was I sure what kind of curriculum might support that flexibility. It is out of this context that the kernels of my research questions were developed.

The first two research questions are sequenced in roughly chronological order. The first question is organized around the idea that before I can see whether or not Clare and Sara are generalizing knowledge from the FYW course I need to understand with some certainty that Clare and Sara did in fact develop knowledge in the semester 1 course that they could generalize in semesters 2-7. The third question explores what is learned from the first two research questions and situates it within the ongoing discussion of transfer in writing studies.

1) What do students learn about writing over one semester in a transfer-focused FYW course whose curriculum focuses on WAW and Beaufort's (2007) five knowledge domains (semester I)?

2) Given that these five knowledge domains and a more situated understanding of writing are supposed to help students negotiate writing tasks in college, is there

any evidence that the students generalize their knowledge from semester 1 in their perceptions and approaches involved in writing situations in semesters 2-7?

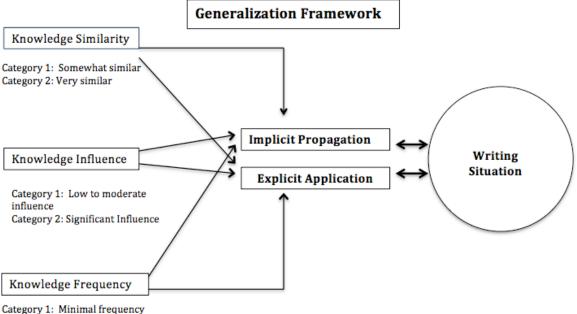
3) Does this longitudinal study of students' perceptions and approaches to writing provide insight into the nature of transfer between FYW courses and subsequent writing tasks?

I explore these three questions in two phases. In phase 1, I attempt to identify any baseline knowledge that Sara or Clare might have developed as a result of taking the transfer-centric course in semester 1. In phase 2, I look at Sara and Clare's thinking as they negotiate new writing situations over semesters 2-7 to determine if they are generalizing baseline knowledge from semester 1. Generalization can occur in two forms. The first form that generalization can take is as the explicit application of prior knowledge. In the explicit application of knowledge, Sara or Clare would specifically state that they are using a concept from semester 1 in their thinking as they approach writing a text. The other form of generalization I look for is implicit propagation; in this form, Sara and Clare are "knowing with" prior knowledge from semester 1 but they don't specifically describe that they are propagating that prior knowledge in their thinking. This generalization framework (Figure 2) includes three elements that aid in helping refine any potential example of either the explicit application or implicit propagation of knowledge. Knowledge similarity describes a way of articulating how the prior knowledge and the knowledge generalization are similar. *Knowledge value* is a way of making visible how

significant the knowledge is in Clare and Sara's thinking. Lastly, *knowledge frequency* refers to how often this knowledge application occurs.

In an attempt to see what kinds of variables might be shaping whether or not generalization occurs, I also seek out accounts of the personal connections Clare and Sara make of the writing situations they encounter. I define personal connections as the perceptions they have of the writing situations as well as the personal value they assign to the writing situations. Seeking accounts of their personal connections is a way of taking what Lobato describes as an actor-oriented perspective, which is a way of understanding the writing situation from the perspective of Clare and Sara beyond merely how they are thinking about composing the text.





Category 1: Minimal frequency Category 2: Significant Frequency

### Study Design

This study uses a longitudinal, multiple case study approach as the primary methodology to explore questions about individuals' experiences of learning and change over time. Yin (2012) defines a case study as an "empirical inquiry that investigates contemporary phenomenon (the "case") in depth and within its real-world context" (p.16). A positive rationale for using a case study, according to Yin, would be that the study's research questions address "how" or "why" questions, as well as the goal of pursuing "an extensive and in-depth description of some social phenomenon" (p.4). The present study looks at both if and how Clare and Sara generalize prior knowledge in addition to examining why there might or might not be generalization. Additionally, the longitudinal, granular approach of examining Clare and Sara's thinking about writing situations over semesters 2-7 is in its own way an "extensive and in-depth description" of generalization.

Another reason that the case study was chosen was that the case study, as methodology, has an established place in the field of composition research (Johaneck; 2000, Kirsch 1999; Newkirk; 1992) and is also used by studies whose research questions are similar to those of the present study (Brent, 2012; Smart & Brown, 2002; McCarthy 1987; Wardle, 2007; Yancey, Robertson, & Taczak, 2014).

A case study approach was also selected because it supports the granular, qualitative focus of the research questions. Transfer, as DePalma and Ringer (2014) have argued, can be "idiosyncratic" and "tacit" (p.137). A case study is more capable of capturing the slow, internalized, and idiosyncratic processes by which of Clare and Sara might generalize prior knowledge. The case study also supports this study's longitudinal

approach. I chose a longitudinal approach because I was interested in knowing how Clare and Sara might apply or propagate knowledge in their thinking several semesters beyond the FYW course. A longitudinal perspective enables me to look for generalization in multiple spaces and over time rather than in one semester and in one class (Sternglass, 1998; Carroll, 2002; Fishmann, 2012). The key benefit of this is that I'm able to develop a relatively deep and diverse set of data from which to look closely at in order to see how Clare and Sara might or not be applying or propagating prior knowledge.

Lastly, my use of the case study also extends Yin's (2012) belief that "case studies are generalizable to theoretical propositions and not to populations or universes" and in doing so the goal of the goal of the case study "is to expand and generalize theories (analytic generalization) and not to enumerate frequencies (statistical generalization)" (p.21).

#### Research Site

The initial setting for semester 1 and semester 2 of this study was a small, private, liberal arts institution on the West Coast that I will refer to as "St. John's." In the late 2000s St. John's transitioned from a two-year institution to a four-year university. At St. John's, the transfer-centric course (ENG1) is the first of three required, credit-bearing, English courses, before ENG2 and ENG3. As noted before, students are required to take ENG-B if they do not score high enough on an Accuplacer test they take during orientation. In semesters 3-7 I met with study participants at two different coffee shops but not in any institutional setting.

#### Study Phases

This focus of this study is defined as occurring over two phases. The first phase describes the FYW course and the data collection around the course. Over the course of phase I, I collected surveys, student texts, and e-mailcorrespondence. Phase 1 is aligned with research question 1. Phase II covers semesters 2-7, where I conducted interviews and collected writing from Sarah and Clare.

#### Selection of Study participants

As noted before, Clare and Sara emerged as participants after an initial examination of the surveys from semester 1 revealed that more data was needed in order to understand more about what students had learned about writing in the course and how what they had learned might be generalizable. At the beginning of semester 2 my advisor suggested I reach out to 4-5 students and see if I could interview them. I submitted a Human Subjects application and was approved in November 2013 to gain IRB approval for a research study that used surveys, course assignments, and documents from semester 1, as well as to conduct an interview and collect student writing assignments from courses in semester 2.

I contacted five students from the ENG1 course to see if they would be willing to be interviewed. I selected these five students to contact because their thoughtful participation in the course suggested they would perhaps be more likely to respond to my communications, more likely to participate in a longitudinal study, and because of the relative diversity in terms of gender and ethnicity: Four of the five were female, and of the five one identified as Latina, one as Native/American and Latino, two as Caucasian,

and the other as African-American. All five students thoughtfully participated in the course. By thoughtfully I mean they fulfilled all assignments, contributed in class, attended all student and instructor meetings, and generally were engaged. Additionally, four of the five received a grade of "A" in the course. Four students responded to my e-mail though only three scheduled interviews and all three students signed consent forms at the beginning of the interview late in semester 2. I interviewed all three students late in semester 2. As I followed up with them in semester 3, only Clare and Sara responded.

Ultimately, I've chosen to focus on Clare and Sara as the 'cases' for my case study, and I did so for several reasons. While many have argued the need for more longitudinal studies of writing (e.g. Beaufort 2007; Wardle, 2007), there are several inherent challenges in conducting longitudinal research. Both Haswell (2000) and Fishmann (2012) have described attrition as one of the most difficult challenges in longitudinal studies of writing. One of the key factors in addressing attrition is the ability to develop a rapport, defined here as the "feeling of comfort, accord, and trust between the interviewer and the interviewee" (Madison, 20012, p.39). Over the course of teaching Clare and Sara in semester 1, I did not develop a full rapport with them but I did establish grounds on which one could be developed. Like I did with all the students in the course, I had met individually with Clare and Sara about their papers, e-mailed back and forth regarding questions, and overall had gotten to know a little bit about them. I did this not knowing that I would ultimately seek to ask both of them to take part in a longitudinal study. Clearly the kind of rapport I describe here is a constitutive part of any long-term, qualitative study. Despite these complexities, other qualitative research has found rapport to be a positive and critical piece of fulfilling the goals of longitudinal studies. In his

overview of longitudinal research in the social sciences, Hermanowicz (2016) points to multiple studies in order to highlight the important role of rapport in minimizing attrition. He notes how a longitudinal study of college culture by Armstrong and Hamilton (2013) was built on the rapport developed in the first year of the study, which then "facilitated students' subsequent cooperation in interviews that yielded high rates of response" (p.497). In his own study (2009) of academic professionals and aging, Hermanowicz describes how his rapport with his participants prior to beginning his longitudinal study was a key factor in its successful participation rate. For this study, Clare and Sara were chosen as a result of the beginning of a rapport that had been developed in semester 1 as well as their degree of engagement in the course.

#### Study Participants

Clare is an African-American female who attended a suburban, public high school in southern California. Clare began the second semester of her freshman year still undecided about her major. Neither Clare's mother nor father attended college. At the start of the study, her mother worked in the medical field and her father worked for the federal government. Clare voluntarily joined the study and was not paid to participate. I first met Clare when she was a student in my ENG1 course. In her first semester of college Clare took ENG-B, a non-credit bearing remedial course that students are placed into if they fail to achieve a particular score on an Accuplacer test they are given during orientation. She passed ENG-B, then took ENG1 with me, and followed that with ENG2. Clare left St. John's in the fall of 2014 and then took courses at a community college. She works in retail currently and is also about to begin another job working with children. In addition, she has enrolled in four courses at a different 2-year college for the fall of 2015.

Sara is a multi-racial female who attended a private, religious, urban high school in southern California. Sara entered college as a bio major. I first met her when she was a student in my ENG 1. Sara volunteered to participate in the study and was not compensated for her participation. Like Clare, Sara took my class in the spring after being placed into ENG-B. Sara left St. John's in the spring of 2014 and enrolled at St. Mark's, a private 4-year university in the fall of 2014. She left that university at the end of spring 2014 and is now enrolled in four courses at a junior college. She no longer is a pre-med major and is seeking a film and television major. She also works full time in retail while attending classes at the JC.

#### PHASE 1

#### ENG1 Course Design

ENG 1's central aim was to help students to write more flexibly and effectively in their other college writing courses by introducing them to two key knowledge areas. The first kind of knowledge the course introduced was the idea that writing is situated and audience-driven. This is an attempt to get students to move away from any potential prior idea that all writing is the same or that one kind of writing will work for all of their courses. The second knowledge area helps provide students with a conceptual vocabulary that helps them more deeply understand and think about writing situations. To help students develop both of these kinds of knowledge, I drew upon WAW principles and

integrated them with a conceptual vocabulary based off of Beaufort's (2007 Beaufort's (2007) five knowledge domains—discourse community, rhetoric, genre, process and subject matter.

#### ENG 1 - Writing about Writing

The WAW elements of the course encouraged students to develop a more sophisticated conception of writing, how writing works, how writing is shaped by audience, as well as to develop a language for talking about writing and themselves as writers. This WAW emphasis on having students understand how writing works is threaded throughout the course readings, discussions, and two of the three writing assignments.

In order to first introduce students to see the situated nature of reading and writing, and its potential power, students read Malcolm X's essay "Learning to Read." In their first assignment, a case study, students had to interview two people (friends or family) and compose case studies that described how particular literacies have shaped and impacted their interviewee's lives. In order to develop richer conceptions of literacy as part of their case study assignment, students read Brandt's (1999) "Literacy, Opportunity, and Economic Change" as well as DeVoss et. al (2004) "The Future of Literacy." These WAW-influected readings and the case study assignment encouraged students to redefine writing as literacy, and in doing begin to see the complexity, dynamism, and situated nature of language use in various social contexts and over time periods. This assignment occurred concurrently with class discussions about how writing is a "human action that gets things done." This phrase emphasized the interrelationship of

author, text, purpose and audience and used specific examples like traffic signs and visitor information signs located on campus; these texts accomplished things. In addition, discussions also included the idea that 'good writing is writing that works and that a text works when the audience responds in the way the author intended.

The WAW principles that inform the students' final assignment, a genre analysis, include the idea that students need to see writing as a way of enacting the values and beliefs of a discourse community. Additionally, the WAW nature of the genre analysis assignment is that students were studying real-world examples of writing in order to see in these texts the situated, audience-driven nature of writing. Students were asked to find a topic (e.g., death penalty, welfare) that was examined in two genres: a newspaper op-ed and a peer-reviewed academic article. They then were asked to analyze these two genres and evaluate their differences in terms of evidence, tone, structure and other text attributes using Beaufort's five knowledge domains. In this next section I discuss the way the five knowledge domains were integrated into the course and assignments.

#### ENG1-Beaufort's Five Knowledge Domains

While WAW principles informed the design of the entire course, the first half of the semester was specifically focused around the WAW ideas that there is no such thing as good writing and that students would need to develop new literacies as they moved into different jobs and environments. In the second half of the class students were introduced to the five knowledge domains and were asked to compose two assignments using what they were learning about the five knowledge domains. As discussed in chapter 2, Beaufort's (2007) five knowledge domains offer a model of writing expertise. Each domain is comprised of knowledge required in developing expertise in writing: discourse community, rhetorical knowledge, genre knowledge, process knowledge, and subject matter knowledge. Discourse community, Beaufort believes, is the largest domain that determines the other knowledge clusters and within which the others operate. An expert writer, understanding her discourse community, will then make the appropriate choices regarding genre, rhetoric, subject matter, and process in order to effectively and persuasively fulfill her goals with the text she composes. My goal in the course was to introduce students to each of these knowledge domains, to explain and define the domains and their interrelationship, and then have students think through and study these concepts in two course assignments—the letter to the St. John's president and the genre analysis.

The second half of the class was primarily focused on the five knowledge domains. Starting with discourse community, one domain was introduced each week up until week 10. In week 12 students were assigned to write a letter to the president of St. John's about an issue they felt needed to be addressed. The goal behind this assignment was to have them experience, or put into practice, the domains of discourse community, rhetoric, genre, subject matter, and process that they had been reading about. Students workshopped the letters together in class and then turned them in at the end of the semester.

As noted earlier, In week 12 I also introduced students to the final genre analysis assignment. The purpose of this assignment was to have students conduct an inquiry into the situated nature of writing so that they would have to provide evidence of this writing

principle using examples from real genres. The editorial was selected as a genre because of its accessible nature and that it is written to a general audience. The academic article was selected as a way of providing stark contrast to the editorial and it was chosen as a way of scaffolding students' exposure to and understanding of what an academic article is, whom it is written for, and why it looks and sounds the way it does. This final assignment was an attempt to build upon and reinforce students understanding of the five knowledge domains. In our individual meetings, we looked at the texts the students had found for their genre analysis and in our discussion I used the terms discourse community, genre, and rhetoric with students to discuss what was going on in their articles. I encouraged them to use these terms as well in order to analyze what they were seeing in terms of tone, structure and evidence and as a way of explaining why the texts looked so different. For example, I asked them to consider how the concepts of rhetoric and genre might help explain why they think the editorial author used informal language like "I" and the author of the academic article did not. The goal was to have students not just be able to repeat what each knowledge domain was, but to know how to think with the knowledge domains as a way of interpreting texts. Ideally this practice of knowing with the knowledge domains would be generalized in their thinking when they needed to interpret and compose texts in future writing situations.

TABLE 1: Overview of Assignments	in ENG1	(Phase 1)
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Assignment	Concepts and Pedagogical Goals	semester 1 Due Date
Literacy Case Study	Situated dynamic nature of literacy. Students read Brandt (1998) "Literacy, Opportunity and Economic Change", in order to both understand how literacies evolve as well as for understandings of descriptions of literacy. Devoss, et al. (2004) "The future of literacy" was presented as a model text for students. Students interviewed two people in order to understand their literacy histories. This was primarily a WAW assignment.	1 <sup>st</sup> Draft: Week 5
	Literacy Case Study can ideally facilitiate transfer in that students develop awareness of the need to adapt to new literacies in new situations. For example, they would generalize this knowledge when composing texts and learning about the literacies at a new job.	
Letter to College President	Practice in a specific genre. Students were asked to write a letter to St. John's college president in order to understand the way genre, discourse community and rhetoric are interrelated.	1 <sup>st</sup> Draft: Week 12 Final: Week 16
	The transfer goal of this assignment was to give students opportunity to practice writing using their knowledge of these concepts. Ideally, they'd then be encouraged to use these concepts again in their thinking in future situations.	

Genre	Practice analyzing genres to understand how writing is	1 <sup>st</sup> Draft:
Analysis	shaped by discourse community. Students selected one topic	Week 14
	to examine through two different genres - a newspaper	Final: Week
	editorial and an academic article. This assignment integrates	16
	both WAW and Beaufort's five knowledge domains, though	
	discourse community and genre were emphasized more than	
	rhetoric, subject matter, and process.	
	Ideally students would apply or propagate this knowledge in	
	the future when they have to negotiate and interact with any	
	disciplinary, peer-reviewed articles in the future. They	
	would generalize their understanding of discourse	
	community and see how a discipline (e.g., bio) uses	
	language based on their values and beliefs.	

Here, I discuss how each knowledge domain was introduced to students and the specific conceptual ideas embedded in each knowledge domain.

### ENG1 - Discourse Community Knowledge

In week 6, students were introduced to the first, and in some ways most critical concept, discourse community. Students read James Paul Gee's text "Language, Literacy and Discourse" in order to see how language use was dynamic, complex, and significantly shaped by context. In-class discussions involved questions about how writing and language use involves, in Gee's terms, an "identity kit" that is enacted within particular discourse communities. In class, we read together a one-page handout that I created that attempted to just define discourse community, explain what you do with the knowledge of discourse community, and attempted to do this in a relatively colloquial language accessible to students. Through discussion, students were encouraged to see themselves in their own discourse communities (home, student, sport, job), how those

discourse communities were shaped by jargon and language, and then to see how their major, or discipline, could be defined as a discourse community. Knowing what a discourse community is and how it shapes writing is operational for transfer in that students can draw upon this knowledge when assessing a new writing text. For example, they could draw upon this knowledge when writing a report for engineering by looking more closely at the language and the values embedded in model reports. As a result, they would perhaps use some of that language and take up the values that they saw in the model reports in their own writing.

# ENG1 Genre Awareness

In week 7 students were introduced to the concept of genre as a frame for social action and were asked to identify genres on campus as well as genres that they use daily. In class we read a handout I created that provided quotidian examples of genres (e.g. weather report, grocery list), explained why it's important to develop genre awareness, and then provided a schema for doing a genre analysis. For transfer purposes, a student can draw upon her knowledge of genre as a way of seeing more clearly the logic of a text's structure and linguistic features. For example, a student could perhaps more clearly make sense of how to write a literature review for history because she understands both how and why she needs to situate her study within existing research.

### ENG1 Rhetorical Knowledge

In Weeks 8 and 9 students learned about how rhetoric involves persuasion and the use of language to create effects. As was done with discourse community and genre, I

created a handout that was read aloud in class. This anchored a discussion in what rhetoric was, how advertising could be rhetorical, and how rhetoric worked in their own assignments. What was also discussed was the relationship between rhetoric and discourse community and genre, and how one needed to know how to argue appropriately within a particular discourse community and in a certain genre. Knowledge of the concept of rhetoric can potentially assist students in future writing situations by helping them focus their attention on what kinds of evidence they will need to persuade their audience and determining what kinds of evidence is appropriate for that audience.

## ENG1 Process Knowledge and Subject Matter Knowledge

To access process knowledge, I asked students in class in week 10 to write to a series of prompts which we could discuss after 3-4 minutes of writing. These prompts asked students to think about the conditions under which they write: where do you write, around people or alone? Do you listen to music or must it be quiet? How do you plan out your writing process? Or do you even plan it out? The central idea discussed that day was that students must have a process, and they must examine that process continuously to figure out if it is working. Drafting and revising were emphasized as critical parts of a writing process. I also designed a process knowledge activity in the course prior to discussing it explicitly. I asked students to send me their final version of the case study on Thursday night, the night before class. When they came in the next day they took the survey which had a question that asked: "How polished or final would you say your paper is?" Question 14 on the page was intentionally blank. Once students finished the survey, I then handed them printed out versions of the paper they had e-mailed me the

night before. They were told they could make any changes they want, using pen or pencil, and that I'd accept the changes as final. Once they did that and turned in the paper, I then asked them to answer in the space for question 14: "Was your paper as finished or polished as you initially thought? What kinds of changes did you make?" This exercise was an attempt to get them to see how critical revision and drafting is, and how a paper they believe is 'final' is most likely still in need of revision. Process knowledge is potentially valuable for students in future writing situations in that students can draw on their awareness of the importance of revising their paper and seeking out other people's feedback on their writing. They also could generalize the idea that they need to have a process for writing and also plan out their writing.

#### ENG 1 Subject Matter Knowledge

In week 10, I discussed subject matter knowledge though I did not give the students a handout. I connected subject matter to discourse community, and asked them to think about the discourse communities they belonged to, the genres used by those discourse communities, and then asked them what topics or things were typical in those genres. For transfer, the purpose of having students learn about the idea of subject matter knowledge was that they would use this awareness that there is an appropriate kind of subject matter for each discourse community and when they write they needed to make sure that the subject matter they were writing about would be seen as appropriate for that particular discourse community.

### ENG 1 - Metacognitive Knowledge

Based on previous studies which have suggested the importance of metacognition in facilitating transfer (e.g., Wardle, Jarratt, Mack, Sartor), the course threaded metacognitive activities over the semester. These activities include the surveys. In week 1, students were asked to e-mail me responses to a set of questions that were designed to facilitate their thinking about themselves as learners, writers, and as students in the course. The goal of this self-analysis was to help bring to the surface students' existing views of writing so that those views could be more precisely contrasted with what we were learning about in our readings and class discussions.

In week 2, as part of reading Deborah Brandt's "Literacy, Opportunity, and Economic Change" students were asked respond to questions about literacy in their own lives, as well questions about their process for reading the article and also asking them to answer why they think they were assigned the reading. In Week 5, students were part of a discussion on what it mean to be thoughtful—a term chosen in an effort to communicate students the importance of thinking before taking on any writing situation. The discussion revolved around the idea that the addition of 'thoughtful' into an activity changed the nature of that activity, and that being thoughtful about writing meant seeing writing as something audience and purpose driven, high-stakes, important, and requiring planning and strategic thinking. Survey 2, in week 7, as noted before, asked students to think about their views on the course concepts, the case study assignment, and their process in fulfilling the case study assignment. Survey 3, in week 14, similarly encouraged reflection in asking students to look back at their learning in the course, their perceptions of writing, and how they would advise someone doing a writing assignment.

Generally, the goal of these reflective activities was to continually make visible to students' their own learning and to contrast what they were learning about writing in the course with what they previously thought about writing. Ideally, this reflection would help encourage the generalization of their understanding of writing as situated as well as the five knowledge domains.

#### Phase 1: Data Collection

In order to determine if Clare and Sara developed any knowledge in the course, I collected a relatively diverse set of data from semester 1 that included surveys, assignments, and e-mail correspondence. The goal of collecting the data was to first try and establish what kinds of conceptions of writing they brought with them to the course and then look in the data to see if there was any visible changes or additions to their that conception of writing.

# Surveys

The first survey, distributed in the first week of the course, attempted to develop a baseline understanding of the nature of students' prior knowledge and attitudes about writing in addition to basic demographic questions. It asked questions about conceptions of writing, good writing, the students' writing process, and their views on how people become better writers. The second survey was administered in week 7, the same day that the case study assignment was due. This survey asked the same questions regarding definitions of writing and good writing, though it included specific questions about the students' process in doing the case study assignment, as well as questions about what

course concepts/ ideas the students were thinking about. The final survey, distributed the last week of school in week 15, asked students to again define writing and good writing, describe their writing process, as well as list and provide examples of the concepts they were introduced to in the course. Additionally, students were asked to describe what they felt the purpose of learning these concepts was, as well as the overall purpose of the course.

The design of the survey attempted to help determine whether students developed baseline writing knowledge in two areas; a situated view of writing and awareness of any or all of the five knowledge domains. Questions were organized around attempting to observe over the semester whether and how students were seeing writing as situated and how they were or were not taking up the five knowledge domains. All three surveys are provided in the index.

In addition to the surveys, I collected the three course assignments that students completed, as well as an e-mail activity and e-mails between the students and me. I included these documents in my analysis in order to see if there were any patterns or relationships between what the students were saying in the surveys and how they were writing in the course.

	Data Type	Data Source	Timeline
1	Survey	Survey 1	January semester 1
2	Student Self-Analysis	ENG1 Student Response 1	January semester 1
3	Student Course text	ENG1 Case Study	January semester 1

TABLE 2: Overview of Data Collection in Phase 1

4	Survey	Survey 2	March semester 1
5	Student Course text	ENG1 Letter to President	May semester 1
6	Student Course text	ENG1 Genre Analysis	May semester 1
7	Survey	Survey 3	May semester 1
8	Correspondence	E-mails between student	Over course of
		and instructor	semester 1

# PHASE 2

In phase 2, I looked for whether and how Clare and Sara might have generalized any baseline knowledge or inchoate knowledge from semester 1. To look for this generalization, I conducted semi-structured interviews in each semester and collected documents, both academic and non-academic, from them.

# Interviews

I conducted six interviews with both Clare and Sara over semesters 2-7. Each interview averaged around 45 minutes to an hour, though a few interviews with Clare were around 30 minutes. To set up the interviews, I would e-mail Clare and Sara and ask when they were free to be interviewed. Often, this required a bit of back and forth over e-mail to identify a time that worked for both of us. My goal was to make it as easy and accessible as possible for them. In semester 2 the interviews were conducted in my office at St. Johns with both Clare and Sara. I held interviews with Clare in semesters 3-7 at a coffee shop close to her home. With Clare, I held semesters 2, 3, and 4 interviews at a

coffee shop near her boyfriend's house. Interviews in semesters 5,6, and 7 were held at a coffee shop near her work. I used both my phone and my laptop to record the interviews and I asked permission each time to record Clare and Sara. At the end of each interview, I would write down brief notes about what we talked about, where Clare and Sara were in their college careers, and anything of significance to my research questions. I transcribed the interviews over a series of weeks after all interviews had been conducted. A full list of representative interview questions is provided in the index.

### Interview Design and Approach

The interviews function as a critical way of targeting and addressing my research questions. A semi-structured interview was chosen because of the study's emphasis on creating accounts of Clare and Sara's thinking and the personal connections they make in writing situations. A semi-structured interview approach aligns with this study's research questions in that it "it allows depth to be achieved by providing the opportunity on the part of the interviewer to probe and expand the interviewee's responses" (Rubin & Rubin, 2005, p.88). A semi-structured interview enables the interviewer to consistently tailor questions across interviews around important areas that relate to the study's research questions. Berg (2007) conceives this fixed aspect of the semi-structured interviews as a basic checklist that ensures the interview or interviews have a coherent spine that helps maintain a sense of proximity to the research questions. For a longitudinal study like the present one, this basic checklist aids in attempting to capture data so that the same issues can be examined over time. Berg describes this approach as allowing for "in-depth probing while permitting the interviewer to keep the interview within the parameters

traced out by the aim of the study" (Berg, p. 39). The in-depth probing that is enabled by a semi-structured interview comports with the idea that transfer is idiosyncratic and situational as described by both Lobato (2006; 2012) and DePalma and Ringer (2013)

Three central ideas informed how I designed and conducted the semi-structured interviews over semesters 2-7. One key idea is that in the interviews I was carefully attempting to manage a delicate balance of asking questions that were both specific enough to elicit data but open enough that they wouldn't influence that data in ways that could limit what could be learned about their thinking and personal connections. Whereas Yancey, Robertson, and Taczak (2014) asked their students questions specifically about transfer like "What are you transferring from your first year writing course as you write this semester?" I never mentioned the word transfer nor did I ask Clare or Sara if they saw any connections between the transfer-centric course and their thinking as they wrote a new text. In my view, this kind of questioning is too direct and there is the potential for encouraging students to describe transferring knowledge in unnatural or inauthentic ways. Instead, I would ask questions that were relatively open-ended like "What are you thinking about as you are writing this?" "Do you think anything you did in college helped you outside of college?" and "What do you think you've learned about writing in college?" Asking them directly if they transferred knowledge, in my estimation, risks making Clare and Sara to feel compelled to say they are in fact transferring knowledge. This indirect approach accords with Brent's (2012) approach to interviews in studying transfer: "Rather than directly probing students for explicit instances of transfer, we will

need to infer from field observation or rigorous interviews, or both, the academic experiences that students are using as background to their new learning" (p.410).

A key goal of my interviewing strategy was to balance asking specific questions about Clare and Sara's thinking without leading them to respond in ways they wouldn't have because of the way I asked the question. I used a few different strategies to do this. For example, rather than ask, "Are you thinking about the audience for this paper?" I would ask open-ended questions so that I didn't prompt them to feel pressured to say that they were thinking about the audience. I also felt that if the audience were prominent in their thinking then that would surface in their responses. One strategy was to exhaust a set of open questions that attempted to narrow in on their thinking without prompting them or leading them to anything that would influence their thinking. For example, I'd ask questions like "Fill me in on this paper, what are you thinking about?" "How have you figured out how you are going to write this?", "What do you think you're being asked to do?"

A second key idea that informed how I designed and conducted the semistructured interview was that I flexibly let Clare and Sara dictate how much they wanted to talk about a particular writing situation. I realized relatively quickly that Clare and Sara responded differently depending on the writing situation they were talking about. When Sara was talking about her media literacy paper she was effusive and verbose. She spoke about it over different semesters and made connections between the paper and her life. For her assignments in her documentary class, her responses were short; "I got a check plus on it so it's good."

To address the challenges of attempting to develop a portrait of their thinking about writing that is as comprehensive as possible, I also asked Clare and Sara about their general thinking about writing. These questions supplemented what I was finding about specific writing situations. For example, I'd ask Clare "Compare Clare as a high school writer and Clare as a college writer", "How is college writing different than high school writing", "What are the top things you think about when you write?" and "What would you tell the Freshmen Sara about writing in college?" These again are specific enough that I feel that I can learn something from their answers but they are not so specific as to lead them to responses they might not really believe

Lastly, like other writing studies research into transfer that involved actionresearch (Wardle, 2007; Navare-Cleary, 2013) I was aware that my identity as Clare and Sara's former teacher could be influencing their responses. As Hammersley & Gomm (2008) have argued, "what people say in an interview will indeed be shaped, to some degree, by the questions they are asked; the conventions about what can be spoken about; [...] by what time they think the interviewer wants; by what they believe he/she would approve or disapprove of" (p.100). There are a few different aspects of this study, however, that I think help mitigate the risk that my presence would significantly influence their responses.

One approach I took to lessen the odds of influence was that I made it clear to both Clare and Sara that the purpose of my study was to see what the experience of writing is like for students in college. I didn't tell them I was looking for transfer or that I wanted to see if our course was helpful. A second approach is that I made it clear that I

was no longer affiliated with St. John's. Rather, I was working at a different university, I rarely communicated with anyone at St. John's, and that I was a graduate student. Both Clare and Sara left St. John's after two years, so it was clear to both them and me that I had no way to affect their current grades or experiences at college. The goal was to encourage them to feel they could be honest with me because there was no potential for any recourse. Lastly, we also never met at St. John's after the semesters 2 interview. The coffee shops that we met in over semesters 2-7 offered a neutral, non-academic environment, which to some degree helped diminish the idea that I was working for St. John's or in any academic role.

What perhaps helped mitigate my identity as their former teacher more than anything I did deliberately was the sheer effect of time on memory. Other than the one specific example of knowledge application in semester 3, neither Clare nor Sara mentioned the semester 1 transfer-centric course in any significant way over semesters 2-7. It almost seems as if they forgot everything about the course. That doesn't mean they were hesitant to talk about writing that helped them. Sara was effusive when she said that the best thing she learned about writing was a trick about structure that she got from a writing center tutor; the semester 1 course did not seem to register in either of their thinking in any significant or explicit way. While this does not mean in any unequivocal way that Clare and Sara were not influenced by my identity as their former teacher, my analysis of the data and the findings of the study do not reflect that they felt the need to tell me what they thought I wanted to hear.

#### Phase 2: Document Collection

While the interviews form the core data set of the study, I also collected documents in two ways. First, I would ask Clare and Sara over e-mail to e-mail me any writing that they were doing as well as bring any writing to the next interview. Second, I'd ask in the interview if they had any writing that we could look at. Overall, this part was relatively challenging in that it was not always easy for me to get Clare and Sara to send or give me their writing. I attribute this mostly to being forgetful but I also erred on the side of caution and did not want to be pushy or annoying. In table 2 and table 3 I detail the documents I collected, the semester the documents were produced, and the word count.

Document	Course	Word Count	Semester		
Reading Journal	ENG2	318	2		
Reading Journal	ENG2	120	2		
Final Assignment	ENG2	2678	2		
Reading Journal	ENG2	468	2		
Final Assignment (Draft)	ENG2	1306	2		
Final Assignment	ENG3	558	3		
College APP	N/A	455	4		
Media Literacy Review	Intro to Media Studies	1440	5		

Table 3: Document Collection Sara in Phase 2

Written/Visual Exercise			
One	Contemporary Am Film	1028	7
Written/Visual Exercise			
One	Contemporary Am Film	644	7
Short Exercise #2	Intro to Documentary	933	7
	Total words:	9948	

Table 4: Document Collection Clare in Phase 2

	Course	Word Count	Semester
History paper	His135	607	3
Fed Up paper	His135	427	3
Sociology Paper	Soc 240	1648	3
Sierra Leone Paper	HIS135	2967	3
Psych Outline	Psych	176	4
Research topic - Religion	RE1125	317	4
Religion Final	RE1125	1386	4
PSYC Take home	Psy345	223	4
Religion Final	REL125	883	4
Psych Final	PS123	1614	4
Resume	N/A	175	4

Cover Letter	N/A	219	5
Group Window Display	Fashion 28	656	5
Networking e-mail	N/A		7
	Total words:	11298	

### Overview: Analytic Rationale and Coding

This study's first research question is different, though interrelated to, my second and third research questions. Because of this I could not use the same analytic framework for question one and two. Phase 1 and the semester 1 FYW course is connected to research question 1: "What do Clare and Sara learn as a result of taking a transfer-centric first-year writing course?" Phase 2 is aligned with research question 2: "Is there any evidence that Clare or Sara generalize knowledge from the transfer-centric course in semester 1 in their thinking as they negotiate writing situations in semesters 2-7?" To begin addressing these questions in my analysis of the data, I had to first identify what kind(s) of baseline knowledge Clare and Sara perhaps developed in the transfer-centric course in semester 1. From there, I could look to see if Clare and Sara generalized that semester 1 knowledge in their thinking as they negotiated new writing situations.

For both research question 1 and 2, I draw upon grounded theory as a way of aligning the study's goals of looking at generalization from the perspective of Clare and Sara. Grounded theory, as noted before, involves a recursive, inductive process wherein "one begins with an area of study and what is relevant to that area is allowed to emerge" (Strauss and Corbin, 1990). In order to make visible the logic behind my coding for question 1, here I articulate in more detail my area of study and the interpretive framework I brought to my analysis of the data.

In the initial phase of my research, I use open coding as I read and re-read the surveys, interviews, and student written products while simultaneously putting codes on ideas, trends, and patterns that emerged in the reading. In open coding, the researcher attempts to "open up the data to all potentials and possibilities contained within them" (Strauss and Corbin 1990, p.160). In order to make visible and discover in the data as many ideas as possible, I drew primarily upon two approaches to classify the data that Strauss and Corbin describe as analytic tools: questioning and constant comparison. Questioning enables the researcher to "take the role of the other" (p.70) and foregrounds the participant's perspective, which is crucial for this study's attempts to understand the domain of college and college writing from Clare's perspective. In reading the data, for example, I asked temporal questions regarding "frequency, duration, rate and timing" (p.71) as well as "theoretical questions" like "what is the relationship of one concept to another"(p.72), which for example, involved me considering the property and dimensional relationship of "discourse community" and "audience." In using constant comparison analysis, "each incident in the data is compared with other incidents for similarities and differences" (p.73).

### Analytic Rationale and Coding

In order to code and analyze the data I collected, I draw upon grounded theory (Strauss & Corbin 1990). Grounded theory, as defined by Strauss and Corbin, involves "building theory from data" (p.23) and a particular ontological and epistemological

orientation to knowledge. A grounded theory is one that is "inductively derived from the study of the phenomenon it represents. That is, the theory is discovered, developed, and provisionally verified through systematic data collection and analysis of data pertaining to that phenomenon. Therefore, data collection, analysis, and theory stand in reciprocal relationship with each other" (p.23). One does not begin with a theory, and then prove it. Rather one begins with an area of study and what is relevant to that area is allowed to emerge (Strauss & Corbin, 1990).

In writing studies, Broad (2012) has drawn upon grounded theory in order to address what he believes is a qualitative researcher's central aim:" to actively seek out interpretations contrary to what they might have hoped or expected to find, and to ensure that interpretations and findings are "emic," that is, that they are deeply rooted in the interpretive framework(s) of research participants" (p.204). Strauss and Corbin's idea of allowing a theory to emerge organically, as opposed to interpreting the data as a way of proving a theory, involves a continual, recursive process of collecting, coding, and analyzing the data from the initial to final stages of analysis. This approach also accords with the theoretical and methodological approach in this study's generalization/AOT framework. Developing an emic perspective, and grounding the data in Clare and Sara's descriptions of their thinking and the personal connections they make, aligns with this study's view that generalization is idiosyncratic and situated. The account of Clare and Sara's personal connections—perceptions and personal valuing of the writing situation that I develop in addition to their thinking about writing situations requires grounded theory's emic orientation.

### Interpretive Framework and Coding for Question 1

Grounded theory, as noted before, involves a recursive, inductive process wherein "one begins with an area of study and what is relevant to that area is allowed to emerge" (Strauss and Corbin, 1990). In order to make visible the logic behind my coding for question 1, here I articulate in more detail my area of study and the interpretive framework I brought to my analysis of the data.

The area of study I was operating with, or my interpretive framework, was comprised of 1) the five knowledge domains (Beaufort), 2) the perspective of learning articulated by Alexander, Schallert, and Reynolds (2009), and 3) the transfer-centric course outcomes of the first-year writing course. In using the five knowledge domains as an analytic vocabulary I looked to see in the data where Clare or Sara were expressing a dimension, attribute, or quality that would fit within the knowledge realms discourse community, genre, process, subject matter, or rhetoric. The learning construct proposed by Alexander, Schallert, and Reynolds (2009) enabled me to identify what in the data potentially count as knowledge, as well as more accurately identify data that conveyed or demonstrated a shift or alteration in Clare's knowledge over the semester. The course outcomes—seeing the situated nature of writing and the need to adapt to different audiences—were part of the analytic framework as well. In my approach to coding the data, I worked back and forth within the data, moving recursively between the three surveys and the course assignments. I was sensitive to allowing significant ideas to emerge while at the same time seeing how those ideas might fit within the interpretive framework. I was open to the idea that Clare could have developed knowledge outside of my interpretive framework. Additionally, it was likely that I could identify a particular

kind of knowledge that didn't seem to have significance for question 1 but might have value in my analysis of Question 2.

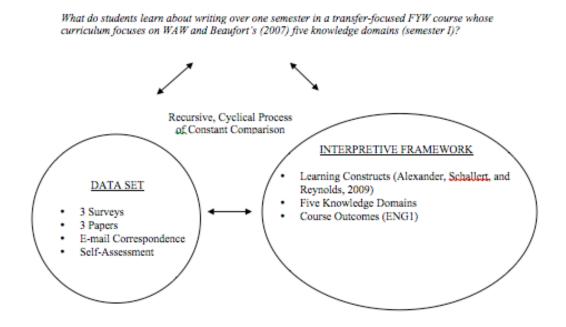


Figure 3: Coding Framework for Question 1

#### Question 1 Coding Process: Open, Axial, and Theming

In my first cycle of open coding for Clare I generated 81 codes and for Sara I developed 65 codes as a result of my moving back and forth between my interpretive framework and the data set. My first open coding cycle involved creating codes that kept Clare's and Sara's language which is part of this study's grounded theory approach (see figure 2 for Clare as example). A code could capture data that was only a word, like "style," or a phrase, like "write for myself." I wanted to to retain this language because of the way the generalization framework's element of *knowledge similarity* requires looking at the baseline knowledge developed in semester 1 and the generalization of that knowledge in semesters 2-7. Staying close to Clare and Sara's language in the data in question 1 would help me when I had to evaluate how similar the knowledge developed in semesters 2-7.

After assigning these codes, I then looked back at each code in the first cycle and examined it within the broader interpretive framework of my definition of learning, the five knowledge domains, and the course outcomes of encouraging students to see the audience-driven, situated nature of writing. Using the constant comparison method, I would ask questions of the data. For example, in the first cycle I considered whether Clare's mention of her child in a description of her process was significant within the interpretive framework. Given that it was the first cycle of coding, I decided to code it in case something else came up later. Perhaps Clare frequently referenced her child and that could have something to do with how she might learn something new about process that would be helpful? As this example illustrates, in the first cycle of coding I was more liberal in assigning codes to the data.

The second cycle of coding generated 60 codes for Clare and 43 for Sara; this subtle shift in the number of codes reflects my refinement and willingness in the second round to not give a code to a piece of data after giving it deep consideration. While, for example, I coded "style" in the first cycle of open coding for Clare, I chose not to code it

in the second round given that I didn't see anything else in the data that seemed to "speak" to style. Nor did it fit that clearly within my interpretive framework. For Sara, in the first cycle I assigned a code to "different variations of a topic" for her initial definition of genre. In the second cycle I realized that while this piece of data did relate to genre it didn't seem that Sara had really changed her definition of genre from survey 1 to survey 3. While that could be interesting in one sense in regards to what Sara didn't learn in the course, I dropped that code in the second round to give more focus and attention to other areas that were emerging as more relevant to my questions.

In the third cycle of coding I repeatedly looked back and forth at the cycle two codes in their original context. I started to see certain patterns emerging, particularly that for Clare the word "thinking" was surfacing in different responses across surveys 2 and 3. In the fourth cycle of coding, I began to more aggressively trim, isolate, identify, and organize codes around a large set of ideas that I was developing as a result of looking back and forth at the data, the first three cycles of codes, and my interpretive framework. In the fourth cycle I moved from 51 codes to 11 codes for Clare, and for Sara from 35 codes to 6 codes.

I then transitioned from the open-coding process to the axial coding phase. Importantly, Corbin and Strauss (2008) note that in previous research they had made a stronger distinction between open coding and axial coding (Corbin and Strauss 1990), yet in more recent work they maintain that open coding and axial coding go "hand in hand" (p.199) and that processes are interrelated; any difference is artificial and for explanatory purposes (p.199). They note that in the open coding phase, researchers "break data apart and identify concepts to stand for the data," but they invariably have to "put it back

together again by relating those concepts" through axial coding (p.199). This process of dissembling and assembling, they point out, is recursive and concurrent. Memos, they suggest, can function as a linking mechanism in axial coding in that they often connect two concepts but also enable elaboration of those concepts, thus creating another structural level of meaning that constructs the study, or "pyramid", as Corbin and Strauss metaphorically note (p.200). I used the analytic memo below as a way of helping me anchor my back and forth thinking about how Clare viewed writing when she entered the class. I wrote a memo as a way of exploring the link between two different codes, "expressive" and "write for myself", under the larger category of "initial conception of writing."

Analytic Memo 1: Clare Conception of Writing

12/16/2016 Code Definition: Initial Conception of Writing for Clare

C: I feel writing is an expression of an individual.

C: Writing is a form of communication, not just with another person but with the person who is actually writing.

Given that learning is defined in my interpretive framework as involving some sort of change, it's important that I develop a relatively stable understanding of Clare's initial understanding of writing so that I could see if there is any change, alteration, or addition to that understanding of writing. Yet, it's not necessarily totally clear that she had a concrete or unified 'view' of writing that she brought into the class. There is some sense that she sees writing as expression; she repeats the word again in survey 2. In looking back and forth and comparing the data, it seems that expression is more of a sub-idea of her initial view of writing. While it is not the only part of her initial conception of writing, Clare's belief that writing is something an author does for herself is the most prominent or strongest part of her initial view of writing. I came to this conclusion after reading and re-reading, and looking back and forth at the surveys. Clare's statement in survey 2 is what seems to most strongly corroborate this conclusion; "I don't believe it's always about another audience. I am more likely always my audience than any other person. An example would be my studying the Bible and writing down scriptures that pertain to my life. I write for myself most of the time to reflect on my own life and about my own life." This passage suggests that a key course idea writing is audience-driven—is interacting with Clare in relatively deep ways; so

much so that she feels the need to disagree with it and then provide an example that illustrates why that the course idea about audience is wrong.

From the axial coding stage, I then began the process of theming the data (Saldana, 2009). A theme, for the purposes of this study, is defined as an "abstract entity that brings meaning and identity to a recurrent [patterned] experience and its variant manifestations. As such, a theme captures and unifies the nature of basis of the experience into a meaningful whole" (Patton, qtd. in Saldana, 2009). This attempt to synthesize the various data occurs concurrently with what Strauss and Corbin (2011) call integration, "the process of linking categories around a core category and refining and trimming the resulting theoretical construction" (p.263).

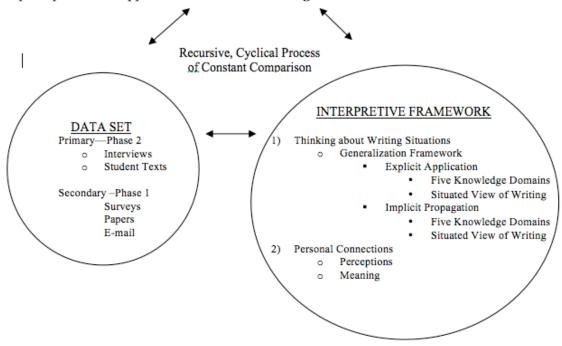
1	Round1	New Code	Round 2	New Code	Round 3	New Code	Round 4	New Code	Axial	Frequency
2	think out							1	Catharsis	
3	skills already taught							2	Expression	
4	would not write much							3	author- centric	
5	people told me to write out everything	1	write out everything	1	catharsis	1	catharsis	4	audience- positive	
6	don't hold in my mind	2	don't hold in mind	2	catharsis	1	catharsis	5	thinking	
7	write as if I am speaking so nothing left out	3	write as if speaking nothing left out	3	catharsis	1	catharsis	6	opinion	
8	expressive	4	expresive	4	expresion	2	expression	7	audience- dc	
9	fiction	5	emotional	5	non-audience	2	expression	8	audience jargon	
0	song lyrics	6	emotional	6	non-audience	2	expression	9	good writing	
1	writing is expression of individual	7	expression	7	expression	2	expression	10	audience	
2	form of communication	8	communication	8	communication			11	audience positive	
13	not just with other person, but with author	9	author-centric	9	author-centric	3	author-centric			
14	writing you can connect with and learn from	10	connect	10	connect and learn					

 Table 5: Coding Cycles Question 1 for Clare (partial view)

# Interpretive Framework and Coding for Question 2

I used the same coding process for question 2 that I used for question 1, moving recursively from open coding to axial coding, to theming the categories. However, there

were important differences between the coding approach for question 2 and question 1. As research question 2 involves the subsequent learning contexts (semesters 2-7), I was now using a more complex and larger set of elements within the interpretive framework (figure 3) to make sense of the data. Now, I was taking the baseline knowledge I had identified in semester 1 and then looking to see if it was explicitly applied or implicitly propagated in Clare and Sara's thinking as she negotiated new writing situations in semesters 2-7. If I felt that there was the potential for a particular piece of data to be generalization, I used my generalization framework in order to drill down and further refine the nature and scope of the potential generalization. In addition to looking for any evidence of generalization, I am also looking for the perceptions and personal meanings that Clare and Sara make of writing situations. Figure 3: Interpretive Framework for Research Question 2



Is there any evidence that the students generalize their knowledge from semester 1 in their perceptions and approaches involved in writing situations in Semesters 2-7?

### Question 2 Coding Process: Open, Axial, and Theming

In the first cycle of coding for question 2, I coded the data with the idea that I should view the data as broadly as possible. As I read over each interview in semesters 2-7, I was looking for multiple elements. One element I was looking for was any word, phrase, or comment that was an explicit or implicit reference to any baseline knowledge from semester 1. For Clare, that meant looking for anything in her responses that explicitly or implicitly continued the two baseline knowledge areas from semester 1: audience, and thinking as part of the writing process. For Sara, that meant looking for her any way that her thinking might reflect the generalization of a greater understanding of

the diverse types of writing as well as a sophisticated understanding of audience. In addition to looking for the explicit application or implicit propagation of baseline knowledge from semester 1, I also was looking to see what kinds of perceptions Clare and Sara were developing of the writing situations. Perceptions of writing situations could include how they talk about their understanding of the writing task, the course, a major, or even college. Looking for these perceptions was an attempt to see how Clare and Sara were experiencing the writing environment from their perspective. I also looked for how Clare and Sara personally valued the writing situation; I looked for whether they described being interested or motivated in the writing situation and whether they felt the writing situation was valuable for their own purposes.

The coding process for question 2, like question 1, involved Strauss and Corbin's analytic tools questioning and constant comparison. I had to frequently and repetitively move back and forth between data sets asking questions like – "Could Sara's description here potentially be an implicit propagation of her audience knowledge from the semester 1 course?" and "Is there a link between what Sara said in her baseline knowledge about discourse community and audience and how she describes corporate in her work e-mail in semester 6?" This kind of questioning and constant comparison permeated the four cycles of open coding and the two rounds of axial coding for question 2.

In cycle one of open coding, I continuously calibrated being open to new ideas but keeping in mind that I was looking for the elements of my interpretive framework; application, propagation, and personal connections. For example, I had an idea of what I thought a perception code would look like in the data, but as part of my grounded theory approach I wanted to be open to the idea that what actually emerged in the data about

perception could be different than my pre-set idea of perception. In my first cycle of open coding, I developed 153 codes for Sara and 144 codes for Clare. As is clear from table 5, the first round of coding emphasized maintaining the specific word or phrase because of the interpretive nature of the generalization framework, especially the *knowledge similarity* and *knowledge influence* elements.

	New		New		New
Cycle 1	Code	Cycle 1	Code	Cycle 1	Code
babied a lot	1	shows that I researched the school	40	his definition of ethnography	79
college is normal	2	I'm really interested in	41	researched the women's center	80
more talkative	3	I'm dedicated in going there	42	8 pages at least	81
pre-med major	4	little hints that I want to go there	43	I got an a in the class	82
link my passion and my brains	5	have somebody revise it	44	it was weird	83
I don't mind school	6	you need, you even said in class	45	I guess the store has its own email	84
applying at learning center	7	talk to my advisors	46	we sign it with our name	85
chemistry and calculus	8	get other options and don't listen to me	47	the first e-mail I sent for my manager	86
english is what I have to take	9	chemisntry we had a paper	48	does this make sense	87
reading journasl	10	he's giving us two papers to do for missing class	49	is it right	88
turn in partial credit	11	religion	50	should I use a different word	89
forced to write	12	look up different articles and journals	51	it's definitely not as formal as I though it'd be	80
write when I have a good topic	13	go to san diego	52	I was confused how to sign it	81
I was like whatever	14	depends for each school	53	I feel awkward putting my title	82
he wanted our opionins	15	I had my professor look over it	54	he resonded to our district manager	83
find a quote	16	english has nothing to do with my major	55	he made a mistake	84
peer edit	17	I never got that bad of grades ever	56	thanks now he thinks I'm stupid	85
change one thing	18	looking at other schools	57	yeah I send the daily deposit	86

Table 5:	Cvcle 1	of Coding	for Sara	(partial)
				(

From this first cycle, I continued to refine my thinking as I worked through the second cycle of codes. I would look in detail at a particular data point, compare it to potentially similar data points, look at the data point in the actual interview, and then look at the other data point in the interview. For example, I struggled with what I was understanding as "personal meaning." Clare at one point says, "I don't know why I'm in statistics" (semester 3 interview). In cycle one I coded this strip of data because in my head I thought it could potentially become part of a larger "meaning" category. In a similar phrase later, Clare states, "I don't even know what sociology is" (semester 3 interview). I felt that this was categorically different than her earlier statement about

statistics, so in cycle one I coded it with the idea in mind that this would be an example of a "perception." In the second cycle, I read more deeply into the context of each statement and decided to then code the statement "I don't know why I'm in statistics" as "perception" rather than my initial idea of "meaning". After reviewing the statement and seeing how she talked about her other classes, I realized that this statement was part of her general perception of her courses, which was that she didn't really know why she was taking many of her classes. In cycle two I developed 95 codes for Clare and 115 for Sara.

In cycle three I continued to reconsider each code and move back and forth between the interpretive framework and the data. I refined the 95 codes from the second cycle into 82 codes for Clare and from 115 to 75 for Sara. In the third cycle for Sara, I started to see some emergent patterns in terms of how I was coding the data when I observed her discuss getting feedback. In this cycle, I began to see some key differences in how Sara was seeking feedback on her writing in academic and non-academic contexts. What I found in moving from cycle three to cycle four was that I needed to create a set of different codes (academic and non-academic) for Sara's generalization of process knowledge. There were writing situations when she sought feedback in nonacademic settings that were categorically different than when she was seeking feedback in college because of the different goals for each situation, which I explain in the next chapter. Additionally, in moving from cycle three to cycle four I began to look even more closely at the semester 1 data, where I found Sara mentioning the importance of process in a few points in the surveys. This back and forth would help me when I would in significant detail evaluate this example of the application of process knowledge within the generalization framework.

In cycle four I started to make more and more clear-cut decisions about the data and what strips of information were and were not related or important to my research questions. I also became more comfortable with how I negotiated my grounded theory approach and my ability to place codes on data in ways that wasn't prescriptive or a projection of my own interpretive framework. Once again, I moved metronomically between the sets of data and my codes and in cycle four refined the data for Sara into 34 codes and for Clare into 22 codes. To move from this last cycle of open coding into axial coding, I developed analytic memos to try and negotiate some of the complexity and ambiguity of the data. For example, in order to make sense of what I viewed as Sara's generalization of course content, I wrote an analytic memo as a way of refining my ideas and determining whether it was significant.

## Analytic Memo 2: Sara Generalizing Course Content 1/11/2017 Code Definition: Generalization of course content as a result of valuing course

S: I feel like that essay, like, it challenged me at a lot, having to take both sides of it, saying how [the TV sitcom *Friends*] passed the Bechdel test how it didn't, finding ways to balance it and then finding the research and everything. It like challenged me the most but I definitely think it was the best outcome.

The research questions are focused around what Sara might have generalized from the semester 1 course but the connection between Sara's personal valuing of the media literacy paper and her deep understanding and subsequent generalization of the content of that paper seems to be really significant. Sara always wants to talk about that paper, and I think it's not just because she enjoyed writing it but that all of these critical elements came together. I can't help but feel that this showed me a different way of thinking and even studying transfer. We could perhaps argue in a WAC/WID program that students not only write better papers when they are 1) fully engaged 2) fully supported, but that they actually can learn in deep ways that can support the understanding of course content. Without any prompting Sara discussed how the paper, and her understanding of the Bechdel test encouraged her to think about her own identity and feminism. She also noted that it changes how she sees things. So it's really a change in both identity and epistemology that this bit of data reveals, and for this reason I want to include it in the study even though it's not directly related to my own research questions.

This analytic memo is representative of the general kind of thinking and analyzing that helped me in the final cycle of coding which involved theming the data and truly determining what was and was not significant for my study. This cycle involved me taking the 14 categories I developed and organizing them into a set of four core categories for Clare.

- 1) No explicit application.
- 2) Audience implicit propagation in fashion intern e-mail and inconsistently in general thinking
- 3) Follow the directions.
- 4) Not as good as for my own satisfaction.

For Sara, I refined the final cycle of axial coding of ten categories by theming the data

into a set of five categories.

- 1) Implicit propagation of audience knowledge in three writing situations
- 2) Explicit application of process knowledge on college transfer statement
- 3) Integration of audience and process knowledge for academic writing situations
- 4) Different perceptions same assignment based on environment
- 5) Link between valuing and generalization of course content

These final sets of categories emerged from a slow, iterative, and recursive process of

constant comparison and questioning from the first cycle of open coding to the final

round of axial coding and subsequent theming of the data.

### Chapter 6: Findings

The present study takes up the question of transfer by looking for how Sara and Clare might generalize knowledge as they move between two different sites. The first site is the semester 1 transfer-centric FYW course, where I look to see what Clare and Sara might have learned as a result of taking a course that focused on helping students see the situated nature of writing and knowing how to adapt to new audiences. I then look in the second site, a term I used collectively to refer to semesters 2-7. Over these six semesters I use the generalization framework described in chapter 3 to examine whether semester 1 knowledge was explicitly applied or implicitly propagated in Clare and Sara's thinking as they negotiate new writing situations. In order to see what kinds of variables might be influencing whether or not Clare and Sara generalize prior knowledge, I also look at the perceptions they make of the writing situations. Specifically, I examine the perceptions they develop of writing situations and the kinds of personal meaning they assign to the writing situations.

The generalization framework, as discussed, addresses two complex questions in studying transfer: how is transfer defined, and how is transfer identified? The framework, and its three elements—*knowledge similarity, knowledge influence, and knowledge frequency*—are used in order to try and make explicit and clear how I am defining transfer and how I identify it in the data. As such, the framework functions in this study as taxonomy for conceptualizing and studying transfer in the writing experiences of two

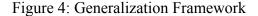
students. The framework helps in interpreting, clarifying, and analyzing any potential example of generalization.

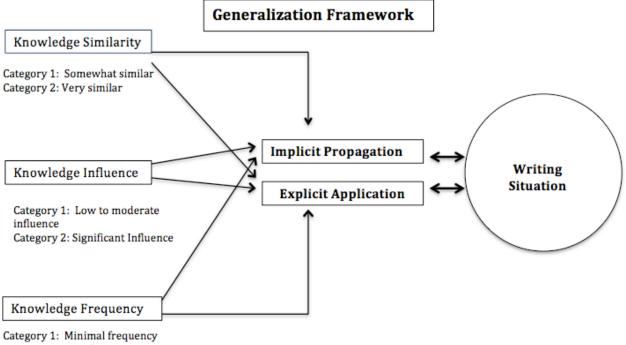
The first framework element I use to examine generalization is *knowledge* similarity. Knowledge similarity helps to illuminate one of the central complexities involved in studying the generalization of writing knowledge: how can we understand how a particular kind of knowledge developed in one site (semester 1 FYW) is the same knowledge that is generalized in another site (a writing situation in semesters 2-7)? As will be discussed in this chapter, Sara appears to propagate audience knowledge from semester 1 in her thinking in semester 3; looking at these propagation examples through the knowledge similarity element helps further refine how the audience knowledge from semester 1 and the propagated audience knowledge in semester 3 appear to be the same knowledge. As part of looking at *knowledge similarity*, I analyze what Sara said about audience knowledge in semester 1 alongside Clare's in semester 3 as a way of showing how they are connected and share the same ideas about audience. Two categories, category 1 and category 2, help identify on a spectrum the nature of the similarity of the knowledge from semester 1 and semester 3. If there is a low to moderate similarity between the knowledge in each semester, then the generalization example is a category 1; this would mean that there appears to be the same knowledge operating in both semesters but there is not an identical or clear alignment. Category 2 describes a virtually identical alignment wherein it seems to be quite obvious that the knowledge from semester 1 is the same knowledge being generalized in semester 3.

Analysis of generalization through the second framework element, *knowledge influence*, aids in this study's ability to articulate how and to what degree the generalized knowledge shaped Clare and Sara's thinking as they negotiated the writing situation. A tacit assumption of transfer research is arguably that a key aim is to not just know if transfer happens, but to also know what that transfer might mean for that student's ability to manage new writing situations. The element of knowledge influence was developed to help address this question in regards to the kind of impact or effect the knowledge had in their thinking: did, for example, the audience knowledge that Sara appeared to propagate in semester 3 operate in a peripheral or central way in her thinking? To more closely describe the nature of the impact and effect that the generalized knowledge has two categories were developed for *knowledge influence*. A category 1 description of *knowledge influence* would describe knowledge that is significantly influential to how Clare and Sara think about the writing situation.

The last element, *knowledge frequency*, helps contextualize any individual examples of generalization within the larger scope of the writing situations Clare and Sara encounter in semesters 2-7. Looking at generalization through *knowledge frequency* involves examining whether, for example, Sara implicitly propagated audience more than once or whether there is only one example of it. Underlying this is the idea that more examples of implicit propagation help strengthen the claim that Sara is in fact implicitly propagating audience knowledge. Were there only one example of implicit propagation,

then a category 1 would be assigned to knowledge frequency. More than one example, however, would mean that a category 2 would be assigned to knowledge frequency.





Category 1: Minimal frequency Category 2: Significant Frequency

As many have noted about transfer research in writing studies, there is very little consensus or consistency in regards to how transfer is defined or how it is identified. The generalization framework and its three elements *–knowledge similarity, knowledge influence, and knowledge frequency*—reflect my attempt to develop what Barnett and Ceci (2002) describe as a "clearly operational definition" (p. 216) for studying transfer.

## Baseline Knowledge from Semester 1

In order to look for whether knowledge from semester 1 is explicitly applied or implicitly propagated in semesters 2-7, it is necessary to identify and describe what knowledge Sara developed in semester 1. To do this, I examine Sara's three surveys, course assignments, and e-mail correspondence. I describe what Sara learned in semester 1 as baseline knowledge, which refers to knowledge that I observed Sara develop in semester 1 as a result of evaluating and analyzing three surveys, e-mail correspondence, and writing assignments in semester 1. This knowledge could be one or all of the five knowledge domains, or a more refined and clear understanding of the situated nature of writing.

As discussed in chapter 3, the constructs I use to define learning are drawn from Alexander, Schallert, and Reynold's (2009) articulation that learning is a "multidimensional process that results in a relatively enduring change in a person...and how that person will perceive the world...and respond to its affordances" (p.186). What is most important in this conceptualization for the present study is that learning is change. Additionally, learning is a multi-dimensional process, rather than linear or monolithic process. An interrelated and similarly important element of looking for what Sara learned in semester 1 is how I define knowledge, which is conceived as an "individual's personal stock of information, skills, experiences, beliefs, and memories" (Alexander, Schallert, & Hare; 1991, p.317). For the purposes of studying what Clare and Sara learn in semester 1, this definition means that I categorize any evidence of their responses that reflects their beliefs, memories, and information as knowledge.

Identifying baseline knowledge helps address one of the key elements of any study of transfer: what knowledge is or is not being transferred, and what is the original form of that knowledge? In addition, one observation made about some transfer studies has been that the inability to find evidence of transfer could perhaps be related to the failure of learning in the initial learning site (Beach, 1999). There is no evidence of knowledge transfer because there is perhaps no knowledge to be transferred. This part of the study attempts to address that question of knowledge in the initial learning site by determining whether anything was in fact learned in semester 1.

### Sara's Baseline Knowledge: Semester 1

As discussed, the first site of this study involves looking for any baseline knowledge in semester 1 that Sara might have developed as a result of taking the course. There is some evidence that suggests Sara developed new knowledge in the FYW course, though she did not seem to in any wholesale or uniform manner take up all five knowledge domains over the course of the semester. Two areas of what I refer to as baseline knowledge seem especially important: Sarah's understanding of writing's purpose and what type(s) of writing are created by writers to achieve that purpose and her understanding of the role of audience.

### Baseline Knowledge 1: There is More than One Kind of Writing

At the beginning of the semester, Sara's descriptions of writing in both surveys and e-mail correspondence suggest a somewhat narrow conception of writing. She believed that there was one type of writing. Her understanding was oriented around the idea that writing and good writing involves connecting with a reader on an emotional level. There are several data points at the beginning of the semester that reflect this conception of writing. When asked what kind of writing she found most enjoyable, Sara responded, "I find personal writing the most enjoyable because I like thoughtful and heartfelt things" (survey 1). This emphasis on the idea of writing being "heartfelt" is continued when she states that good writing "makes the reader feel as if they are there experiencing the events going on throughout the writing" (survey 1). When asked about her best piece of writing, Sara notes that it was an essay she wrote "that had to do with someone I admire because it was emotional and kept the reader interested" (survey 1). The same belief that focuses on the connection between writing and emotions also seems to be expressed in an e-mail correspondence from correspondence in week 1 when she was asked to write about her reading and writing history: "the main types of books that I read are personal stories. I like books with a lot of emotion in them and make me feel like I'm experiencing it on my own. I read for the enjoyment of a good story" (email week 1). When asked about her writing life, Sara says that she loves "to write about personal experiences that I have experienced myself because I feel like those are the best types of writings. I write like this because I feel like it is important to touch the hearts of the readers for them to really understand what you are saying" (email week 1). These ideas about emotion and touching the reader interested also correspond with her statement that writing is "another way to express ideas rather than talking about them" (survey 1).

These data points suggest that like many of the students in Yancey, Robertson and Taczak's (2014) study, Sara brought to college a conception of writing predominantly

associated with fiction and imaginative literature and the idea that writing is about communicating emotion. While there is some mention of audience in Sara's conception of writing, the primary emphasis is on the author and how the author is able to touch and connect with the audience. Together, Sara's association of writing with the author's ability to create an emotional experience for the reader suggests she has a relatively narrow view of writing. This relatively limited conception is potentially consequential for future generalization in that her conception can potentially constrain her ability to respond to future writing situations. New writing situations, especially in college, will likely involve a range of purposes involving composing complex arguments and the marshaling of data and evidence. While certainly there might be some assignments that would require Sara to communicate on an emotional level with her reader, it is more likely she will be writing in a way that requires her to try and be objective and at some personal remove. The aim of the FYW course was meant to move students towards a broader conception of writing through the WAW curriculum and the five knowledge domains. The WAW-oriented assignments like the literacy case study and the genre analysis were designed to introduce Sara to different kinds of writing and an understanding of the ways audience shapes those kinds of writing. As a result of being exposed to and analyzing literacy and different types of writing, Sara would be able to generalize that knowledge and use it to adapt and make sense of new writing situations.

### Baseline Knowledge 1: Mid-Term

At the mid-point of the semester Sara appears to have added to her conception of writing a few new ideas from the course and at the same time held on to some parts of her conception of writing from the beginning of the semester. Whereas writing at the beginning of the semester was chiefly about communicating emotion, in survey 2 she defines writing as a "human action that gets things done" (survey 2), which was an important course idea introduced in the early weeks of the semester. This idea about writing was intended to encourage students to see the pragmatic, everyday nature of writing as making things happen with real audiences. Additionally, another new idea that she adds is that writing involves other people. This idea is found in her definition of good writing at the mid-term as "something that knows its audience and what type of literacy to use" (survey 2). At the same time that Sara appears to be adding the idea that writing gets things done and that good writing involves an audience, she also seems to be situating these new ideas within her existing view of writing as involving creating emotional response for the reader. This is reflected in her statement that it's "important to know who your audience is because you want your writing to touch your audience" (survey 2). So while she is growing in terms of her awareness of different types of writing and audience, that new knowledge does not subsume but rather co-exists with her earlier conception of general view that writing involves creating an emotional connection.

### Baseline Knowledge 1: End of the Semester

At the end of the semester, Sara appears to demonstrate that she has continued to expand her awareness of different types of writing in addition to her growing conception of the importance of audience in writing a text. When asked what she thought the purpose of learning particular course concepts were, Sara states that the purpose was to "get us to see all the different types of writing that goes on in our world and the different ways

writing could be used for" (survey 3). At the beginning of the semester, Sara appeared to have a conception of one type of writing and that type involved emotionally expressive writing. In survey three, she seems to have learned about new types of writing and new purposes for writing. This new knowledge surfaces in her definition of good writing, which she defines as "a human action that gets things done. In order for a writer to know if his/her writing is good is if they persuaded the reader/audience in a certain way or changed their way of thinking" (survey 3). Rather than good writing being about making the reader "feel as if they are there," Sara appears to be able to identify new types of good writing -writing that persuades or changes the audience's way of thinking. While it's not conclusive by any means, Sara's new knowledge about the different kinds of writing that exist could have been the result of the WAW orientation of the course and Sara having to write case studies about individuals and literacy and in having to evaluate two different genres using the five knowledge domains. This baseline knowledge of the different types and purposes of writing can be generalized in future situations in that Sara will be able to more clearly and openly assess a text she has to write because she knows that text might have its own unique purpose and that she needs to determine what that purpose is. When she came into the course, she seemed to have a limited understanding of the diversity of texts and the purposes for those texts.

### Baseline Audience 2: New Role of Audience

In addition to being more aware of different types of writing, Sara appears to have a slightly more complex sense of the important role of audience in the writing process. Three different points in survey 3 and an example in her genre analysis illustrate this increased focus on audience. In the surveys, an increased understanding of audience is found in her response to a question about how she would give advice to someone with writing: "I would tell them...to understand who they are writing for" (survey 3). A second place where this thinking about audience is found is in her description of good writing: "in order for a writer to know if his/her writing is good is if they persuaded the reader/audience in a certain way or changed their way of thinking" (survey 3). This statement suggests she believes that audience is important insofar as an audience's response to a text determines whether or not that text could be considered good. Lastly, in her genre analysis she seems to reflect the idea that the audience plays a key role in the writing process when she notes that "author needs to thoroughly understand its topic and its audience, and that is exactly what I plan on doing with any kind of writing that I am going to have to do" (genre analysis).

In addition, there is some evidence to suggest that this increased understanding of the significance of audience was perhaps shaped by her exposure to the concepts of rhetoric and discourse community. In survey 3, Sara identified rhetoric and discourse community as two concepts she was introduced to in the course. She illustrates her understanding of rhetoric as it relates to the audience in defining rhetoric as "the purpose of the specific writing. What are you trying to get the audience to understand" and notes that the "most simple example [of rhetoric] is an advertisement of some sort. The purpose of the advertisement is to convince the audience to buy their product" (survey 3). Discourse community, in Sara's view, involves "the language that car repair employees have. They have a certain type of talking that a librarian wouldn't know because he/she wasn't a part of that discourse community" (survey 3). While Sara doesn't directly

explain in her definition the relationship between discourse community and audience, she does appear to express an understanding that different groups of people will use different kinds of language. Her description of the awareness of the relationship between different audiences and language to some degree echoes the ideas discussed in Gee's article, which was assigned in the class, and the ideas students negotiated in their genre analysis. In her genre analysis, however, Sara does partially addresses the relationship between a text and discourse community: "I know that each piece of writing has to be towards what discourse community it is for and it has to fit what they want and are expecting out of the article" (genre analysis) and also describes how an "author needs to thoroughly understand its topic and it audience, and that is exactly what I plan on doing with any kind of writing that I am going to have to do" (genre analysis). Subsequently, for Sara learning the concept of rhetoric seems to have aided in helping her see the way that writing for an audience involves having a purpose like persuading them. The concept of discourse community seems in some sense to have helped her identify the need to adapt to the audience, or as she puts it in her terms figuring how to "fit what they want and are expecting" from the text. Together, her identification of these course concepts and her explanation of them offer some evidence of a Sara's development of an awareness of audience.

### Summary: Sara's Baseline Knowledge

This analysis of the semester 1 data suggests that the course led Sara to change two areas of knowledge about different types of writing and the role of audience. Yet there are additional aspects to consider when attempting contextualize this identification

of Sara's baseline knowledge from semester 1. One aspect is that (as noted before) surveys don't necessarily provide as comprehensive and full a picture of learning in the way that other approaches like interviews or focus groups potentially could. Thus the surveys at weeks 1, 7, and 15 are more accurately characterized as snapshots of Sara's thinking and knowledge at particular points. As discussed in the methodology section, future iterations of this kind of study would attempt to develop a richer set of data at the beginning of the semester from which to understand the nature of the conceptions about writing students bring with them to FYW courses. Another key idea to keep in mind with this semester 1 data set is that Sara's learning in the course might not show up more clearly until future semesters, though even then it's not totally clear that any evidence of learning could be singularly attributed to the FYW course in semester 1. In addition, I am not claiming that this observation of Sara's growth means that her slightly expanded understanding of writing and audience can be attributed to only her experience in this particular course; to be sure, Sara's experiences with writing in other courses during semester 1 could likely have shaped, consciously or subconsciously, how she was making sense of what she was exposed to in the FYW course. Lastly, the observation that Sara developed an expanded sense of the role of audience in her understanding of writing does not mean that Sara did not bring any understanding at all of other types of writing or the role of audience in writing to the course. My claim that Sara's understanding of writing when she entered the course was relatively narrow is based solely on her answers in the surveys. It is possible that the surveys did not capture her entire view and conception of different types of writing and the role of audience in writing when she first entered the course.

Additionally, there are alternative interpretations of the data found in the three surveys, email correspondence, and writing assignments that are worth addressing. One is that Sara's responses in the surveys are perhaps the result of her feeling that she needs to parrot the key course ideas that she heard over the semester. Another interpretation is that Sara is not necessarily parroting what she has heard but that she is merely describing the ideas that she's been exposed to over the semester. In this interpretation, Sara's ability to identify and explain course concepts like rhetoric and discourse community perhaps reflects only a relatively minimal understanding of these concepts. These are but two valid and alternative conclusions that could be made in addition to the one that Sara's conception of writing seemed to expand to include a greater understanding of different types of writing and the role of audience. This claim is anchored by an attempt to describe only what can be observed in Sara's surveys and writing collected over the semester. It is not an attempt to construct a direct causal link between the course and Sara's writing knowledge at the end of the semester.

## Generalization: Application and Propagation

Two key findings emerge from an analysis of Sara's thinking as she negotiated writing situations in semesters 2-7. First, there is some evidence that suggests Sara implicitly propagated baseline knowledge of audience across three writing situations in semesters 2, 6 and 7. Second, there is evidence that Sara explicitly applied prior knowledge of process from semesters 1 in a writing situation in semester 2. Sara's process knowledge from semester 1 was not initially identified in the data. While she did

mention ideas about process at the end of survey 3, these ideas did not seem to be sufficiently robust or developed at the time to warrant their coding as baseline knowledge. While my analysis of Sara's thinking as she negotiated writing situations over semesters 2-7 does appear to suggest she propagated and applied prior knowledge, what remains inconclusive is whether the transfer-centric course in semester 1 is the sole originating source of the knowledge that was propagated and applied.

## Implicit Knowledge Propagation

The evidence of implicit propagation of audience knowledge from semester 1 is found in three non-academic writing situations -- a transfer essay in semester 2 for a new college and e-mails she sent to the corporate headquarters of her company in semesters 6 and 7. However, it is helpful first to reiterate what Sara's audience knowledge looked like in semester 1 so that identifying its propagation in similar-though-different terms in semesters 2,6, and 7 is clearer.

In semester 1, Sara noted that if she were to give advice to someone with writing that she "would tell them...to understand who they are writing for" (survey 3). In her genre analysis, she wrote that an "author needs to thoroughly understand its topic and its audience, and that is exactly what I plan on doing with any kind of writing that I am going to have to do" (genre analysis). In that same text, her awareness knowing what your audience expects is found in her statement "I know that each piece of writing has to be towards what discourse community it is for and it has to fit what they want and are expecting out of the article" (genre analysis). Additionally, in the survey she wrote that "In order for a writer to know if his/her writing is good is if they persuaded the

reader/audience in a certain way or changed their way of thinking" (survey 3). These data points together reflect Sara's baseline knowledge of the importance of audience in semester 1.

Sara's thinking as she negotiates these writing situations in semesters 2,6, and 7 appears to involve the propagation of audience knowledge that in some ways resembles her baseline knowledge about the key role of audience from semester 1. Looking at these three writing situations through this study's generalization framework for evaluating implicit knowledge propagation helps reveal with more precision and clarity how these three writing situations appear to demonstrate the tacit continuation of audience knowledge from semester 1.

## Implicit Propagation Example 1: College Transfer Statement

The first writing situation in which Sara appears to implicitly propagate baseline audience knowledge from semester 1 occurs in semester 2 when she is discussing her approach for composing personal statements as part of her plan to transfer to a new college.

A: What's going in your brain [as you write the essays]?

N: I'm just basically thinking like.... what does the school want to hear? Obviously a lot of people are just gonna kinda like bs their essays...so um you have to really research the school and like show what they are looking for in students and apply that in your essay...they're not going to want someone who's lazy, so you have to really research the schools and everything...so that is something that I'm going to have to do.

A: When you research the schools what are you looking for?

N: I'm looking at kinda the clubs so I could be like "oh I'm interested in this club that you have"... or even jobs on campus "I'd love working here" anything like that...or I'd be interested in...I could look at their mission statement, where do they want students to end up...so I could be like in your mission statement you said bla bla bla...it shows that I researched their school, like I'm' really interested in it...to show that I'm really dedicated in going there, so basically like little hints that I want to go there just like...go on that.

#### Framework Element 1: Knowledge Similarity

An analysis of this excerpt through the element of *knowledge similarity* involves determining whether and how the knowledge that Sara appears to develop and then generalize is in fact similar. In this example, Sara appears to be "knowing with" her prior learning about audience; that is, the knowledge that Sara generalizes in her thinking in semester 2 seems to be similar to the knowledge she developed in semester 1. Sara doesn't explicitly mention her ideas from semester 1 like audience, rhetoric, persuasion, or discourse community. Instead, her reflection of her thinking reveals she is enacting a tacit understanding of these semester 1 terms and concepts in layered and complex ways. In her description of her thinking she seems to prioritize what the school is expecting

from the statement as opposed to Sara prioritizing her own ideas about why she wants to go there.

The statement that she's trying to figure out "what does the school want to hear" seems to echo her statement in semester 1 about how discourse community knowledge involves knowing what the audience is "expecting out of" (survey 3) the text. Another example of this conceptual link between this writing situation and her semester 1 baseline knowledge about understanding audience is found in her apparent awareness of the need to identify the school's values -- "look at their mission statement, where do they want students to end up" and then "show them that I'm really dedicated in going there." This attempt to figure out the school's values and then match them reflects her ideas from semester 1 that writing needs to "fit" (survey 3 semester 1) its audience. There is even some evidence that Sara is thinking with her understanding of the need to persuade the audience, which was something she identified in semester 1 through the concept of rhetoric. This thinking with the idea of persuasion appears to be operating in her statement that she needs to persuade her audience by being subtle rather than overt. She notes that she will give her audience using "little hints that I want to go there" rather than be explicit and inauthentic like other applicants who "kind of bs their essays." These multiple data points reveal that while she might not have explicitly stated she is using audience knowledge from semester 1, nor did she consciously enlist any of the terms or concepts around audience knowledge from semester 1, Sara does appear to be implicitly propagating audience knowledge in nuanced ways. Given the relative depth and complexity of how Sara is thinking with audience knowledge in semester 2 and how

closely it resembles her understanding of audience in semester 1, this example would be coded as a category 2; the knowledge appears to be significantly aligned and similar across both contexts.

## Framework Element 2: Knowledge Influence

Looking at this example through the lens of *knowledge influence* involves evaluating the significance of the knowledge to Sara's thinking about the writing situation. In light of how embedded audience knowledge appears to be in Sara's thinking about the personal statement, this example would be a category 2 for *knowledge influence*; her approach to the writing task was significantly shaped by her understanding of audience. Implicit audience knowledge appears to be threaded into her description of her thinking and she foregrounds her attempts to learn about the audience before she determines what she will write about. She emphasizes the importance of knowing who her audience is "you have to really research the school" and then talks about taking that knowledge and transforming it into a persuasive statement tailored to them: "oh I'm interested in this club that you have." This relatively sophisticated connection she makes between herself and the school is also found when she gives another example of how her thinking is oriented around addressing the college's concern over how she will participate as a student there: "to show that I'm really dedicated in going there, so basically like little hints that I want to go there just like...go on that."

## Framework Element 3: Knowledge Frequency

The third element for evaluating implicit propagation of prior knowledge involves the frequency of that propagation; as will be discussed below, Sara seems to continue this tacit audience knowledge in her two work e-mails in semesters 6 and 7, which suggests that her propagation here was not an outlier. This high frequency would then classify this example as a category 2 for *knowledge frequency*; Sara continued this writing knowledge in her thinking in two different writing contexts and over five semesters. As a result, there is the potential that the semester 1 baseline knowledge of audience is being propagated in consistent ways as part of Sara's thinking about writing situations.

# Implicit Propagation Example 2: Work E-mail

During semesters 6-7, Sarah discussed writing work emails for a retail job. Her discussion of this activity also points to awareness of the key role that audience plays in composing texts that Sarah began to describe in semester two. I categorize the semester 6 and 7 items as two different writing situations in semesters 6 and 7. In semester 6, Sara is learning how to write a specific kind of e-mail with her boss as part of her new duties as a manager. In semester 7 she has had more experience in writing this e-mail; now, she is doing so as an experienced contributor. Additionally, categorizing them as two different writing situations helps clarify if and how she might approach writing the e-mail in different ways over time.

In semester 6, Sara had been promoted from cashier to bookkeeper in her job and as a result took on new duties. One of those duties involved having to e-mail numbers and data from her retail store to the corporate office. In her thinking around the process for writing the e-mail it seems that she was propagating audience knowledge2; she appeared to be thinking that she should take into account her audience's expectations for the e-mail, and that awareness shaped her decisions, actions and the process by which she composed and sent the e-mail. Sara does not explicitly use any of her audience knowledge2 terms from semester 1 nor does she talk about the semester 1 course: rather, her continuation of these terms and their ideas is conveyed tacitly in her use of similarthough- different terms, the influence of this knowledge on her thinking, and the frequency with which she propagates audience knowledge when she approaches new writing situations. I provide the full context below and then evaluate Sara's thinking using the three propagation elements.

S: The first e-mail I was sending it for my manager so I was like I was the phone with her I literally read every sentence I put is this okay? Cause like it was weird. Cause today I actually sent my first email on my own, cause there was something wrong with the deposit so I was like oh my god this is weird it was scary cause I was sending it to corporate people.

A: What were you thinking about?

S: I was like does this make sense, is this grammar right I was like should I use a different word here? I even called my manager before, okay does this make sense?

## A: What did they say?

S: Yeah it's fine go ahead and sign it. It was different than what I thought it would be, I feel like emails going to corporate are supposed to be formal, and then my manager would say "Just say this" and it's like so casual, and I was like "are you sure?"...it's definitely not as formal as I thought it would be.

## Framework Element 1: Knowledge Similarity

Analyzing this example through the lens of *knowledge similarity* is a way of making visible the connections between the knowledge from semester 1 and the knowledge here in semester 6. In Sara's description of how she was thinking about composing the e-mail, there appears to be evidence that she is thinking with her prior knowledge of audience. One way this is found in the weight that Sara imputes to corporate, her audience, throughout her description of the task: "I'm sending it to corporate people" (semester 6 interview). This excerpt also appears to reveal her understanding that a successful text will be determined not by the writer's view of the text, but how the audience might interpret it: she asks her boss twice "Does this make sense?" The questioning here in semester 6 about what the text should look like seems to correspond with her understanding at the end of semester 1 that writing involves the need to "understand who you are writing for" (survey 3). Additionally, her approach to writing this e-mail to corporate in subtle ways echoes her comment at the end of semester 1: "I know that each piece of writing has to be towards what discourse community it is for and

it has to fit what they want and are expecting" (survey 3). Sara's questioning about what the e-mail should look like suggests that she's aware that she doesn't "understand who [she's] writing for", and asking helps her figure out what corporate "want[s] and [is] expecting." For the knowledge similarity element, this example suggests that the audience knowledge of semester 1 and the propagated audience knowledge in semester 6 are relatively well aligned, so this example would be a category 2.

## Framework Element 2: Knowledge Influence

An analysis of Sara's description in terms of *knowledge influence* reveals that this example would be a category 2. Sara's audience knowledge was significantly shaping how she thought about and approached the e-mail. One illustration of this importance is in how Sara described her process of calling her boss and asking her several questions. On the call, she describes that she "literally read every sentence" to her boss asking "Is this okay? What can be interpreted from this is that Sara's placed significant emphasis on her need to know what the audience wanted: "literally read every sentence to her" (semester 6 interview). Rather than presume how to write it she asked her boss who did know the audience. Subsequently, the influence of her audience knowledge on her actions here is relatively powerful, or category 2. Her actions are shaped by her belief that she can't write and send the e-mail without getting a better understanding of what the audience expects, which she does by reaching out to her boss.

### Framework Element 3: Knowledge Frequency

The element of knowledge frequency foregrounds how consistent a particular kind of generalization is. In light of the fact that Sara propagated audience knowledge in a similar form in semester 2 on her transfer statement, and does so again in semester 7 when she begins to write the e-mails on her own, element 3 would be a category 2; there is a relatively stable pattern of propagating audience knowledge when she negotiates writing situations.

### Implicit Propagation Example 3: Work Email 2

In semester 7, Sara's awareness of audience continues to shape how she thinks about writing the work e-mails to corporate. While this example is not as clear-cut of a writing situation as the previous two, Sara's description of how she was handling and interpreting the e-mail within the context of her work appeared to reveal some evidence of audience knowledge propagation.

## Framework Element 1: Knowledge Similarity

In this example, Sara's propagation of audience knowledge from semester 1 seems to occur in two forms. The first form in which the propagation occurs is when she describes her concern for how she is perceived by the audience, "corporate," for her emails. Sara notes how a co-worker wrote an email to corporate using her email account and his e-mail had an error in it. Sara was concerned about how corporate would view her e-mail with an error in it and what it means about her, half-jokingly stating that because of her co-worker's mistakes in the e-mail corporate now "thinks I'm stupid" (semester 7 interview). Later, however, she notes that she composed a series of e-mails that were error-free and that corporate responded approvingly to

her e-mails, so she jokes that "okay, corporate is starting to like me again." In addition to her story here about her concern regarding corporate's perception of her e-mails and of her, Sara seems to demonstrate that she is in some ways studying how her audience, corporate, is writing in order to determine their values around e-mails. She notes that "I've seen e-mails from corporate with typos... if they don't care...what's one mistake" (semester 7 interview). Whereas in semester 6 the only resource Sara had that would help her understand her audience was her boss, she now is trying to understand her audience by analyzing their e-mails for their values, one of which she identifies is that corporate doesn't appear to worry about typos in their e-mails. Sara's response, "if they don't care...what's one mistake" seems to show her propagating her ideas about audience and discourse community from semester 1 and the idea that the writer must "fit" their writing with their audiences. Of the three examples of audience knowledge propagation, this is perhaps the least similar form of audience knowledge propagation, which means it is a category 1 for the element of knowledge similarity. While it is clear that Sara is propagating some form of audience knowledge, it is loosely aligned with the audience knowledge from semester 1

### Framework Element 2: Knowledge Influence

Audience knowledge in this example, like the two previous ones, appears to operate in relatively powerful ways in Sara's thinking. Given the centrality of her thinking about corporate, her analysis of corporate's emails and value, and her

subsequent alignment of her email approach with that of corporate's in her statement "if they don't care...what's one mistake," this example would be a category 2 for knowledge influence.

## Framework Element 3: Knowledge Frequency

This example is the third piece of evidence that suggests Sara was implicitly propagating prior knowledge of audience from semester 1. In terms of knowledge frequency, this example is a category 2 because there are multiple examples, over time and across contexts, where

Sara is thinking with her audience knowledge. This example, and the example from semester 6 and semester 2 also seem to suggest that this propagation is relatively enduring and durable.

## Example of Application of Prior Knowledge

In addition to evidence that suggests Sara was propagating audience knowledge, there are several data points in these interviews that also suggests Sara was generalizing process knowledge from semester 1. This process knowledge took the form of Sara repeatedly seeking feedback on her writing. While Sara appeared to get other people to read her work on the majority of her writing, there is one situation in semester 2 where she linked this practice (seeking feedback) to semester 1. This linking qualifies as evidence of the explicit application of prior knowledge.

Yet what is interesting is that I didn't identify Sara's process knowledge as baseline knowledge in semester 1. When I looked back in the semester 1 data I did find some evidence that Sara had learned about process in the course, though it had not appeared to be significant enough to describe it as baseline knowledge.

There are two different places in survey 3 where Sara mentioned feedback. In response to one question she described that her writing process involved having "as many people as I can to go over my writing and edit it" (survey 3). In another response to a question about how she would advise someone writing a paper, Sara responded she would "get as many people as they can to read it and go over it for them" (survey 3).

These same ideas about getting feedback around found in semester 2 when Sara explicitly applies her semester 1 knowledge about process as she negotiated a personal statement for a new college. When asked what her plan for writing the statement was she responded "I definitely want feedback before they're due...I will make an appointment, have somebody revise it...even you said in class the more people you get to read it, it's not cheating but making it better, getting more than one opinion on your paper" (semester 2 interview). Below, I use the three framework elements—*knowledge similarity, knowledge influence*—to more deeply examine the nature of this example of knowledge application.

## Framework Element 1: Knowledge Similarity

Examined through the lens of *knowledge similarity*, it is relatively clear that the process knowledge Sara described in semester 1 is the same knowledge she is applying in semester 2, which would mean that this example is a category 2. In semester 2 Sara uses the terms "feedback" and "revise" and in semester 1 she uses the terms "go over my

writing and edit it" and "read it", which suggests that the knowledge was applied in specific and relatively precise ways. Further evidence of the relative uniformity of the knowledge in semester 1 and semester 2 is that Clare consciously linked her action "I will make an appointment have somebody revise it" to an idea from semester 1, "even you said in class the more people you get to read it, it's not cheating but making it better." There is a visible trajectory between Sara's description of her semester 1 ideas about process and her use and description of that knowledge in semester 2.

## Framework Element 3: Knowledge Influence

The third element, *knowledge influence*, involves examining the way that the knowledge shapes Sara's thinking. Sara's description here suggests that this example of the application of prior knowledge appears to be a category 2. Sara's understanding of process knowledge as reflected in her statement appears to is relatively deep and does seem to be significantly shaping her actions. Were she to have merely referenced the idea but not acted upon it, this example would be a category 1. However, Sara is not just naming the concept but her statement "it's not cheating but making it better, getting more than one opinion on your paper" suggests she has thought about the logic behind the concept and why it makes sense.

### Framework Element 3: Knowledge Frequency

Lastly, looking at this example in terms of knowledge frequency means taking into consideration whether there is only one example or there are multiple examples of this specific knowledge application. As will be further discussed, Sara seeks feedback on her writing at multiple points over semesters 2-7, which classifies this example for element 4 as a category 2: Sara's knowledge about process is a relatively consistent element of her thinking as she negotiates writing situations.

Admittedly, although Sara's comment "you even said in class" does suggest her actions here are influenced by prior knowledge of feedback developed from semester 1, it is not totally clear that her desire to get feedback on the personal statement was precipitated by consciously applying her memory of our discussion of feedback in semester 1. More precisely, it's possible that her idea to get feedback didn't involve her conscious awareness that she got that idea from the transfer-centric course. Rather, Sara might have intuitively felt the need to get feedback on the essays and then as a result of our interview and of my presence in the interview, and then made a connection between her choice to ask for feedback on the personal statement and the semester 1 transfercentric course. Subsequently, it is not entirely clear that there is causal relationship between the transfer-centric course's emphasis on getting feedback on writing and Sara's decision to seek out other's views in this situation of the personal statement. However, there is some evidence that the course had some effect on her thinking about process. In survey 1 Sara did not mention soliciting feedback in any of her responses; in survey 3, she mentioned getting other people to read her paper in two different points.

### Integrated Knowledge Propagation as part of "Doing School"

As has been discussed, Sara does appear to propagate audience knowledge in semesters 2, 6, and 7 and in one instance explicitly apply prior knowledge about feedback from semester 1 in a few instances. There is, however, another form of implicit knowledge that Sara seems to demonstrate that is distinct from this previously discussed evidence of generalization.

Within the context of school writing situations, Sara seems to propagate an integration of her audience knowledge—the importance of figuring out what the professor wants—and her process knowledge—getting feedback from the professor as part of a strategy of figuring out what professors want and giving it to them.

Before illustrating in more detail this integrated form of knowledge propagation, it is important to clarify a few complexities around whether "giving the professor what they want" can be characterized as an authentic writing purpose within a real writing context. Can Sara's relatively sophisticated and consistent process for figuring out what her professor wants be considered a form of audience knowledge? Some researchers, like Beaufort, might say no; giving the professor what they want is not a real writing situation with a real audience. Beaufort notes that her study participant, Tim, never really learned to write for a discourse community because his college writing experience was characterized by what she calls "doing school" (p. 144). She notes that "what was the most difficult for Tim in school— in freshman writing, in history and in engineering was to grasp the "real' social context for writing in those disciplines, beyond the context of "doing school" (144). In writing for the professor and not having to write for a "real" audience, Beaufort suggests that Tim wasn't really learning how to write for an audience. She points to Tim's approach to an assignment in his first-year writing course as an example, noting "It was not a piece of writing he took seriously in terms of his stated audience or his purpose" (p.37).

What is perhaps implied in Beaufort's analysis is that there is little value for students in terms of learning about writing when they are simply "doing school" because they aren't really deploying audience knowledge. Another way to look at doing school, however, is that learning to figure out what a professor wants is in some sense a very real writing situation and could involve some degree of propagation of audience knowledge. It could be argued that the ill-structured nature of writing assignments in college share similar qualities with the ill-structured nature of writing assignments in professional environments. McCarthy (1987) has made a similar case, noting that "Studies of writing in non-academic settings have shown just how complex these writing environments are and how sophisticated the knowledge - both explicit and tacit - is that writers need in order to operate successfully in them (Odell & Goswami, 1985). And classrooms offer no less complex environments for writing" (p.235). While there is some validity to Beaufort's concern that doing school doesn't involve a significant way of learning how to write for a particular discourse community, from this perspective the discourse community of school as perceived by the student is no less authentic than the field of history or an engineering firm. Moreover, students don't necessarily "do school" in the same way for each professor; as Sara's example illustrates, there is considerable sophistication in assessing what each professor will expect from a text and identifying how she will engage the kinds of writing resources are afforded by that professor. The current section acknowledges some of the drawbacks of writing that is merely "doing school" and simultaneously argues that the thinking involved in "doing school" is worthy of study and inquiry especially for transfer.

As noted earlier in this chapter, Sara appeared to develop both baseline knowledge of the importance of audience and inchoate knowledge of process in semester 1. An analysis of her thinking as she negotiates classroom writing situations over semesters 2-7 suggests that she integrated these two knowledge areas as a way of figuring out what the professor wanted and getting a good grade.

Throughout the description of her thinking as she approached academic writing situations in semesters 2-7, Sara revealed that her approach primarily centered on the goal of meeting the professor's expectations for the assignment. In this way, what Sara could be said to be doing was propagating audience knowledge; her professor was her audience for the paper and in order to write a good paper Sara felt that she needed to better understand her audience. In order to understand her audience, Sara described how she consistently met and sought feedback from professors at every phase of the writing process as a way of figuring out what the professor wanted and getting a good grade. In this way, she seemed to be propagating an integrated form of her knowledge about audience and process that she indicated at the end of semester 1.

There are multiple illustrations of Sara propagating audience and process knowledge for class writing assignments. One example is found in the description of her writing assignment in a religion class in semester 4 that aptly embodies the interweaving of these two knowledge areas. When asked about the paper for the class, she said "I got an A- on that one, I went to her office hours a lot and then to like talk to her cause I didn't know how she was on grading, I didn't know what she was looking for" (semester 4 interview). Here, Sara's description reveals in her thinking an awareness of the interrelationship of her goal of getting a good grade, her professor's role in giving her the

grade, and her need to figure out what she needs to do in order to get a good grade. It's evident too, that not only does Sara figure out what her audience wants, but that she listens closely and then acts on what she learns from her audience:

A: Did you have to take a stance in this paper?

N: She told us we didn't have to but I kind of like... I just told her my point of view, I could see where the scientists are coming from, where Dalai Lama and Buddhism are coming from... why I believe both of them at the same time, they both make sense... she didn't tell us that we had to pick one side.

In this excerpt, Sara indicates she is writing for a specific audience when she notes "I just told her my point of view", and that she's aware of how her text reflected what her professor wanted: "she didn't tell us that we had to pick one side."

# Framework Element 1: Knowledge Similarity

In terms of *knowledge similarity* and what kind of alignment can be observed between the knowledge from semester 1 and in semester 4, this example would be a category 1. It is not entirely clear that when Sara is prompted to discuss the paper with her professor that it is her audience/process knowledge from semester 1 prompting her to do so. Despite any significant alignment, some parts of her knowledge from semester 1 about audience appear to be echoed in her thinking though it is echoed in new language: Semester 4: "I went to her office hours a lot and then to like talk to her cause I didn't know how she was on grading, I didn't know what she was looking for" (semester 4 interview).

Semester 1: "I would tell [someone looking for advice]...to understand who they are writing for" (survey 3).

Sara's sense in semester 1 that you need to "understand" who you are writing for seems to be inflected in her belief in semester 4 that she needs to figure out how her audience is "on grading" and "what she is looking for." This inflection, however, does not seem to be significant which is why this example is characterized as category 1.

## Framework Element 2: Knowledge Influence

The element of *knowledge influence* foregrounds what kind of impact and influence the knowledge has on Sara thinking. While it's not clear if Sara is drawing upon both her semester 1 audience knowledge and process knowledge, she is nonetheless orienting her writing around figuring out what her audience wants. For this reason, this example is a category 2 because of the influence audience knowledge is having on her thinking. She realizes she doesn't know what her audience wants so she seeks out the resources available to her, office hours. Additionally, that what she wrote in the paper is informed by her learning more about what her audience wanted is reflected in the substantive description of how her text balanced both sides of the issue of her paper. This complex awareness of audience and process knowledge suggests that element 2 is a

category 2 and that this knowledge is operating in influential ways that shape how she negotiates the writing situation.

## Framework Element 3: Knowledge Frequency

In terms of knowledge frequency and the number of times this propagation of audience/process knowledge was observed, this example is a category 2. Similar examples of Sara proactively speaking to the professor before writing the paper, and then asking the professor for feedback, include her ENG1 courses in semester 2 and semester 3 as well as her cultural communication and media literacy courses in semester 5. That Sara propagated this integrated process/audience knowledge to such a significant degree suggests it could be said to consistently occupy her thinking when negotiating an academic writing situation.

That Sara's knowledge of audience and process appear to become more and more integrated over six semesters is perhaps not surprising given the overlapping nature of the five knowledge domains introduced in the FYW course and the complex, multidimensional nature of writing. As discussed earlier, that process of integration in some ways makes it harder to delineate clear, distinct borders that demarcate where one kind of writing knowledge begins and ends, or how other kinds of knowledge like genre knowledge or rhetorical knowledge are or are not contiguous, integrated or interrelated. As Sara's case demonstrates, what might be concluded from a longitudinal study of transfer is that the further an individual gets from initial learning the more likely different knowledges from that initial site are to change from their original shape. As such, what

could be said to occur is a "more than the sum of its parts" process of learning and development; rather than Sara's thinking about writing evolving as a series of continually added knowledge areas, the process is perhaps more accurately characterized as a continuously reconstructed ecology of thinking shaped by new writing tasks, dialogue around writing, and general experiences of writing. The goal of the generalization framework is to attempt to bring some kind of clarity and shape to studying that continuously reconstructed ecology, and to be able to with some kind of certitude identify how particular knowledge areas of that ecology came to be.

## Role of Personal Connections: Perceptions

As discussed in Chapter 4, studies of transfer have historically limited their approach to looking at the binary question of whether there is or is not evidence of transfer. What those studies perhaps overlooked was the potential that other variables could be shaping whether there was or was not transfer. This study operates from an AOT approach that hypothesizes that those other variables could be the personal connections students make of writing situations. Specifically, the assumption is that how students perceive a writing situation, and how they assign personal value to a writing situation, might in some way influence whether or not generalization occurs.

As sociocultural scholars like Beach (1999, 2003) and Lave (1989) have argued, individuals' perceptions of the environments in which they operate will shape how they think in that environment—cognition is fluid and situated. While there was no overwhelming evidence that Sara's perceptions were shaping whether or not she generalized prior knowledge, what did emerge from the data is one example that supports the idea that how Sara thinks about a writing situation can be shaped significantly by how she perceives the context of that writing situation. In an interview in semester 4, Sara described how she approached a writing assignment for a religion course at St. John's, the first college she attended, and how she approached a nearly identical writing assignment at St. Mark's, the second college she attended. At both colleges, the assignments required her to go to a religious site like a church or temple and then reflect upon the experience. However, Sara didn't perceive St. John's as academically rigorous or as having high academic expectations of the students. Without any prompting from me, she noted that at St. John's she wrote the paper and described going to a temple even though she never in fact went to the temple. She states that at St. John's "it was easier to get away with not going" to the temple (semester 4 interview).

Her thinking about how to approach a nearly identical writing assignment a semester later at St. Mark's was completely different because of her perception of the academic expectations at St. Mark's. Sara was the same person at both institutions but took a different approach to writing a similar assignment based on her perception of the context. Two conclusions can perhaps be drawn from this example is that in transfer research it is important to look for evidence of transfer in more than one writing situation; as was the case with Sara's religion writing assignment, how she thought about the writing task was significantly shaped by her perception of the task's environment. The second conclusion is that in addition to looking at multiple writing situations for transfer, looking at student's perceptions can potentially help illuminate how the environment

does or does not support transfer. Wardle (2013) has drawn upon Bourdieu to advance a similar claim that transfer research should "look beyond one task, one setting, or one individual" (n.p.) to consider how the environment might be shaping how students think about writing tasks and thus whether or not they generalize prior knowledge.

### Personal Connections: Valuing the Content of the Writing Task

In addition to looking at Sara's perceptions of writing situation, another area that I look at is how Sara's valuing of a writing situation might shape any possible generalization. If Sara notes that she is interested in the writing topic and motivated to take on the writing situation, is she more likely to generalize prior knowledge? There was nothing in the data, however, to conclusively address that question in either positive or negative ways. I did observe something interesting about the relationship between Sara's valuing of a writing situation and how her positive writing experience on that topic facilitated future transfer of the content of the writing task. While admittedly this observation is somewhat oblique to the question of how and whether writing knowledge transfers across different sites, there is perhaps something helpful in this example for WAC/WID research and how writing assignments can support the generalization of course concepts.

In semester 7, Sara described her experience of writing the media literacy paper from semester 5. I include a significant excerpt in order to show how specifically Sara threads into her description of the writing situation ideas around motivation, the significant effect it had on her, and how it was consequential to her identity.

A: What do you think your best piece of writing has been?

S: My [media literacy] essay...I love that essay, I feel like it showed me a side to me I didn't even know. Cause after researching into like how women are represented in media it really showed me like wow I really do care about like, I wouldn't say I'm a feminist, I do care about women's rights and everything, so I'm somewhat of a feminist but I wouldn't say I'm hardcore. But, I feel like that essay, like, it challenged me at a lot, having to take both sides of it, saying how [the TV sitcom *Friends*] passed the Bechdel test how it didn't, finding ways to balance it and then finding the research and everything. It like challenged me the most but I definitely think it was the best outcome.

A: Because...

N: Because I put so much work into it. I was in the writing center like almost every time I made an edit, like to go over it with them cause I'm really bad at grammar, so I wanted them to check that the most like I even sent it to my teacher a couple times she was like "Oh add this in here, talk more about this, give an example of this" so I even sent it before like I submitted it to my teacher and she was like "Yeah that's perfect submit it right now, and I was like "Ok" and once I got that validation I was like "Ok I'm done."

These responses reveal that an important byproduct of the positive interaction of all these elements—Sara's deep investment in the writing situation, the comprehensive feedback provided by her professor, her willingness to repeatedly get help in the writing center—is that her involvement went beyond merely meeting the expectations of the professor but led her to perhaps question her social identity in a meaningful way: the paper "really showed me like wow I really do care about like, I wouldn't say I'm a feminist, I do care about women's rights."

Another significant aspect of the positive experience around this media literacy paper for Sara is that it seems as though writing the paper facilitated Sara's generalization of the conceptual framework of the Bechdel test. Sara could be said to have undergone an epistemological shift in that she appears to be generalizing her knowledge of the Bechdel test in contexts outside the course. As a result of writing the paper, the Bechdel test has in some ways shaped how Sara interacts with the world. She herself appears to name the generalizability of the concept: "I can take this thing [the Bechdel test] anywhere" (semester 7 interview). In reflecting on what the concept means for her, she notes: "I like talking about it. It's weird... It's like the way you can use it literally on any kind of media I think that's why I like it so much, you can use it on anything, I've used it for video games so... I was like saying if your kids playing a video game like grand theft auto, and they're seeing like a girl half naked and a man calling her all these names, like a prostitute and everything, then that kid will think it's okay in real life...Yeah it's really weird how much I like talking about it." It's important to note too that the Bechdel test in was not a part of the regular course curriculum but instead was an idea Sara's professor introduced to as a topic in their early meetings about the paper. Her absorption and

uptake of the concept was thus primarily a result of her talking about it with her professor as well as writing about it in her paper.

Additionally, Sara discusses how her media literacy professor had told the class jokingly that once they started critiquing movies that she wouldn't be able to enjoy movies anymore. Sara connects her media literacy professor's comment to her developing this critical stance: "Even now, I saw a billboard when I was driving, and I started critiquing it and I was like...no it's just a billboard" (semester 7 interview). She then tells her boyfriend, "See billboards like that is what makes people think it's okay to treat women so badly" (semester 7 interview).

Sara's writing experience with the media literacy speaks to generalization as a learning phenomenon in that it shows how the existence of particular variables in a writing experience—a motivated student, a supportive professor, writing resources—can at least partially cultivate the development of conceptual knowledge like the Bechdel test that can be generalized beyond the context of the writing experience. Sara didn't necessarily generalize prior writing knowledge from semester 1 as part of her experience of learning about the Bechdel test.

## Conclusions from Sara

A central conclusion that can be drawn from surveys and interviews about Sara's writing experiences over semesters 2-7 is that in a few instances she did appear to implicitly propagate audience knowledge and in one instance she explicitly applied knowledge from semester 1 about getting feedback on her writing. Another way of looking at these examples of generalization is that there was much that was introduced in

semester 1, the five knowledge domains in particular, that never seemed to be propagated or applied in the 17 writing situations over six semesters. Despite the fact that I taught the semester 1 class and that I was the one who interviewed Sara about her writing, only once in six semesters did Sara refer specifically to the course. This points to the challenge of evaluating the way knowledge works beyond the initial learning context and the complexities of naming and studying it. That Sara only once explicitly connected the way she was thinking about negotiating a writing situation with her previous learning about writing in semester 1, however, not an unusual observation in studies about writing transfer research. As both Smart and Brown (2002) and Brent (2011, 2012) found in their studies of transfer, students rarely identified how they knew how to do something or where their knowledge came from. Sara couldn't identify the origins of her writing knowledge. Thus, despite her not explicitly saying "To write this work e-mail I'm applying audience knowledge that I learned in semester 1" there is some evidence that Sara was propagating her ideas about the importance of audience in at least three distinct writing situations: the personal transfer statement in semester 2 and the work e-mails in semester 6 and 7. However, it's difficult to determine what kind of influence the semester 1 class had on her apparent propagation of audience knowledge. It's unlikely that the transfer-centric course was the singular locus of learning about audience that then launched her through semesters 2-7. At the same time, it's not entirely clear how Sara's writing experiences alone could have helped cultivate her relatively frequent propagation of audience knowledge.

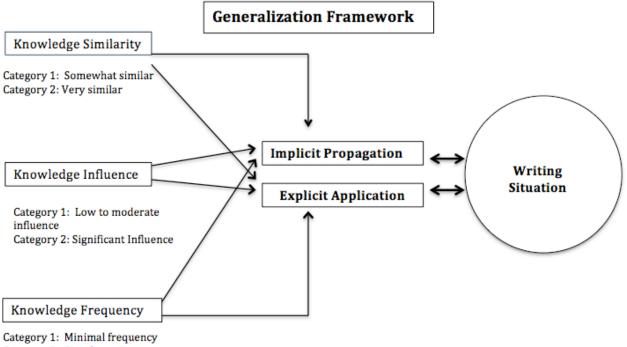
What can be concluded is that the roots of Sara's propagation of audience knowledge can't be imputed simply to the semester 1 FYW course or to the sum effect of

her writing experiences in semesters 2-7. Rather, the audience propagation is perhaps more likely the result of the complex and recursive relationship between the two, which is an observation that accords with the sociocultural orientation that informs this study. The conclusion that whatever learning, knowledge or experiences a student has in an FYW course will invariably interact with the social reality of future writing experiences – writing assignments in different courses, interactions about writing with professors, e.g.—continues to pose a challenge for the study of writing transfer.

## Clare: "Because I Actually Want to Write It"

Clare's experience of the transfer centric course in semester 1 and her thinking about writing situations in semesters 2-7 depart from Sara's in significant and nuanced ways. Below, I articulate how I develop an understanding of what Clare appears to have learned in semester 1 and then examine how she might have explicitly applied or implicitly propagated that baseline knowledge using the generalization framework. Each potential example of generalization is examined through three framework elements. The *knowledge similarity* element helps clarify and establish the nature of similarity between the knowledge from semester 1 and the knowledge that is generalized in the future writing situation in semesters 2-7. The second element, *knowledge influence*, helps explore in the data the kind of influence the knowledge has on Clare's thinking as she negotiates a writing situation. Was the knowledge shaping how Clare made decisions and choices about how she tackled the text? The last framework element, *knowledge frequency*, helps highlight how consistent and enduring the generalization is over semesters 2-7. These three framework elements applied to any potential examples of generalization help operationalize my definition of transfer as well as more precisely articulate the nature of the generalization that is observed.

Figure 5: Generalization Framework



Category 1: Minimal frequency Category 2: Significant Frequency

### Clare's Baseline Knowledge in Semester 1

As a result of taking the semester-long, transfer-centric composition course, there is some evidence that suggests that Clare has appeared to develop new knowledge about writing in two different ways. The first way Clare developed new knowledge was that she saw that there could be more than one purpose for writing; you can write for your audience and also write for yourself (her initial conception). The second new knowledge area is that Clare appears to have developed new knowledge about the importance of thinking in the writing process; at the end of the semester she learned that a writer should think before starting to write and consider what she's trying to do with the text. As Clare notes in the final survey, she felt the general purpose of the course was to get students to "just stop and think about what it is we need to write" (survey 3).

### Baseline Knowledge 1: "An Expression of One's Feelings": Writing as Author-driven

Upon entering the course, Clare's understanding of writing is somewhat narrowly organized around the idea that writing an activity primarily undertaken for the author. Writing, for Clare, offers the writing a way of working through her emotions. When asked how she would describe herself as a writer, Clare notes: "People always told me to write out everything, and that I cannot hold everything in my mind forever. When I write, I do so as if I am speaking so nothing will be left out" (survey 1). Here, her description suggests that a key way she thinks about writing is as a way of getting things out of her mind and that in some sense she should not censor herself when she writes. Her focus on the author and the way writing helps a writer get things out also corresponds with description of what kinds of writing she enjoys—"I find expressive writing enjoyable. Long fiction, song lyrics" (survey 1). While there is some awareness of the reader in this early conception, it is minimal. She describes writing as "an expression of an individual" and a "form of communication, not just with another person but with the person who is actually writing" (survey 1). This last phrase, that writing is an "expression of an individual" further points to her belief that writing is something a writer does for herself. At the beginning of the semester, there is little in Clare's responses about how an author writes for purposes beyond the author-centric purposes of writing as something you do for yourself.

#### Baseline Knowledge 1: Mid-Term

At mid-term, Clare's belief that writing is something primarily done for the writer endures. At the same time, however, what her responses in survey 2 suggest is that she's beginning to add new ideas about writing to her existing belief. She maintains her view that writing is about authorial expression and in an indication that she is perhaps taking seriously the course's emphasis on audience, she pushes back against that emphasis on audience: "I define writing as an expression of one's feelings. I don't believe it's always about another audience. I am more likely always my audience than any other person. An example would be my studying the Bible and writing down scriptures that pertain to my life (they all do). I write for myself most of the time to reflect on my own life and about my own life" (survey 2). When asked to define good writing, however, Clare now includes a role for the reader: "I would define good writing as pertaining to whichever audience I am writing to. And receiving a positive response" (survey 2). This slight movement in her definition suggests that she is incrementally altering her prior knowledge of writing while at the same time incorporating her own prior beliefs (writing as expression) with the new ones she is processing. Clare's development in her thinking seems to describe a process Yancey, Robertson and Taczak describe as "assemblage," wherein Clare is "grafting isolated bits of new knowledge onto a continuing schema of prior knowledge" (p.12). Clare, at this point in the semester, somewhat resembles their study participant Eugene, who held tightly to his prior understandings of writing despite the course offering new terms and strategies.

### Baseline Knowledge 1: End of Semester

In the final week of the semester, Clare's understanding of writing continues to evolve as a process of assemblage; she maintains her prior beliefs about writing while at the same time she integrates some of the concepts from the course. Her understanding of writing remains an "expression of one's self" (survey 3) and her definition of good writing extends her response from survey 2 in its emphasis on the idea of a reader and an effect: "...getting whomever to respond to what it is I am writing" (survey 3). For Clare in survey 3, good writing is all about "teaching, learning and persuading" (Survey 3). Here, she incorporates for the first time the idea of persuading, which was the course definition for rhetoric and also one of the concepts that Clare identified as part of the course. This response suggests that Clare's conception of the audience in writing was perhaps in part shaped by her exposure to the course concepts and rhetoric in particular.

Clare's movement towards seeing writing having more purposes beyond the author writing for herself is also evidenced in the way that Clare's description of her writing process changes from the beginning of the semester to the end of the semester. In survey 1, she wrote: "When I have to write something for class, I think out what I will write about before I write it. The skills I draw on are what I know and have already been taught." In survey 3, Clare's response is notably different and now includes a slightly more valued role for audience: "When I have to write something for class, I try to gather as much information possible. Whether it is from experience, books, Internet; my teachers or family. I tend to think from the opposite perspective. I have many opinions about different things, but in order to write an effective paper, I have to know what my audience wants to read" (survey 3). Without being asked about good writing or prompted to discuss audience in this question, Clare organizes her response around the idea of audience and her attempts to try and "think from the opposite perspective" and not just go off of her how own "opinions about different things." There seems to be a relatively high level of complexity in this response that suggests Clare is negotiating this new idea about audience; she might have her own opinions but she seems to know that she needs to consider the "opposite perspective" rather than go off her own views of what she should write.

Another data point that seems to corroborate the idea that Clare developed a greater awareness of writing for an audience is found in Clare's identification of the course concepts in survey 3. Two of the concepts in her response were explicitly about audience: "discourse community - jargon/genre/rhetoric purpose/good writing/thoughtfulness/audience" (survey 3). When asked to offer an example of any of

them, she notes: "An example of discourse community would be; A basketball player and a football player. They both play sport, but the jargon is completely different" (survey 3). This definition points to the idea that Clare understands how different groups of people are different because of their language, and she uses a course term, jargon, to describe their language. Her account here suggests that she has a relatively strong understanding of discourse community, an observation that is reinforced in her linking of the terms to the course purpose for learning them: "The purpose of learning these concepts was to help us be more aware of writing and not just know that because we have to write we're just going to spew out words that don't even go with specific audiences. We need to be more thoughtful of what we write and who we write to" (survey 3). Clare here links the five knowledge domains to one of their key pedagogical purposes in the course-good writing is developed as a result of knowing the discourse, or "words", that relate to the reader, or "that...go with specific audiences" (survey 3). The course concepts, Clare notes, were intended to form part of a new awareness of audience in the process of writing: "We need to be more thoughtful of what we write and who we write to" (survey 3). Lastly, another subtle indication that audience has come to occupy a role in Clare's thinking about writing is found in her response to the survey question about how she would help someone with writing: "If someone were to ask me for help in writing, I would definitely use what Andrew has taught me. The advice I'd give them would be to put themselves in whoever they're writing to's shoes and imagine what they would want to read if someone is writing to them" (survey 3).

What can be concluded from reading Clare's descriptions of writing, good writing, and her process over the semester is that the course has perhaps had a slight

impact on adding the new idea of writing for an audience to Clare's conception of writing. While Clare seemed to have brought into college a view of writing forged from prior experiences that led her to see writing as something an author does for herself, the transfer-centric course appeared to provide her with another way of thinking about writing that involved the idea that writing can also involve an author writing for her audience. This additional, more multi-dimensional view of writing might be operationally consequential in future writing situations in that Clare's thinking might focus on who she is writing for, understanding who they are, and identifying what kind of response she wants from them. In focusing on the reader and the reader's purpose, Clare is thus potentially more able to develop an effective text. The view of writing that Clare brought into the course organized around writing as a way of getting out your emotions is not wrong but it could be limiting; this view seemed to be the primary or only way that Clare thought about writing. What the course might have done is made more prominent and central in Clare's thinking that writing is also done for an audience, which ideally is knowledge she can generalize in the future.

## Baseline Knowledge 2: Thinking About Writing

The other area where Clare seems to have developed new knowledge is that there is evidence of a subtle increase in her understanding of the role that thinking plays in the writing process. The first place where evidence of Clare's sense of thinking is found is at the mid-term in survey 2, when she is asked what she feels she is learning in the course: "I am thinking more about thinking. Why am I doing, saying, and writing the things that I am doing, saying and writing. I think about these things because I would like to be much

more aware of what I have to say. I tend to read the things I write or take my times as I am writing more often now" (survey 2). Seven weeks later in survey 3, Clare's view that an author should think before writing is gradually amplified. The idea that a writer must pause and think as part of the writing process is threaded throughout four different responses to different survey questions. In response to a question about the course concepts Clare identifies "thoughtfulness" as one of them. When asked how she would describe herself as a writer, she notes, "I definitely am more cognizant about what I want to write" (survey 3). Her use of the term "more cognizant" suggests that she's aware of some kind of increase in her thinking when she writes. Her response here is relatively aligned with her response to the question about the course concepts she identified: "The purpose of learning these concepts was to help us be more aware of writing and not just know that because we have to write we're just going to spew out words that don't even go with specific audiences. We need to be more thoughtful of what we write and who we write to" (survey 3). Here, her ideas that the course was trying to help students "be more aware of writing" and "be more thoughtful." An added layer of complexity to her views about the place of thinking in the writing process emerges in survey 3 in that Clare appears to link thinking with audience. She states in the statement above that the course encouraged students to consider how they should be more "aware" in order to approach different audiences with different language. And that students should be "thoughtful" because being thoughtful enables a writer to know "who we write to."

## Conclusion for Baseline Knowledge for Clare

As a result of taking the transfer-centric course, Clare's understanding of writing has evolved in two gradual though perceptible areas. Clare left the course with a conception of writing that expanded to include the idea of writing for an audience and she developed a greater understanding of the importance of thinking in the composing process. Next, I look to see whether these two baseline knowledge areas or any inchoate knowledge is explicitly applied or implicitly propagated in her thinking as she negotiates new writing situations in semesters 2-7.

## Generalization: Application and Propagation

What emerges from an evaluation of Clare's thinking as she negotiates writing situations in semesters 2-7 is a nuanced and multi-directional portrait of generalization. Clare did not at any point explicitly apply any prior knowledge from semester 1 in any writing situations in semesters 2-7. There is only one example of Clare implicitly propagating audience knowledge, which occurred in an email she wrote in semester 7 to inquire about being a fashion intern. Yet while Clare doesn't appear to explicitly apply prior knowledge at all, and only once appears to implicitly propagate audience knowledge, there is some evidence that she is propagating her understanding of audience from semester 1 in what I describe as her general thinking about writing. Her general thinking about writing is comprised of her views and beliefs about writing that are not specifically attached to a discrete writing situation.

### Implicit Propagation Example 1

In semester 7, Clare wrote an email to a woman from her church in order to see if she could potentially work for her as a fashion intern. In her thinking involved in writing this text, what appears to occur is that Clare is implicitly propagating her semester 1 knowledge of audience. Looking at this example through the three propagation elements helps to further illuminate what is going on in terms of propagation.

### Example 1 Propagation Element 1: Knowledge Similarity

The element of *knowledge similarity* addresses the question of how Clare's audience knowledge from semester 1 could be the same as the knowledge she propagates in semester 7. What an analysis reveals is that this example would be a category 2, given how closely aligned Clare's semester 1 knowledge is to the knowledge from semester 7.

In one example of that baseline knowledge from semester 1, Clare wrote that if she were giving advice to someone about writing, she would tell them to "put themselves in whoever they're writing to's shoes and imagine what they would want to read if someone is writing to them" (survey 3). In relatively significant and sophisticated ways, Clare seems to enact this semester 1 idea of thinking from someone else's perspective in semester 7 as part of her negotiation of writing the email. As the analysis below reveals, Clare's decisions about what she should say in her email and how she should structure the email were based on her consideration of her audience's potential interpretations of the email and what Clare though her audience needed.

In her opening sentence of the email, Clare writes, "Hi (name redacted), I'm not sure if you remember me or not, but I'm the one who has the little boy, (name redacted), who used to attend the Smith School, and the one who asked you about your [fashion

school] journey a while ago" (email semester 7). When I asked Clare why she started the email with this sentence, she responded: "I'm trying to jog her memory. I didn't think she'd remember me, I hadn't been to church...You know how some people can't remember a name but not the face or a name but not the face I usually throw (her son's name) in there cause everybody knows (her son)." In another sentence at the beginning of the email, Clare wrote, "Last semester, I took a fashion merchandising class and I really enjoyed it. Now, I know class isn't the same as the real world" (email semester 7). When I asked Clare why she wrote the part acknowledging that class isn't same as the real world, she explained that in her course she had learned just the basics about fashion merchandising and she didn't get the real experience of putting clothes on mannequins and creating windows. Clare noted that she was aware that her audience might think that she was a bit naïve or wrong to think that a fashion course was the same as actually working in fashion because her audience "goes to wholesalers to find clothes so she can broadcast them on her website" which Clare explains is a lot different than just taking a course in fashion. Clare's phrase "Now, I know that school" was written as a way of anticipating her reader's response to the previous sentence, "I took a fashion merchandising course." The level of sophistication involved in the depth of thought in writing this part of the email seems to suggest that Clare was propagating her semester 1 idea that students should leave the transfer-centric course knowing they needed "to be more thoughtful of what we write and who we write to" (survey 3) and that writers shouldn't "spew out words that don't even go with specific audiences" (survey 3). In one way, "specific" seems like an apt way to characterize Clare's entire approach to writing this short but still important email. Her email was tailored in unique ways for her

audience. Lastly, another example of her thinking with audience knowledge occurs when she conveys how her tone reflects a sensitivity to the ethical dimensions of how her reader might interpret her email: "I kept it at a friendly tone so she can know I'm coming from a genuine place and not really trying to steal her ideas...you know how people do that how people come in and take people's ideas" (semester 7 interview).

### Example 1 Propagation Element 2: Knowledge Influence

Clare's understanding of audience seems to permeate her thinking as she composes this email. As a result, this example is a category 2 for *knowledge influence*. That is: Clare's thinking about the woman she was writing to, and what she needed was not peripheral but central to her composition of the text (an intention I associate with category 2 in the analysis). In crafting each sentence Clare seems to consider to how her reader might interpret the sentence, which points to the idea that her audience knowledge is orienting her thinking and negotiation of the writing situation. It is not just the breadth of her thinking about the reader but also the depth; she could articulate and explain the logic behind her choices in relatively complex ways. For these reasons, this example is a category 2 for *knowledge influence*.

## Example 2 Propagation Element 3: Knowledge Frequency

The knowledge frequency element helps situate this example of propagation within the larger context of the study to see if this propagation was an outlier or was in fact part of a broader set of examples of propagation. Clare did not appear to propagate audience knowledge in any other writing situations as she did for the fashion intern email, which means this example is a category 1 for *knowledge frequency*. However, that Clare did not appear to propagate audience knowledge again in any other writing situation does not mean that audience knowledge wasn't operating in any way at all in her thinking. Rather, Clare did seem to be continuing her belief of the importance of audience in her general thinking about writing though she did this in contradictory ways. Next, I explore what this propagation of audience knowledge in her thinking looked like over semesters 2-7 and where it is and isn't found.

## Knowledge Propagation in General Thinking

Studying Clare's general thinking about writing over semesters 2-7, I observed that her baseline knowledge about audience from semester 1 appeared to percolate in uneven and contradictory ways. I didn't find any clear examples of Clare propagating this audience knowledge in her thinking as she negotiated writing situations beyond the example of the fashion intern email above. I did, however, find that Clare seemed to be continuing her prior knowledge of audience in what I call her general thinking about writing. General thinking about writing refers to Clare's description of her ideas about writing not specifically attached to a writing situation. As discussed in the methods section, I asked questions in the interviews with the goal of learning as much as possible about Clare's thinking around a writing situation and her broader thinking about writing over semesters 2-7. I wanted to know what she was thinking about writing even if it wasn't attached to a writing situation so I asked her questions like "What advice would you give to someone about writing?" and "How would you compare the writing you did in high school to the writing in college?" While the depth and breadth of her responses varied, most of her responses were not data-rich enough to apply to the framework. However, her reflection of her general thinking remains important enough for some discussion and analysis because it offers a expanded view into how prior knowledge might be operating in her thinking outside of a specific writing situation.

An illustration of Clare's propagation of audience knowledge in her general thinking is found in semester 2 when I asked Clare to list the top things she thought about when she was writing. She noted that audience was first, and noted "Audience...writing to a professor and writing to an admission office is completely different" (semester 2 interview). This example reveals the propagation of Clare's idea that writing is situated, which corresponds with her statement from semester 1 that good writers shouldn't "spew out words that don't even go with specific audiences" (survey 3). Another example of propagating audience knowledge is found in her description of writing a cover letter in semester 3: "Like for the cover letters even though they don't tell you what to write you know who your audience is...The hiring agent, so you can't talk about your life. You have to talk about the company" (semester 3 interview). When I asked what she would say to the company, her response does suggest that she is thinking about adapting the cover letter to the specific company: "I don't know, I know it has to do with whatever company" (semester 3 interview).

Clare's understanding of audience also appears to be reflected in how she talks about Twitter. When I asked her about her Twitter usage, her response seems to indicate that audience orients her thinking: "My Twitter followers consist of friends I went to high school with. Some of them are Christian leaders I have to be careful what I say. Some of

them are people I met at church I have to be careful what I say." Here, Clare's thinking as she negotiates tweeting seems to reflect an awareness of her reader. Her next statement also reveals she's aware of multiple kinds of Twitter audiences: "Yeah I have to be more careful...They're watching me and I don't want them to look at me different...You're being watched, with employers and stuff" (semester 3 interview). Her use and linking of the terms "careful" and audience here seems in some sense to be a conceptual echo of her statement in semester 1 that the course goal was to get students to "to be more thoughtful of what we write and who we write to" (survey 3). While these examples of her continuing her ideas about audience are not part of her thinking in a particular writing situation, they nevertheless offer some indication of what kind of knowledge she is propagating about writing even if it is not employed in a particular writing situation.

#### Inconsistent Audience Knowledge Propagation

While these examples suggest that Clare does advance her beliefs from semester 1 that the audience is important when writing a text, there are contradictory examples that seem to suggest that Clare's propagation of audience knowledge isn't necessarily consistent. The first example of this inconsistency is found in semester 3 when Clare describes being asked to write an essay in order to be accepted into a women's group that will travel to Washington DC. Here, Clare seems to propagate her author-centric view of writing that she brought into the transfer-centric course in semester 1:

A: What were you thinking about (as you were writing this)?

C: To write from the heart, yeah...Um in the beginning there are the questions they ask and then I just wrote after...

A: (reading text out loud) I intend on changing the world...like God's help

C: Yeah

A: Who's the audience for this?

C: It was umm, I don't know. Do you know [woman]...she just sent me the email...I don't know who the audience is. I think it's some type of committee.

Clare apparently composed the essay without really taking into consideration her reader, which is reflected in her response that she didn't know who the audience was. In not knowing who the audience was, Clare's statement that she was writing "from the heart" echoes her belief early in semester 1 that she writes "so nothing will be left out" (survey 1). In the essay Clare wrote about "changing the world" and "God's help" without really considering whom her audience was or whether they'd find these kinds of ideas compelling. This writing without thinking of audience contrasts greatly with the thoughtful and audience-driven approach she took in composing the fashion intern email in semester 7.

Another example of the contradictory nature of Clare's propagation of audience knowledge is found in semester 4 when she is discussing a cover letter. Earlier in

semester 3, Clare had noted that a writer needs to know who her audience is when she writes a cover letter and that audience will be different depending on the company. Here in semester 4, however, in a discussion about cover letters Clare states that in doing a cover letter for different companies she would send the same cover letter to each company and "just change the company name" (semester 5). In this example, Clare seems not to draw upon her knowledge of audience in her thinking that she doesn't need to tailor each cover letter to a particular company. It is these examples of Clare's lack of audience knowledge propagation that complicate developing a simple or monolithic portrait of how Clare does or does not generalize prior knowledge.

### Personal Connections: Perceptions

As has been discussed before, part of the present study's expanded conceptualization of transfer involves looking also at how the way Clare perceives writing situations and how she assigns value to writing situations might influence any potential knowledge generalization. One important perception that I observed was that Clare's primary perception of her writing assignments in college courses was that she was "following directions". This view dominated how she understood writing assignments, and as I discuss below, has potential implications for generalization.

One of the first examples of this perception is found when Clare discusses how she is negotiating a sociology paper in semester 3. When I asked her about her thinking Clare twice repeats the statement, "I just followed the directions": A: How did you even think about the intro (for the paper)?

C: I just wanted to introduce what I was going to talk about...Then put my question... I just followed the directions.

Clare restated this idea again when I asked her about the audience for the lit review:

A: When you are writing it are you thinking of who's going to be reading it?

C: No I didn't.... [I] just write it according to his directions.

Later on in the interview Clare continues to describe what she did to complete the assignment: "Get the information and then summarize it. You don't really put thought into it, like in my literature review I didn't put thought into it. I just took info from the articles and then wrote it" (semester 3). Her view that the assignment doesn't require her to think but instead just do what she's asked to do is also found in her description of her approach to writing assignment in her fashion class in semester 5: "I just went off of what she was looking for in the syllabus. I just followed what she wrote" (semester 5 interview).

That Clare sees writing situations in her classes primarily as requiring her to "follow the directions" has some potential implications for generalization. One involves a potential misalignment between the semester 1 course curriculum and Clare's actual writing situations. The transfer-centric course introduced students to the five knowledge domains and a situated view of writing. One of those knowledge domains, for example, involves the idea that texts are genres with particular features and purposes. This knowledge of genre might not find much congruence with the kinds of texts Clare believes she is being asked to write; rather than perceiving the writing assignment as a genre, it seems that Clare sees the writing assignment as another set of instructions that need to be followed. She herself suggests that she doesn't do much thinking outside of what's required in the directions when she notes, "You don't really put thought into it" (semester 5 interview).

## Personal Connections: Valuing of the Writing Assignment

In addition to looking for the perceptions that Clare makes of writing situations, I also looked at how Clare imputed personal value and meaning to writing situations. While it's not entirely clear whether Clare did or did not generalize because of how invested she was in a writing task, what is clear is that her investment in the task can play a role in how she thinks about a writing situation.

One of the most visible places where this issue of personal valuing became evident was in semester 4. Clare's response to a question about how she views herself as a writer in college illustrates the idea that Clare's approach to a writing situation can be determined by whether she feels she is doing it for herself:

C: Based off of my grades I'm pretty sufficient. I feel like I've done pretty well. Probably not as good as if I was doing it for my satisfaction. Or like because I actually want to write it and not because I have to write it." A: If you actually wanted to write it, how would it be different?

C: I would make an outline I know that.

Here, Clare's note that she would "make an outline" suggests that she doesn't approach every writing situation in the same way. Her statement that she would make an outline if she were writing a text for herself points to the idea that Clare will expend more energy on a writing task if she feels as though she's doing it for her own "satisfaction." Her thinking about a writing situation will be influenced by the kind of value Clare assigns to it.

Clare extends this view that her personal valuing of the academic context determines how she approaches the academic task in her description of her biochemistry course in semester 4. She notes that she didn't really value the course, nor did she really learn anything, because it didn't matter for her major: "We weren't really like retaining the information. Unless you were a biochem major like someone was in the class. And he knew everything because that was what he was learning. But for me...I'm just trying to get the right answer and pass the class I took the class because I needed that because I was going to transfer..." (semester 4 interview). While these are only two examples, they are in many ways representative of how Clare generally viewed academic writing tasks.

A key implication is that how Clare values the writing task might shape the potential for generalization. Clare makes it clear that if she finds a writing task important she will create an outline for it, which suggests that she adapts her approach to writing

based on how much she values the task. In light of this, that Clare did not generalize prior knowledge from semester 1 more frequently in semesters 2-7 is not necessarily because she didn't learn anything in semester 1. Rather, Clare's inability to find academic writing assignments meaningful might be one key variable that illuminates the lack of significant generalization.

### Conclusion: Clare and Generalization

As has been articulated, an examination of Clare's learning in semester 1 and her subsequent negotiation of writing situation in semester 2-7 reveals a layered and at times contradictory portrait of writing. In semester 1, Clare seemed to develop new knowledge about writing in two areas. She added to her existing understanding of writing an increased understanding of audience and she saw the importance of being thoughtful in writing. Clare did not appear to explicitly apply these two knowledge areas, or any other knowledge from semester 1, in her thinking as she negotiated new writing situations in semesters 2-7. There is, however, some evidence that Clare implicitly propagated audience knowledge in a fashion intern email she wrote in semester 7. Additionally, Clare does seem to continue her audience knowledge in her general thinking about writing over semesters 2-7, although she continues this knowledge in inconsistent and often contradictory ways.

The role that personal connections have in whether or not Clare generalized knowledge from semester 1 is not entirely clear. Given, however, that Clare didn't really feel that she had to do any thinking when she was following the directions of a writing assignment, it is perhaps likely that Clare didn't feel the need, conscious or otherwise, to

bring to bear all of her writing knowledge to the task. Additionally, Clare did not really seem to value any of the writing tasks she encountered in college, which perhaps can be attributed to the idea that Clare was never really sure she wanted to be in college in the first place. She never settled on a major and she attended three different institutions in semesters 2-6. In semester 6 she dropped out of college entirely. Finding evidence of generalization in the experience of a student like Clare might be tough given her reluctance to fully invest in her classes and her inability to find a major. One general conclusion that can be drawn is that it is perhaps not entirely accurate to say that Clare didn't generalize prior knowledge, but rather that the environment, as perceived by Clare, did not create conditions under which Clare would generalize prior knowledge.

## Chapter 7: Discussion and Conclusion

This dissertation attempts to participate in a century long conversation around the question of how individuals use and apply knowledge across different sites. As has been discussed, tracing the evolution of transfer research from its early roots in Thorndike and Judd, to the cognitive studies of the mid to late 19<sup>th</sup> century, and more recently the sociocultural approach is revealing. Transfer research has changed in relatively significant ways from the "mental muscle" approach of Thorndike, yet many of the underlying issues and questions persist. In the present study, I tried to both address and explore some of these lingering questions in several different ways. One way is that I reconceptualized transfer as generalization, which is both the explicit application and implicit propagation of prior knowledge. This expanded definition responds to Bransford and Schwartz's (1999) insight that "prevailing theories and methods of measuring transfer work well for studying full-blown expertise, but they represent too blunt an instrument for studying the smaller changes in learning that lead to the development of

expertise. New theories and measures of transfer are required" (p.7). Extending their idea, I wanted to look both more broadly for knowledge application and propagation and at the same time attempt to capture the incremental, nuanced, and subtle forms of generalization that might occur. I looked for explicit application of knowledge in the form of the explicit, self-aware use of prior knowledge. Studying implicit propagation involved drawing upon Broudy's (1977) theory of interpretive knowledge, which involves the idea that we know with prior knowledge in ways that aren't entirely conscious, visible, or explicit. Given the complexity of this expanded conceptualization of transfer, I developed a generalization framework as a way of more clearly refining and articulating my definition in addition to what that definition would look like in Clare and Sara's thinking.

Together, three framework elements help answer the questions about the nature of transfer as it might be observed in this study: *knowledge similarity, knowledge influence*, and *knowledge frequency*. Looking at knowledge similarity in generalization is a way of making visible the grounds for calling something transfer. *Knowledge similarity* addresses the question of how alike the generalized knowledge and the prior knowledge are and how is that like-ness expressed. Given that transfer researchers are interested in not simply knowing if transfer happens but also what kind of impact that transferred knowledge has, the framework includes the *knowledge influence* element. Examining any evidence of generalization through knowledge influence is a way of addressing what kind of impact and force the knowledge has within Clare and Sara's thinking about a writing situation. *Knowledge frequency* foregrounds what the kinds of consistency and durability a particular kind of generalization might have and helps determine whether a potential example of propagated audience knowledge is one-time occurrence or whether it happens

frequently. The generalization framework helps make explicit my expanded view of transfer as the explicit application and implicit propagation of prior knowledge as well as outline key elements that help attempt to discern the nature of transfer within this study

In addition to the generalization framework, I drew upon Lobato's (2006; 2012) actor-oriented perspective in an attempt to understand of how Clare and Sara were experiencing the writing situations over semesters 2-7 from their point of view. Specifically, I wanted to see what kinds of perceptions they had of these writing tasks and what they believed they were being asked to do. Additionally, I wanted to know what kinds of personal value and meaning they assigned to these writing situations.

Together, the generalization framework and the accounts of Clare's and Sara's personal connections help me address my three research questions. In the beginning of this chapter, I explore some of the implications from my findings from research questions 1 and 2:

1) What do students learn about writing over one semester in a transfer-focused FYW course whose curriculum focuses on WAW and Beaufort's (2007) five-knowledge domains (semester I)?

2) Given that these five knowledge domains and a more situated understanding of writing are supposed to help students negotiate writing tasks in college, is there any evidence that the students generalized their knowledge from semester 1 in their thinking as they negotiated writing situations in semester 2-7?

In the last part of this chapter, I link my analysis of these two questions to the final research question:

3) Does this longitudinal study of students' perceptions and approaches to writing provide insight into the nature of transfer between FYW courses and subsequent writing tasks?

Findings from the first question suggest that Clare and Sara did both develop some new knowledge about writing as a result of taking the transfer-centric semester 1 course. Clare brought into the class the view that writing is something a writer does for herself as a way of working through emotions: "People always told me to write out everything, and that I cannot hold everything in my mind forever" (survey 1). Interestingly, over the semester Clare did not necessarily reject or give up this view of writing. Rather, her idea that writing was something she did for herself would by the end of the semester co-exist with the audience-driven idea of writing she developed over the course. This view is expressed in her response to a survey question about the purpose of the course: "to help us be more aware of writing and not just know that because we have to write we're just going to spew out words that don't even go with specific audiences. We need to be more thoughtful of what we write and who we write to" (survey 3). Clare's statement and her note that the course encouraged students to be "thoughtful" overlaps with the second area of knowledge that Clare developed, which is her idea that

it's important to "think" and be aware when you are writing; specifically, Clare believed that a good writer should "think" of what she is writing and who she is writing to.

Sara too developed new knowledge of writing as a result of taking the course. Her initial view of writing was organized around the idea that the primary purpose for writing was to connect with a reader on an emotional level. Sara expresses this view in her response to a question about her best piece of writing, stating that this text was good because it was "emotional and kept the reader interested" (survey 1). By the end of the course, Sara had developed the idea that writing could be about more than touching the audience's emotions; she stated that the purpose of the course was to "get us to see all the different types of writing that goes on in our world and the different ways writing could be used for" (survey 3). In addition to seeing the various ways that writing works and what it can do, there is also evidence that Sara developed a greater and more sophisticated understanding of the role of audience by the end of the semester.

In terms of the second inquiry—did Clare and Sara generalize this semester 1 knowledge in their thinking as they negotiated new writing situations over semesters 2-7 the —the results are more idiosyncratic and layered. Clare did at times appear to implicitly propagate audience knowledge—once in a networking e-mail and other times in her general thinking—but in general this audience propagation was inconsistent. Sara did implicitly propagate audience knowledge in three different writing situations as well as explicitly apply prior process knowledge once. Additionally, she seemed at times to implicitly propagate a complex integration of her audience and process knowledge as a way of negotiating academic writing situations.

While these examples illustrate the idea that Clare and Sara did at times generalize, the broader conclusion can be made that there was not any significant generalization of knowledge from semester 1 observed. Clare never explicitly applied prior knowledge from semester 1. Sara only once referred to the course in her thinking as she wrote in semesters 2-7. While there is some evidence of implicit propagation, it is fair to say that it is surprising that how little there is despite both subjects' identification of several of the five knowledge domains and expression of a situated understanding of writing at the end of semester 1. In her genre analysis written during semester 1, for example, Clare, threaded two course concepts into an explanation of how writing works: "In order for the writer to write well, they need to know who they are writing for, what the person or people are looking for and how to write it (discourse community), in order to garner a favorable response, they need to write in a way that is compelling to the readers and will change their minds or get them thinking (rhetoric) and finally, the writer needs to differentiate where his or her writing will be going to" (genre analysis). Yet despite Clare being able to describe how a writer should think and act upon ideas of discourse community and rhetoric when taking on a writing situation, it doesn't appear that Clare generalized that idea over semesters 2-7.

While there are likely multiple factors at play in why Clare and Sara did not more frequently explicitly apply or implicitly propagate prior knowledge, I organize my interpretation around the analysis of two potential explanations: one, the failure of the initial learning site (the FYW course) to support generalization, and two, the environment and its lack of affordances for Clare and Sara to need to generalize.

### Factor 1: Failure of Initial Learning Site

One plausible reason that could perhaps explain why there was not more evidence of generalization is that the initial learning site, the transfer-centric writing course, didn't in fact help Clare and Sara develop knowledge that could be generalized. Chi and VanLehn (2012) describe this kind of interpretation of the lack of generalization as the "lacking-deep-initial-learning hypothesis" (p.179). Chi and VanLehn note that while there are multiple ways that deep learning can be defined, its core quality is that it involves developing the ability to see underlying structures and relationships in phenomena that cannot be directly perceived (p.179). For example, a student of literature could be said to have developed deep knowledge if she is able to discern the interrelationship of various narrative elements like plot, characters, setting, and structure. In contrast, a student who has developed shallow or surface knowledge would only be able to identify those visible elements like plot and setting. She wouldn't be able to see or identify the deeper, less explicit structural relationships underneath the story. Chi and VanLehn conclude that there is a relatively clear link between the initial learning site and future transfer, noting, "there is general agreement among researchers that failure-totransfer reflects a lack of deep initial learning, and there is evidence to show directly that deeper initial learning leads to greater transfer" (p.180).

Whether Clare and Sara's lack of generalization be explained through Chi and VanLehn's "lacking-deep-initial-learning hypothesis," though, is hard to say. On the one hand, the study surveys were in many ways designed with the goal of attempting to capture both surface and deep knowledge. Specifically, a set of questions addressing the course concepts was sequenced in an attempt to make visible the nature of Clare and

Sara's potential knowledge. Looking at one example of Sara's survey responses to these questions as an illustration is helpful. Sara's responses to these questions do not seem to reflect mere surface knowledge but suggest that her knowledge is perhaps somewhere in the middle range between surface and deep understanding.

# What concepts or ideas were you introduced to in this class?

Throughout this course I was introduced to a lot of new concepts/ideas such as rhetoric and discourse community. There was a lot of time spent discussing and going over what these two ideas are so I now have a good understanding of them.

### How would you define these concepts?

I would define rhetoric as the purpose of the specific writing. What are you trying to get the audience to understand? I would define discourse community as a certain type of language pertaining to a specific group.

### Can you give examples of these concepts?

An example of rhetoric could be anything. The most simple example is an advertisement of some sort. The purpose of the advertisement is to convince the audience to buy their product. An example of a discourse community is the language that car repair employees have. They have a certain type of talking that a librarian wouldn't know because he/she isn't a part of that discourse community.

### What was the purpose of learning these concepts?

The purpose of learning these concepts was to get us to see all the different types of writing that goes on in our world and the different ways writing could be used for.

From these responses, it would seem that Sara can identify, define, and explain a few of the course concepts. Were she only able to identify the concept and define rhetoric and discourse community it would perhaps indicate that she had only a surface understanding of the concepts. Her definition of discourse community in particular, however, suggests that she is perhaps beginning to see the relationship between language, communities, and the inability of outsiders to understand that language. Yet, what is not entirely conclusive is whether Sara's knowledge is deep enough that it can be generalized in future situations. Moreover, it is hard to determine what would constitute a valid notion of "deep enough."

There are a few key conclusions to be drawn from the idea that Clare and Sara didn't generalize more frequently because they didn't develop deep knowledge in the semester 1 course. One is that the course could have done more to increase the likelihood that "students initial learning of the relevant content was successful enough to provide a substantive basis for them to have transferred what they learned to new contexts" (Engle, 2006, p.253). The course could have done this by taking into deeper consideration what Salomon and Perkins (2012) call "motivated reflective mindful processing" (p.256) which is a way of encouraging students to thread their understanding of subject matter back and forth in ways that supports deep learning. Generalization, they contend, is more

likely to occur when the initial learning site encourages students to develop inquiry-based dispositions to knowledge and a willingness to embrace the often confusing and slow nature of developing answers to challenging problems. Moreover, Salomon and Perkins suggest students should be given opportunities to "explore and construct their own understandings of topics before exposure to standard explanations" (p.256). It is fair to say that the semester 1 course may not have provided students ample opportunities to consider and develop their own questions nor work on a particular idea or question over a prolonged period of time. The literacy case study did encourage students to come up with their own observations from their interviews about learning and writing. Yet there was evidence that in their conclusions that students might have been parroting the broader ideas around literacy that had been discussed-literacy was situated and complex. As such, they were perhaps able to identify particular surface elements of literacy but not actually able to see in a meaningful way the deeper web of interactions within which literacy occurs. Moreover, the idea that "standard explanations" should be delayed until students can come up with their own is a pedagogical idea that was not used that effectively in this course. The final genre analysis assignment could be said to have given students the central conclusion of the assignment -the texts looked so different because they were composed for different discourse communities. Students only had to point to evidence that supported the pre-determined idea that writing choices were shaped by the audience's need and this might have limited the depth of their learning in the assignment.

While clearly there are many ways that the design of the semester 1 course could be revamped to potentially support generalization, there are also alternative explanations of the semester 1 writing course that might illuminate why there was little evidence of

generalization. Rather than a failure of the semester 1 course, it could be said that there is a failure of expectations for that course. That is, overemphasizing the influence of the first-year writing course's role in generalization is akin to what Beach's (1998) critiques as a launch-model theory of transfer; a learning experience like a writing course is presumed to catapult a student into future tasks. One result of this overemphasis on the launch-effect of the writing course is that it is presumed that multiple factors beyond the initial learning site-new writing experiences, future courses, and professor interactions—play no role in whether or not future generalization occurs. In the launch model, the initial learning experience is solely responsible for future learning. The problems of the launch model suggest that rather than a complete overhaul of the writing course what is perhaps needed is a recalibration of expectations around the kind of influence one semester of writing instruction can have on students' future negotiation of writing situations. Sara and Clare took two more writing courses beyond the semester 1 writing course. It is not entirely clear whether any of the writing assignments or their lectures and feedback from their professors about writing supported, neutralized, or discouraged any of the ideas they learned in semester 1. Nonetheless, it is fair to say these writing courses and other experiences with writing likely had some effect on what Clare and Sara believed about writing. As Brent (2012) argues, "we as writing teachers are not the sole and perhaps not even the main source of students' rhetorical education" (p.588). Anson (2016) extends Brent's idea in suggesting that a writing course alone cannot bear the weight of all future transfer:

We can't expect students to effortlessly and uniformly transfer writing ability just because a foundational course has introduced them to process knowledge or audience analysis or metastrategies for analyzing their context. Adaptation and success require continued situated practice and gradual enculturation. These processes often take place mostly tacitly, but clearly it helps novices to receive the kind of mentoring that is sensitive to individual knowledge and experience as well as considerations of linguistic diversity, identity, and learning styles. (p.541)

Anson underlines a key point within transfer research: generalization is likely to be shaped by the degree to which students' writing knowledge is cultivated by "continued situated practice and gradual enculturation" (p.541). His view here that the environment should be considered in whether or not a writing course supports future generalization forms the central idea that is explored in the next section.

### Factor 2: Role of Environment in Transfer

Anson is clearly not the first writing studies scholar to suggest that writing transfer can be significantly shaped by the environment and context. This observation has also been made by Wardle (2007) who found in her own study that students did indeed learn about writing in her FYW course but did not generalize that learning because the "activities of schooling...did not routinely encourage or require students to generalize the writing skills and knowledge gained in FYW" (p.76) She concludes that "neither the writing tasks in other courses nor the structures of the larger activity system of the university provided the necessary affordances for generalization" (p.76). Both Anson and Wardle illuminate the idea that the lack of generalization in this study could be that the

tasks, courses, interactions, and overall system of higher education didn't support Clare and Sara's generalization from the semester 1 writing course.

That the tasks, courses, and environment could be influential factors in generalization is why I chose to take an actor-oriented perspective and capture accounts of the personal connections Clare and Sara construction of the writing situations. In particular, I wanted to develop understandings of how Clare and Sara perceived the writing situations and what kinds of personal investment they had in them. Doing so meant that I'd be able to at least try and see what the various aspects of the environment like task, course, professor, major, and college meant for Clare and Sara from their perspective. One way to begin to approach this question of the role of context is to look at Clare and Sara's personal connections through the lens of sociocultural conceptualizations of learning. Lave and Wenger's (1988) theory of communities of practice (CoP) offers a way of examining the interaction of the environment on knowledge and learning. Their theory is built on the premise that learning and knowledge are embedded in cultural practices (Hoadley, 2008, p.288). A corollary belief in CoP is that learning occurs as the result of legitimate peripheral participation in these communities of practice; individuals join and partake in the activities and functions of a group and slowly begin to develop the ideas and knowledge bound up in the group's activities. Lastly, a key aspect of communities of practice is also its novice/expert dimension and the idea that a novice enters the community and learns by participating and acting alongside a more knowledgeable community member.

Looking at Clare's and Sara's experience from the perspective of communities of practice theory also attests to the ways that the degree of meaningful participation in

social organizations might shape generalization. There is little evidence to suggest that Clare or Sara ever truly participated in any specific communities of practice in any meaningful or enduring way. Clare transitioned majors multiple times; she entered college as a nursing major, switched to communications, considered fashion at a junior college and then dropped out entirely. She never described being a member of or participating within any of these majors. In fact, the opposite was true. Clare seemed to often feel that a course was decidedly not her community as illustrated in her statement about her biochemistry class in semester 4: "I'm just trying to get the right answer and pass the class I took the class because I needed that because I was going to transfer" (semester 4 interview). Clare appears to illustrate the inverse of Lave and Wenger's CoP theory, which is that learning is less likely to occur outside of a community of practice: "We weren't really like retaining the information. Unless you were a biochem major like someone was in the class" (semester 4 interview). And in terms of legitimate peripheral participation and working alongside a more knowledgeable member, Clare never reported meeting with any professors and only rarely did she indicate that she had e-mailed a professor.

The key idea is that Clare's college experience seemed to occur *outside* of any community of practice. It could be argued that Clare rarely generalized prior knowledge when she took on writing situations because she was not invested in the writing situation or the larger system of college within which that writing task existed. It is perhaps inaccurate to say that Clare failed to generalize discourse community; instead, it is that Clare didn't generalize discourse community knowledge because she was pragmatically

responding to her perception of the environment and she didn't see anything that resembled the discourse communities that we discussed in semester 1.

It is interesting that the only example of Clare appearing to implicitly propagate prior knowledge occurred when she was writing the networking e-mail within a community of practice that she felt invested in-her church. Throughout the interviews in semesters 2-7 it was clear that Clare was attached to and felt a part of her church. She was familiar with the people of her church but also knew her fellow church members valued and believed. This became apparent when she described her Twitter usage: "Some of them are people I met at church I have to be careful what I say" (semester 3 interview). Clare had been enculturated into her church community and perceived an affordance; one of the other members of the church had a fashion business and Clare realized she could contact her in order to try and work for her. There are in a sense two communities of practice overlapping here—one is the church community and the other is the fashion industry. However, Clare's meaningful participation in the church community of practice significantly shaped her reasons for writing the e-mail as well as words missing here why she felt it was worth investing significant energy. Clare knew her audience and was comfortable writing to her fellow church member because she too was a church member. In light of her sense of belonging, and her belief that this was a meaningful text, Clare appeared to implicitly propagate audience knowledge to compose the fashion intern email. In contrast, interviews Clare's statements around her academic writing never reflected that she experienced this same kind of connection and sense of belonging with her classmates or her professors. This lack of connection to a community, the paucity of dialogue with classmates and professors, and doubts about whether she wanted to be in

college all appear to viable reasons that help throw light on why Clare didn't generalize in any significant way.

In contrast, looking at Sara's experience through lens of CoP reveals that while she in some sense struggled to find a specific major she nonetheless exhibited a greater sense of belonging as a student of college, which could be considered its own community of practice in its own right. Sara's sense of belonging is evident in several different ways, but it is most prominent in her repeated willingness to engage and interact with her professors and other college resources like the writing center. Sara appeared to generalize an integration of audience and process knowledge as part of her approach to academic writing situations. One reason she might have generalized more frequently than Clare is that because she repeatedly saw that her approach to writing situations was successful; Sara met with her professors, asked them for feedback, and the result was that she consistently received A grades in her courses. The aggregate effect of these successful writing situations is that for Sara the strong grades she received continuously affirmed her sense of belonging within the college community of practice and thus encouraged her to repeat that approach.

A general conclusion that can be drawn is that environment does appear to influence generalization but that influence isn't monolithic or uniform across individuals. Clare and Sara went to the same college for the first two years yet they both had significantly different experiences in that college. Clare seemed to never fully engage or participate as a student within the community of practice of college while Sara from the very beginning appeared to perceive herself as a member. What Clare and Sara's experiences reveal is that there is no objective way of understanding the role of social

affordances within environment in regards to generalization. Through Beach's lens of consequential transitions, which involves the idea that an individual is more likely to generalize if the individual perceives the environment as important for her identity, what emerges is that Sara's entire experience in college was in many ways a consequential transition. She felt like a member of the community of practice of college, she interacted with faculty, and as a result she did at times appear to generalize prior knowledge on academic tasks. In contrast, for Clare college could be said to have been an inconsequential transition; she never really found her writing tasks or courses to be important for her identity or who she wanted to be. In contrast, the e-mail she wrote to her fellow church member does appear to be part of what Beach would characterize as a consequential transition. Clare wanted to become a fashion intern and within this transition Clare did appear to implicitly propagate prior knowledge of audience.

#### Moving forward: Studying Generalizable Knowledge in FYW

As noted in chapter 2, there is a body of research on curricula informed by the idea that a FYW course should be designed to facilitate transfer. This literature and the curricula it describes is based on the premise that an FYW course can provide students with knowledge about writing that they would then transfer to new writing tasks beyond the FYW course. The writing course in the present study was designed to facilitate transfer by helping students develop generative understandings of what writing is and how it works. Ideally, they would then generalize this knowledge of writing in their thinking in future situations. The five knowledge domains –discourse community, rhetoric, genre, subject matter and process—were introduced to students as a way of

giving them conceptual tools for interpreting writing situations; who am I writing to, what do they value, what kinds of topics do they generally write about, how do I persuade them, how should I plan out my writing? In their final assignment, students examined two genres –a newspaper editorial and an academic article—using the five knowledge domains as a way of seeing how they can open up texts and reveal the relationship between how something is written, the author, and the audience.

What is unclear, however -- despite the data collected from three surveys -- is whether the course supported any conceptual change in students that could be characterized as deep, enduring, and supportive of generalizable. What does it mean to develop knowledge that is generalizable, and how would it be clear that students have developed generalizable knowledge?

One way to approach this question is through methodology. In the previous section, I discussed how the course could have included more deliberate transfersupporting elements as a way of increasing the likelihood that future generalization could happen. Here, I discuss the methodological dimensions of developing rich ways of identifying what was actually learned. I developed this idea as a result of seeing that there might perhaps be some disconnect between what Clare and Sara reported as learning in the surveys and whether what they reported is actually the knowledge that would inform their thinking when they approached new writing situations.

Future research could attempt to more clearly identify how a student "reads" a writing situation when she enters the class. Then, after taking the class, the student would be asked to read a similar writing situation at the end of the semester and be prompted to explain her thinking and logic. The writing situation given to students at the beginning

and end of the semester wouldn't be a writing task. Rather, it could be a clearly articulated set of scenarios some of which involve situations where writing appears to work and others where writing isn't working. For example, students at the beginning of the semester might read the story of a personal statement for grad school that is generic and not tailored to a particular school. The students would be asked to describe what they think is going on with this personal statement, why it might or might not be successful, and what kind of thinking the author used to make particular choices in the text. At the end of the semester, a scenario could be introduced to students using a similar genre (e.g., scholarship application, grant proposal). Students could be asked a set of questions that resemble the questions from the beginning of the semester; what do you see, how do you explain what's going on in the text here, why did the author make these decisions? The students' responses could be analyzed in terms of any differences between the beginning and end of the semester; is there any difference in their responses in terms of the degree of depth and sophistication of their thinking about writing? This same study could be replicated across different institutions. It would not only be revealing to see how students respond to the scenario at the end of the semester but would in addition be informative to see what kinds of broader patterns and trends could be identified in students' interpretive approaches at the beginning of the semester. Rather than just looking at prior knowledge as a static entity, this approach attempts to examine changes in thinking and understanding over time.

This sort of methodological approach could also help reveal whether any course concepts might have shaped, informed, or influenced the students' scenario response to the end of the semester. While clearly this proposed idea needs more refinement and

critique, it is perhaps one way of beginning to try and understand what it might mean for students to learn about writing in a way that is deep and significant enough for that knowledge to be generalized in the future. Moreover, it helps us address the question of the nature of writing knowledge, its development, and its future application or propagation. As Chi and VanLehn (2012) have demonstrated, ensuring that the initial learning site did in fact create generalizable knowledge is perhaps the starting point of putting together the pieces of the transfer puzzle.

## Defining Transfer: Looking Ahead

Another central argument that runs throughout this study is that definitions matter: how transfer is defined will shape how it is studied. Additionally, an instructor's design of a transfer-focused FYW curriculum will be significantly shaped by how that instructor defines transfer. Yancey, Robertson, and Taczak's (2014) belief that transfer occurs in self-aware and visible ways is reflected in their curriculum's heavy emphasis on systematic reflection and the development of a theory and language. Definitions, in sum, matter for every facet of transfer in writing studies.

Within writing studies, definitions of transfer remain eclectic (Donahue, 2012; Anson, 2016). There are indeed benefits to this conceptual plurality. Transfer scholars can expand how the phenomena can be studied, new ideas can be unearthed, and different approaches can be examined and considered. At a certain point, however, the field might want to begin to articulate a set of key criteria that help demarcate relatively clear boundaries for what is and what is not transfer through a dialectical process of critique

and refinement. This is not simple, admittedly. Even the broader field of transfer research has yet to agree on whether negative transfer – the ineffective use of prior knowledge—is its own category of transfer or whether it is in fact part of the broader concept of transfer. The point on which this discussion pivots is, as presumed, what is meant by the term transfer. If transfer is defined as the *successful* use of prior knowledge, then negative transfer is by definition not transfer - it is its own category. If, however, transfer is defined as just the use of prior knowledge, absent any positive or negative descriptor, then negative transfer would be included within his broader definition. This is not just a mere quibble over semantics. Many scholars using the broader definition of transfer have suggested that transfer doesn't in fact happen; humans do not draw upon prior knowledge in new situations. But others have pointed to evidence of negative transfer (e.g. Lobato, 2008), which would seem to contradict those scholars' view that humans do not draw upon prior knowledge. At best this imprecision can help refine new conceptions of transfer but at worst it can inhibit the creation of new knowledge about transfer. If it feels as though this brief exposition of negative transfer and definitions of transfer reads like some Gordian knot-tying exercise that is not unintentional. Transfer is incredibly complex and significant questions remain unsettled; sorting through these conflicting, ambiguous, semantically loaded challenges I believe should be a central task of future research into transfer, especially for writing studies.

My own goal in this study was to try and tie down with some degree of refinement how I define transfer, how that definition plays out methodologically, and what can be learned as a result of making those particular choices about definitions. The generalization framework, I argue, is one small way of beginning a discussion around

how transfer might be defined as well as what matters when we talk about transfer. In my estimation, what matters in transfer is that we know the degree to which two sets of knowledge are considered to be similar (*knowledge similarity*), we know whether or not that knowledge was influential in handling a writing situation (*knowledge influence*), and whether that knowledge generalization was part of a consistent pattern or whether it was a one-time occurrence (*knowledge frequency*).

These three elements also help spur discussion around difficult questions about our ability to see transfer happening in student's thinking as they handle new writing situations. If we define transfer singularly as the explicit and conscious application of prior knowledge, as Yancey, Robertson, and Robertson (2014) do, are we limiting where we can look and what we can know about transfer? Perhaps. In this study I would have found only one piece of evidence for transfer were I to have used the definition of transfer as the explicit application of knowledge, despite accumulating a significant amount of data in following Clare and Sara as they wrote in academic and non-academic contexts for six semesters. That narrow definition would have led me to understate how Clare and Sara were in fact generalizing audience knowledge as part of their complex negotiations of new writing situations.

Yet attempting to see transfer in its tacit, less visible form as the implicit propagation of prior knowledge is also a complex task in that it perhaps risking turning transfer research into an overtly subjective endeavor. Is transfer in the eye of the beholder, as Brent (2011) implies in his "glass half-full" characterization of transfer research? There is likely a middle ground to be struck between these polarities of explicit and implicit, and objective and visible and subjective and tacit. This dissertation's

longitudinal study of Clare and Sara, its generalization framework, and its definition of transfer as both the explicit application and the implicit propagation of knowledge is one attempt to find that middle ground.

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