Ecological Awareness: Enacting An Ecological Composition Curriculum To Encourage Student Knowledge Transfer

Nicole Guinot Varty
Wayne State University

Follow this and additional works at: http://digitalcommons.wayne.edu/oa_dissertations

Part of the Curriculum and Instruction Commons, and the Other Education Commons

Recommended Citation
Varty, Nicole Guinot, "Ecological Awareness: Enacting An Ecological Composition Curriculum To Encourage Student Knowledge Transfer" (2016). Wayne State University Dissertations. 1667.
http://digitalcommons.wayne.edu/oa_dissertations/1667

This Open Access Dissertation is brought to you for free and open access by DigitalCommons@WayneState. It has been accepted for inclusion in Wayne State University Dissertations by an authorized administrator of DigitalCommons@WayneState.
ECOLOGICAL AWARENESS: ENACTING AN ECOLOGICAL COMPOSITION CURRICULUM TO ENCOURAGE STUDENT KNOWLEDGE TRANSFER

by

NICOLE GUINOT VARTY

DISSERTATION

Submitted to the Graduate School

of Wayne State University,

Detroit, Michigan

in partial fulfillment of the requirements

for the degree of

DOCTOR OF PHILOSOPHY

2016

MAJOR: ENGLISH (Rhetoric and Composition)

Approved By:

______________________________  __________________________
Advisor                      Date

______________________________  __________________________

______________________________  __________________________
DEDICATION

This project is dedicated to Mom, for single-handedly getting her entire family PhDs, via practical help, constant encouragement and sheer grit.

And to Dad, for demonstrating that we never stop learning, and that it’s never too late to become a doctor.
ACKNOWLEDGMENTS

So many deserve my deepest gratitude for their support and guidance throughout this project.

Thank you, “grand-teacher” Cathy Fleischer, for being the reason I am a writing teacher. From the moment you breezed into class in your fabulous scarf and introduced me to genre theory and pedagogy, I have wanted to be just like you. Still do.

Thank you to Adrienne Jankens, Amy Latawiec, Jule Thomas, Jared Grogan, Thomas Trimble and the rest of my lecturer cohort, for being the best and most encouraging colleagues, sounding-boards, advisors and friends. And special thanks to Adam Yerima, for being my best-dissertation buddy and fellow GOT super-fan.

To all of my students. The best part of my job, hands down, is being with you in the classrooms we share.

Particular thanks goes to the seven students who participated in the longitudinal interviews of this project. Your earnest enthusiasm for the research process, and your genuine love of learning have been wonderful to bask in.

I am grateful to Jeff Pruchnic, advisor and coach extraordinaire, for taking on my project when I was in a pinch and for deftly and swiftly guiding it to completion. I have benefitted greatly from your pragmatic wisdom and calm. Let’s keep talking about the ecological model as ontology.

Thank you, Ellen Barton, for your careful reading and unflinching critique. You helped me shape this project into something I am really proud of, and I have learned so much from you.
To Linda Adler-Kassner, my mentor and friend: Thank you for hiring me to my first graduate teaching position. Thank you for guiding me through my first years as a teacher, for introducing me to curriculum design, program assessment, and threshold concepts. Thank you for showing me how to lead by example, how to get sh*t done, and how to have joy while you do it. Thanks for your steadfast encouragement, trust and smart questions throughout this project. But most of all, for the precious gift of time. I appreciate every minute.

Thank you to the congregation of Grace Christian Fellowship for your care and your support. You truly made me feel “upheld.”

Thank you Amanda, Mom and Dad, for helping. Always helping. Whether by talking through research snags, making dinner, hosting “diss and dat” sessions, or just praying and understanding. You guys always have my back.

Beatrice, thanks for smiling like crazy, calling my name and running into my arms every single time I come home from work. I love you, kid.

And Jacob, my awesome partner, my rock, my best friend. Thank you for hanging out with Bea, making dinner, doing laundry, cleaning the house and listening to me vent. Thanks for making me laugh. Thanks for giving me time to write, and for your unwavering belief in me. I could not have done this without you.
# TABLE OF CONTENTS

Dedication ........................................................................................................................................... ii

Acknowledgements ................................................................................................................................. iii

List of Tables ........................................................................................................................................... vii

List of Figures .......................................................................................................................................... viii

Chapter 1 “Ecological Awareness: Enacting an Ecological Composition Curriculum to Encourage Student Knowledge Transfer” ................................................................. 1

  Overview ............................................................................................................................................... 1

  Literature Review ................................................................................................................................. 4

  Project Description ............................................................................................................................... 12

  Data Collection .................................................................................................................................... 15

  Overview of Chapters ............................................................................................................................. 16

Chapter 2 “What Do Writing Ecologies Curriculum and Pedagogy Actually Look Like?” ...................................................... 19

  Ecological Literate Development in Curriculum .................................................................................. 28

  Outline of Curriculum and Assignments ............................................................................................. 30

Chapter 3 “Transfer Within FYC: What Writing Knowledge do Students Bring With Them and Take Away From First Year Composition?” ..................................................... 37

  Background: Knowledge Transfer and Prior Knowledge .................................................................... 38

  Study One: Pre- and Post-Semester Surveys ....................................................................................... 43

  Study Two: Phase 1 Interviews ............................................................................................................. 55

  Discussion ............................................................................................................................................. 71

  Limitations and Future Research ........................................................................................................ 77

Chapter 4 “Transfer Beyond FYC: What Writing Knowledge do Students Take From First Year Composition to the Following Semester?” .......................................................... 78

  Background: Ecological Model of Writing to Teach for Transfer ..................................................... 79
LIST OF TABLES

Table 1: Threshold Concepts and Learning Outcomes 29
Table 2: Short Answer Response Codes 44
Table 3: Writing Process Knowledge 45
Table 4: Prior Writing Knowledge 46
Table 5: Concept of Writing Success 47
Table 6: Phase 1 Interview Protocol 56
Table 7: Phase 1 Interview Coding Protocol 58
Table 8: Phase 1 Prior Knowledge Codes 60
Table 9: Definitions of Threshold Concepts 61
Table 10: Phase 1 Literate Ecology Codes 64
Table 11: Phase 2 Interview Protocol 84
Table 12: Phase 2 Interview Coding Protocol 86
Table 13: Phase 2 Prior Knowledge Codes 87
Table 14: Phase 2 Literate Ecology Codes 89
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Writing Process Knowledge (Pre-Semester)</td>
<td>49</td>
</tr>
<tr>
<td>2</td>
<td>Writing Process Knowledge (Post-Semester)</td>
<td>51</td>
</tr>
<tr>
<td>3</td>
<td>Prior Writing Knowledge (Pre-Semester)</td>
<td>52</td>
</tr>
<tr>
<td>4</td>
<td>Prior Writing Knowledge (Post-Semester)</td>
<td>53</td>
</tr>
<tr>
<td>5</td>
<td>Concept of Writing Success (Pre-Semester)</td>
<td>54</td>
</tr>
<tr>
<td>6</td>
<td>Concept of Writing Success (Post-Semester)</td>
<td>55</td>
</tr>
<tr>
<td>7</td>
<td>Phase 1—Prior Knowledge</td>
<td>66</td>
</tr>
<tr>
<td>8</td>
<td>Phase 1—Occurrences of Threshold Concepts</td>
<td>68</td>
</tr>
<tr>
<td>9</td>
<td>Phase 1—Literate Ecology Engagement</td>
<td>70</td>
</tr>
<tr>
<td>10</td>
<td>Phase 2—Prior Knowledge</td>
<td>91</td>
</tr>
<tr>
<td>11</td>
<td>Phase 2—Directions of Prior Knowledge Transfer</td>
<td>91</td>
</tr>
<tr>
<td>12</td>
<td>Directions of Knowledge Transfer</td>
<td>93</td>
</tr>
<tr>
<td>13</td>
<td>Phase 2—Occurrences of Threshold Concepts</td>
<td>98</td>
</tr>
<tr>
<td>14</td>
<td>Phase 2—Literate Ecology Engagement</td>
<td>99</td>
</tr>
<tr>
<td>15</td>
<td>Sample Writing Ecology Maps</td>
<td>107</td>
</tr>
</tbody>
</table>
CHAPTER 1 “ECOLOGICAL AWARENESS: ENACTING AN ECOLOGICAL COMPOSITION CURRICULUM TO ENCOURAGE STUDENT KNOWLEDGE TRANSFER”

Overview

Descriptions of knowledge transfer and its potential connections to Composition Studies have permeated conferences, journals and other publications in the field, defining transfer based on work in psychology and education (Salomon and Perkins; Beach; Tuomi-Grohn and Engerstrom; Meyer and Land). Writing scholars have also deployed theories of knowledge transfer from language scholars, connecting activity theory to genre theory (Vygotsky; Russell; Bazerman) and pointing to threshold concepts as key to transfer for students—either acting as doorways or barriers (Adler-Kassner, Majewski and Koshnick). Much of the research conducted on the phenomenon of transfer has been conducted “in the framework of other institutional initiatives” such as learning communities, linked courses or honors programs (Moore). While useful for investigating transfer, this body of research does not take up the effects of transfer on a traditional FYC course, nor does it yet consider fully the implications of student writing ecologies on the transfer of writing knowledge from outside of the university to FYC courses, or between university courses. Examining how literacy functions for students, within and beyond the university, this dissertation investigates transfer itself, independent of other initiatives, in the traditional FYC course, and will focus on the interactions between students’ prior knowledge from writing ecologies outside of the university and the threshold concepts of FYC that they are called upon to navigate within the university.
Tracing the paths of transfer research thus far, I examine how prior knowledge within transfer theory intersects with threshold concepts identified in composition studies (Adler-Kassner and Wardle). While initial steps have been taken to theorize prior knowledge (Yancey, Robertson and Taczak; Reiff and Bawarshi), the focus to this point has been on genre awareness transferred from prior writing experiences and practices and prior knowledge from academic contexts—solely dependent on students’ experience in school (i.e. recent studies focusing on prior knowledge and FYC).

However, I argue that expanding our gaze to include home and personal discourse communities, or writing ecologies, provides rich resources of prior knowledge—in the form of discourse knowledge and discourse experiences—that teachers and students often discount. Using Urie Bronfenbrenner’s ecological model of human development, and his schema of Person, Process, Context, Time, I will use the term “ecologies” to describe the systems students inhabit and adapt to as developing persons, and as writers. The term ecologies takes into account student dispositions and prior knowledge (Person), the discourse students engage in (Process), and the discourse communities students participate in (Context); however it also accounts for variables beyond the individual student that are included in Contexts where individuals are informed by actions and actors outside of themselves. It also accounts for the effects of Time on development. I examine the possible affordances of these ecologies, and the ways students may make use of their discourse knowledge and experiences from personal and home ecologies in the context of my First Year Composition courses, in order see how knowledge transfer operates for students who encounter threshold concepts in standard first year general education writing courses.
Deploying Bronfenbrenner within First Year Composition extends and expands on current theories of an ecological model of writing. An ecological model of writing puts forth the writer as an individual or organism who is not writing in a vacuum, but rather who is acted on, informed by, and responding to the surrounding environment (Cooper 2011). Framing first year composition within an ecological model of writing both enriches our understanding of the social spheres in which knowledge operates and presents concrete questions to pursue in theorizing knowledge transfer (Cooper, Driscoll and Wells). The field of Composition Studies has been taking steps to explore Perkins and Salomon’s work on transfer, designing studies to apply their descriptions of how transfer happens to the writing classroom and to the process of writing in new contexts. But, as Elizabeth Wardle points out, “our field has not deeply theorized transfer beyond what David Perkins and Gavriel Salomon offered,” and precious few answers have been posited for even the most basic questions—such as, what is the definition of “transfer”? How do we study it and teach for it? Why do some students successfully transfer knowledge from one ecology of writing (say, home or work) to another (college writing courses), and others do not?

Transfer research, as mapped so far, provides key points of potential further study. A preliminary study by Yancey, Robertson and Taczak works toward a theory and typology of prior knowledge and begins to investigate students’ prior academic knowledge and the ways students work to reconcile this knowledge with current writing tasks. However, students’ conceptualization of home and personal discourse as “expression” rather than rhetorical communication or dialogue was termed “absent prior knowledge,” based on the theory that the latter concepts had simply not been taught in
previous school contexts, or that student perception discounts this knowledge as linked to “academic” writing concepts, or perhaps threshold concepts of FYC. This tension between prior knowledge and the ability of students to identify said knowledge maps on to what Adler-Kassner, Majewsky and Koshnick have identified as a “threshold concepts.” It also becomes a key variable to consider in researching ways to facilitate students positive knowledge transfer from discourse communities outside the university to FYC classes. What counts as threshold concepts in FYC courses? And how can instructors help students navigate thresholds and activate prior knowledge about the discourses in which they already engage?

**Literature Review**

My dissertation responds to contemporary scholarship in four distinct areas: Literacy Studies, Transfer Research, an Ecological Model of Development, and Reflection. I work through the conceptual frame of an ecological model of writing to design an explicitly reflective curriculum, in order to build on current theories of knowledge transfer within existing Literacy Studies frameworks. Below I discuss some of the relevant theories presented in the literature and begin to sketch out how I draw them together in my dissertation.

*Questions from Literacy Studies*

Research in the field of Literacy Studies has established a vein of inquiry that proves to be rich fuel for research in writing knowledge transfer. Deborah Brandt’s and Shirley Brice Heath’s respective seminal studies on the literacy practices of individuals outside of the classroom established the link between personal and home literacy practices (within what I will call writing ecologies) and student literacy practices in
school. Building off of these studies, scholars like James Paul Gee have worked to expand the definitions of literacy to encompass the broad, intertwined systems that inform an individual’s literacy practices, or “ways of being in the world.” Gee’s work opens avenues for research into the interactions between students’ literacy practices within and outside of school, for the purpose of understanding how to help students develop successful “ways of being” in the classroom.

Examining these interactions from inside the school setting, Elizabeth Chiseri-Strater’s ethnography of students in writing courses at the college level revealed just how tied their in-school literacy was to other writing ecologies, maintaining that all ecologies must be considered, “the package comes complete” (xvi). Working from the outside in, Beverly Daniel Moss examines African-American churches as sites of literacy teaching and literacy learning. Through her inquiry, she seeks to “understand and forge relationships between” community literacy and school literacy. These studies all pose questions about the nature of student reading and writing practices outside of school, and how those practices come to bear on student reading and writing in school, and often at the college level. Transfer research and an ecological model of writing can provide a fresh perspective on these questions, and perhaps bring us to clearer understandings about the nature of how literacy functions for students in the writing ecologies they inhabit.

Transfer, Prior Knowledge and Discourse Familiarity

Early transfer research within Composition Studies has pulled largely from psychology and education research to create the foundation for “writing knowledge transfer” in Composition Studies. David Perkins and Gavriel Salomon are ubiquitously
cited for their concepts of “high road” and “low road” transfer, “near transfer” and “far transfer” and thus set the tone for much of the conversation. According to Perkins and Salomon, high road transfer, with its conceptual activity of “mindful abstraction,” is the preferred method of knowledge transfer that will provide the most flexible deployment of prior knowledge, because it relies less on tacit knowledge, which is not always at hand for easy application in new contexts, and more on explicit knowledge, which can be repurposed more readily. Many of the most current studies have taken up the questions of how “high road” writing knowledge transfer exists and can be encouraged—or even taught for—in the FYC classroom (Adler-Kassner, Majewski, and Koshnick; Beaufort; Bergmann and Zepernick; Devitt and Bawarshi; Driscoll; Reiff and Bawarshi; Yancey), and have pointed to reflective teaching and learning practices as means to achieve mindful abstraction.

Current research into knowledge transfer, specifically in Composition studies, has worked to define, and in some cases, redefine transfer. Prior and Shipka (2003) use the term “lamination,” while Nowacek (2011) presents “reconceptualization.” Kathleen Blake Yancey, Liane Robertson and Kara Taczak draw on Beach to define transfer as requiring, “an adapted or new use of prior knowledge” (7-8). They identify three ways that students make use of prior knowledge: 1) assemblage (closely linked to Reiff and Bawarshi’s “boundary-guarding” and Wardle’s “problem-solving”), 2) remix (which maps on to Reiff and Bawarshi’s “boundary-crossing” and Wardle’s “problem-exploring”), and 3) when students make use of a critical incident, or failure, to clear the decks and build new knowledge. Elizabeth Wardle puts forth a renaming of “transfer” to “repurposing,” in order to situate transfer research within Bourdieu’s concepts of *habitus* and *doxa*. 
Wardle is interested in problematizing transfer theory, and pushing to understand the phenomenon in the context of not only writing tasks, but also individual dispositions and activity. She argues “for understanding repurposing as the result of particular dispositions that are embodied not only by individuals, but also by what Pierre Bourdieu calls ‘fields’ and the interactions between the two” (2012), and focuses on how educational systems (via habitus) encourage particular dispositions in students, categorizing either “problem-exploring” or “problem-solving” dispositions. (This links closely with Rieff and Bawarshi’s categories of boundary-crossers and boundary guarders, respectively). These definitions and categorizations map out ways to think about knowledge transfer in individual and systematic contexts.

Scholars of knowledge transfer in Composition Studies have been keenly interested in ways to teach for transfer. Bergman & Zepernick present evidence for why this is important, demonstrating student perceptions about knowledge transferred from FYC discounted or denied transferability of such knowledge, but they also found that students can build on existing rhetorical awareness, particularly through socialization and deployment of prior knowledge. Beaufort’s case study of a student named Tim launched her argument that FYC can indeed be taught for transfer, through explicit instruction in five knowledge domains (discourse community knowledge, writing process knowledge, rhetorical knowledge, subject matter knowledge, and genre knowledge). Graff, however, holds that teaching rhetorical analysis promotes transfer, while Yancey, Robertson and Taczak demonstrate that the implementation of a so-called “Teaching For Transfer” writing course, based largely in reflective practices, is the most effective way to successfully “teach for transfer.”
The field’s concentration on teaching for transfer leads us to examine variables that we have seen, so far, as both helping and hurting that enterprise. Yancey, Robertson and Taczak identify five dimension of transfer that inform their study: 1) student transitions from high school to college, 2) the introduction of the writing process, 3) the necessary rhetorical stance of novice, 4) interaction between students’ academic and non-academic literate lives and 5) the role of time—past and present—as a motivator. These dimensions lead to a typology of prior knowledge, in which they acknowledge student discourse familiarity (the use of discourse knowledge and practices in genres that are outside the purview of academia), but do not count it as prior knowledge, giving it the term “absent prior knowledge,” due to the fact that students often did not themselves perceive such familiarity as related to academic writing tasks in any way, or that there is “a dearth of information of experience that would be helpful as they begin writing in college” (104). While Yancey, Robertson and Taczak astutely point out that this misperception does in fact function as a barrier to students transferring prior knowledge, they do not tackle the question of how to help students recontextualize their discourse familiarity from personal and home ecologies, which they point out, is often extensive. Thus, Wardle’s argument that transfer is “found in the combination of individual, task and setting,” becomes a salient starting point for thoughtful attention to the intersections, divergences and symbiosis of these factors.

Ecological Model of Writing

An ecological model of writing, then, can be used as a framework to think about how knowledge transfer from home or personal discourse experience might be accessed and deployed in the first year writing classroom. The term “ecological” used
here is a direct reference to Urie Bronfenbrenner’s “ecological environment,” which theorizes human development, or the lasting change over time in the way a person perceives and deals with his or her environment, “especially…the evolving interaction between the two” (3). Bronfenbrenner argues that not only are these interactions important to development, but they “can be as decisive for development as events taking place within a given setting” (3). There is great developmental significance, therefore, in “ecological transitions—shifts in role or setting which occur throughout the life course”—one of which is most certainly the transition into college, and the new role of college student (6).

Bronfenbrenner’s ecological environment can be broken down into nested systems: the microsystem (experiences, patterns, activities, roles in a given setting—such as home, school or peer group), the mesosystem (interrelations between Microsystems, or a system of Microsystems), the exosystem (settings in which the individual does not participate, but the events of which affect the individual’s experiences—such as parents’ employment, sibling’s health status, etc.), and the macrosystem (common denominators of subculture or culture which underlie all other systems). Deploying Bronfenbrenner’s systems within Composition Studies, we see they map out distinct ecologies that inform student writing development. If human development is a lasting change over time in perception and interaction with one’s environment, I argue that writing development can be seen as a lasting change over time in perception and interaction with one’s environment as a writer. This is in keeping with Bronfenbrenner’s aims, though perhaps with more precise language to target a particular kind of development.
Writing to address the tension between cognitive and social models of writing, Marilyn Cooper presents the ecology of writing, “whose fundamental tenet is that writing is an activity through which a person is continually engaged with a variety of socially constituted systems” (367). Hawk, working to complicate the audience-writer dialectic, begins by questioning what it means to be a rhetorical, affective body in the world. From here, he argues for “ecology of immersion,” where students gain greater understanding of their rhetorical presence as multivalent, in connection with other bodies and technologies, and wants students to locate themselves in complex human-technological networks and let their purposes for using rhetoric emerge. In doing so, he presents a philosophical and historical grounding for an ecological model of writing, which Marilyn Cooper introduces. Not only does Cooper’s ecology of writing address tension between social (outer-directed) and cognitive (inner directed) models, maintaining that writers interact to form systems that are dynamic, but it also provides a framework for the kind of investigation that Wardle wants to engage in, and which Yancey, Robertson and Taczak have already begun, by establishing the complexities of transfer within the ecological model.

Drawing on Cooper, Driscoll & Wells investigate transfer with a similarly layered approach. Working their way through the fact that genres are complex social actions (cf. Reiff and Bawarshi), Driscoll and Wells extend Cooper’s organism and surround model to argue that interaction between person and context over time produces (writing) development. They emphasize relationship and interaction, activity systems and individual dispositions as main drives for knowledge transfer.

*Reflection in Curricular Design*
In their book, *Writing Across Contexts*, Yancy, Robertson and Taczkak make several claims about their proposed curriculum, which they call Teaching For Transfer. Chief among these claims is that the curriculum, when measured against two control courses, works best for assisting students in transferring writing knowledge. How does it accomplish this? Through a highly reflective curriculum designed to explicitly focus on Composition field-related terms. Yancey, Robertson and Taczkak propose that this curriculum model will contribute to writing development, and the results point in this direction. Yancey's work on theorizing reflection is already well-known in the field, and here she is applying this work to a particular problem: knowledge transfer in FYC. The described TFT course is a composition course first, that is “reflection-rich,” leading students through explicit instruction in both reflection and steps to theorize writing.

In addition, Adler-Kassner and Beaufort both make persuasive arguments for the place of explicit instruction in and reflection on key concepts (or threshold concepts) as an important feature of “teaching for transfer.” Adler-Kassner points out that students oscillate between new ways of thinking and not quite discarding familiar ways—ways of being Reiff and Bawarshi might type boundary crossing and guarding, and Wardle might define as problem-exploring and answer-getting. For Adler-Kassner, instructors can push students to go past “general skills” by articulating and making explicit threshold concepts, leading students to engage in the same processes for themselves. For Beaufort, learning writing and knowledge transfer of writing are more complicated processes than have been previously considered, and “gaining writing expertise only takes place...in the context of situational problem-solving” (22). This means explicit teaching for transfer via the five knowledge domains. Taken together, Adler-Kassner
and Beaufort are very persuasive about making tacit discourse, rhetorical, and genre knowledge much more explicit in writing instruction as objects and prompts for student reflection. In creating an explicit reflective curriculum and observing the results of its implementation in my own classroom, I operationalize and further Adler-Kassner’s and Beaufort’s arguments for explicit instruction of threshold concepts.

**Project Description**

This project investigates if and how a writing ecologies curriculum and pedagogy facilitates writing knowledge transfer. In Chapter Two, I describe the design of my writing ecologies curriculum and pedagogy, in order to trace the connections between the assignments, composition threshold concepts, and current program learning outcomes. In Chapter Three, I categorize, code and analyze student responses to pre-semester surveys in order to explore what knowledge students transfer into my writing courses. I also categorize, code and analyze student responses to post-semester surveys and Phase 1 interviews, conducted at the end of my FYC courses, in order to see what knowledge they engage with during my courses. In Chapter Four, I categorize, code and analyze student responses to Phase 2 interviews, conducted before and after mid-terms the semester following FYC, in order to track writing knowledge transfer out of my courses.

Because the goal of my research is to develop and test a curriculum designed to help students become explicitly aware of their personal and academic writing ecologies in order to activate their prior discourse knowledge and aid them in navigating potential threshold concepts (such as genre awareness, rhetorical awareness and discourse community) in my FYC courses, I engaged in classroom-based inquiry for this study. I
first developed a curriculum and pedagogy for ENG 1020 that is based on an ecological model of writing. The curriculum and pedagogy scaffolds projects designed to lead students through explicit investigations of their own literate ecologies, and also employs numerous reflection prompts and opportunities for students to explore, critique, and generally become aware of their situated role as FYC students, their existing prior knowledge, and their responses when presented with composition threshold concepts. My course integrates the ecological model of writing into existing program learning outcomes. Through a systematic description of my rationale and course design, I demonstrate what the ecological model looks like as a basis for curriculum and pedagogy.

Secondly, because FYC is uniquely situated at the intersection of several ecological transitions (Bronnfenbrenner), it makes for a natural focal point to investigate student knowledge transfer. My coding and analysis focus on the pre- and post-semester surveys, designed to hone in on the prior knowledge that students bring with them into ENG 1020. Conventional content analysis is used to establish patterns and categories for the survey responses. Phase 1 interviews are analyzed to examine what knowledge students engage with during ENG 1020. Directed content analysis is used to explore 1) how students activate prior knowledge and 2) how they engage with composition threshold concepts. From my analysis, I determined that a writing ecologies curriculum and pedagogy does support transfer of prior knowledge into FYC, as well as engagement with threshold concepts during the course.

Thirdly, when investigating writing knowledge transfer, a longitudinal study design allows for the clearest picture. Accordingly, I apply the same directed content
analysis used in Phase 1 to follow-up Phase 2 interviews, conducted the semester after ENG 1020. This encompasses a new ecological transition for students, and reveals that student engagement with and awareness of their own ecologies activates prior knowledge and assists with transfer and operationalizing of some threshold concepts.

This dissertation project works to make a significant contribution to the field’s established scholarship in knowledge transfer. It expands on past transfer scholarship by explicitly looking at intersections between students’ prior knowledge and their navigation of threshold concepts. At the same time, it adds to the conversation on the impact and relevance of explicit instruction and reflection on students’ developmental ecologies in relation to First Year Writing. I explore what happens when students are asked to engage in a writing ecologies curriculum and pedagogy, reflect on their roles within personal and academic discourse communities, their experiences from those discourse communities, and how they bring that to bear on FYC and academic discourse. Specifically, my dissertation addresses the following research questions:

- What do curriculum and pedagogy based on an ecological model of writing and composition threshold concepts look like?
- How can a curriculum based on an ecological model of writing and composition threshold concepts inform a student’s activation of prior knowledge from experience of personal/home discourses within FYC?
- How does student negotiation of threshold concepts, within an ecological model-based FYC curriculum, inform writing process development and knowledge transfer after FYC?
How does a curriculum based on an ecological model of writing inform scholarship around student knowledge transfer within and beyond a FYC course?

In the following section, I describe my overall data collection as well as the data analysis of the remaining four chapters.

**Data Collection**

My research study took place during and immediately following a First Year Composition course taught at WSU in Fall 2015. This course is appropriate for investigating students’ writing knowledge transfer because it straddles key ecological transitions that freshmen traverse as they are enculturated (or not) into university life. FYC students are transitioning out of high school and into college, and after their first semester they are transitioning out of many general education courses into introductory courses leading to their majors. For this study, the entire populations of three sections of my ENG 1020 (72 total) were asked to participate in the surveys and interviews. 38 students participated in the pre-semester surveys, and 60 participated in the post-semester surveys. Seven students participated in the Phase 1 and Phase 2 interviews.

For this project, I collected and analyzed the following data: student responses to pre- and post-semester surveys; interview transcripts from Phase 1 interviews; and interview transcripts from Phase 2 interviews. Data from all course materials (participating students’ texts from the course, student revisions, instructor assignments, student process writing) was also collected.

**Overview of Chapters**
In Chapter Two, I answer my research question: What do curriculum and pedagogy based on an ecological model of writing and explicit reflection on threshold concepts look like? In order to do so, I describe the curriculum and pedagogy design for my First Year Composition course, outlining the logic of development leading to the assignment sequence, reflection prompt design, and scaffolding of assignments and projects throughout the semester. Anchoring my curriculum will be the particular threshold concepts of genre awareness, rhetorical awareness and discourse community, situated within Adler-Kassner and Wardle’s definitions (2015), as well as a pedagogical attention to reflection, which I argue function as examples of Bronfenbrenner’s proximal processes that support development, in this particular case, writing development.

In Chapter Three, I turn my focus to the research question: How can a curriculum based on an ecological model of writing and composition threshold concepts inform a student’s activation of prior knowledge from experience of personal/home discourses within FYC? I analyze student responses to pre- and post-semester surveys using conventional content analysis, to examine if and how students are activating prior knowledge, and from what sources.

Once categories began to emerge, I used conventional content analysis to hone in on categories of rationale for student responses to the survey questions. Conventional content analysis derives coding categories directly from the text (Hsieh and Shannon) in order to examine language closely in order to classify texts efficiently and meaningfully (Weber). Findings indicate students bring in shallow knowledge of the writing process, over-generalized concepts of sources of prior knowledge, and limited rationale for writing success or failure. After taking the writing ecologies course,
students writing knowledge increased in complexity, their concepts of the sources of prior knowledge became much more specific, and their rationale for level of writing success became more rhetorical.

I also use directed content analysis, which starts with existing theory or findings, to analyze Phase 1 interviews. I used Yancey, Robertson and Taczac’s definition of prior knowledge, and definitions of seven key composition threshold concepts (Adler-Kassner and Wardle) to see how student awareness and reflection of personal discourse knowledge and experience informs 1) activation and awareness of prior knowledge and 2) engagement with composition threshold concepts throughout the course. Findings indicate that students demonstrated far more activation and awareness of prior knowledge than they did absent prior knowledge. Students were found to engage with some threshold concepts more than others, and did not engage strongly with the literate ecologies framework.

In Chapter Four, I answer the research question: How does student negotiation of threshold concepts, within an ecological model-based FYC curriculum, inform writing process development and knowledge transfer after FYC? To do this, I use directed content analysis (Hsieh and Shannon) to analyze Phase 2 interviews to explore the results of an ecological curriculum taught for knowledge transfer. I apply the same directed content codes as in the Phase 1 interviews, in order to compare results longitudinally, investigating whether and how engagement in a writing ecologies curriculum and pedagogy results in knowledge transfer from FYC to subsequent writing contexts. Findings show that during the semester following FYC, students activated prior knowledge almost twice as much as they did during FYC. In addition, students
transferred knowledge in three key directions: 1) School-to-School, 2) Outside Contexts-to-School, and 3) School-to-Outside Contexts. Students were found to engage with fewer threshold concepts, though those they did were strongly engaged. Students were also found to engage more strongly with the literate ecologies framework than they did during FYC.

In Chapter Five, I return to an ecological model and the theoretical and methodological implications of this work for FYC specifically, and Composition Studies writ large, answering my research question: How does a curriculum based on an ecological model of writing inform scholarship around student knowledge transfer within and beyond a FYC course? Reflecting on the theories, methodologies and methods woven throughout this study, I examine the results in light of the unique synthesized framework of knowledge transfer and an ecological model of writing.
CHAPTER 2 “WHAT DO WRITING ECOLOGIES CURRICULUM AND PEDAGOGY LOOK LIKE?”

After laying the groundwork for my argument and outlining the project in Chapter One, here I will answer my first research question: What do curriculum and pedagogy based on an ecological model of writing and composition threshold concepts look like? I will outline the writing ecologies curriculum and pedagogy I designed for the express purpose of supporting student knowledge transfer, both within and beyond FYC.

In their 2012 article, “Addressing the complexity of writing development: toward an ecological model of assessment,” Elizabeth Wardle and Kevin Roozen describe what they call an “ecological model of assessment.” They write to present an assessment method that “recognizes and acts from the assumption that the breadth of students’ literate experiences—in and out of school—impacts their ability to “do” academic literacy tasks” (107). In describing their assessment model, Wardle and Roozen establish what they mean by “ecological literacy development,” by contrasting it with what they call a “monocontextual” model of literate development.

A monocontextual model of literate development is likely familiar to most FYC composition instructors today. It considers writing development within a single setting, such as the writing classroom, or even within a broader curriculum. It conceives of writers' development as moving through phases, or as “the product of the person's deepening engagement with a particular context (i.e., school, a laboratory or professional workplace) or activity (i.e., chess)” (108). From this model comes the portfolio, assembled over time, and likely containing multiple genres, to evaluate student writing development over time, within a single context. While this model of literate development and assessment has immense benefits, such as mapping a student's
learning, participation and growth of expertise over time, it also retains limitations in what it can help us understand and how it can help us understand it, because it narrows our frame of view to a single context.

It is important for the purposes of this study that in order to sketch out their model of ecological writing assessment, Wardle and Roozen should first articulate an ecological model of literate development, as this concept becomes the frame for the pedagogy developed here, one that aims to help students pay attention to the very same things for themselves as developing writers that Wardle and Roozen wish to pay attention to in assessment, such as their growth in expertise over time, and reflections on how their writing is practiced and adapted across multiple contexts. The pedagogy presented here works from Wardle and Roozen’s ecological model of literate development, in which writing expertise develops across networks that link a broad range of literate experiences together over time (108). Wardle and Roozen define an ecological model of literate development as a view that “takes seriously the broad range of textual experiences that inform the growth of persons’ writing abilities” (108); while it acknowledges what they term a “monocontextual” model of literate development by focusing on students’ literate development within a single context, such as a writing class, “it also underscores the importance of the wide range of literate engagements in which persons participate” (109). For my purposes here, I have taken this definition of ecological literate development and, where Wardle and Roozen use it to frame their assessment, I employ it to frame my FYC course.

The FYC course I designed for this project takes an ecological model of literate development as its theoretical frame, and asks students to take up the examination of
their own “literate ecologies” throughout the course, reflecting on and writing about their literate practices across the network of discourse communities in which they participate. Students will engage in projects that ask them to “zoom in” on different discourse communities and literate practices they engage with, reading about, reflecting on, researching and writing about these practices and communities, and how they adapt to the respective discourses, one at a time. The final project will include a portfolio, which is the traditional monocontextual assessment tool, but it will also ask students to produce a map of their own literate ecologies, which will be the final reflective piece to help students visualize and hence, reflect on, how their writing knowledge changes, adapts, and connects across the range of literate experiences they engage in. In this way, the curriculum is designed to help students become aware of the breadth of their developing writing expertise in order to promote the kinds of reflection and awareness that promotes positive knowledge transfer between contexts.

It is important to note here, however, that my interest has not been in developing a course out of thin air. As a full-time faculty member of a robust composition program at an urban R1 university, my desire and design has been to work within the program goals that are currently in place at my institution. I had no inclination to “reinvent the wheel,” but rather aimed to build a course that harmonizes with the current learning outcomes in place. Thus, I have developed a pedagogy to help students attain the goals and learning outcomes set forth by my program by utilizing an ecological model of literate development. I hypothesized this would help students: 1) draw more positively and explicitly on prior knowledge from writing ecologies they inhabit outside of school, 2) negotiate threshold concepts presented in the course more circumspectly and
successfully, and 3) more thoughtfully transfer knowledge from my FYC courses to those courses they take beyond my classroom. I have outlined the current composition program learning outcomes for the particular FYC course I taught for this study (ENG 1020) below:

**Writing**
- Compose persuasive academic genres, including argument and analysis, using rhetorical and genre awareness.
- Use a flexible writing process that includes brainstorming/inventing ideas, planning, drafting, giving and receiving feedback, revising, editing, and publishing.

**Reading**
- Use reading strategies in order to identify, analyze, evaluate, and respond to arguments, rhetorical elements and genre conventions in college-level texts and other media.

**Researching**
- Use a flexible research process to find, evaluate, and use information from secondary sources to support and formulate new ideas and arguments.

**Reflecting**
- Use written reflection to plan, monitor, and evaluate one’s own learning and writing.

The outcomes have been developed over a period of program-wide assessment and curricular development, in order to address current research in the field on transfer. In order to create such an ambitious curriculum that could purposefully facilitate and
support transfer, yet also adapt onto current program goals, I turned to definitions of key threshold concepts that would anchor such a course.

In their book *Naming What We Know: Threshold Concepts of Writing Studies*, Linda Adler-Kassner and Elizabeth Wardle compile brief expositions of thirty distinct threshold concepts of Writing Studies, organized smartly within five broader categories. Each category contains descriptions of threshold concepts that draw on concepts from literature across the field and distills them into 1-2 page explanations that work to fulfill the title of the book, naming what we, in Writing Studies, know. For example, the first category is: Writing is a Social and Rhetorical Activity, and this broader category contains specific threshold concepts such as “Writing is a Knowledge Making Activity” and “Texts Get Their Meanings from Other Texts.” This first category and the threshold concepts articulated there demonstrate what writing is, and what it does. Other categories focus on how writing can be learned. The last category, Writing Is (Also Always) a Cognitive Activity, for instance, contains threshold concepts such as “Metacognition Is Not Cognition,” and “Reflection Is Critical for Writers’ Development” that hone in on the way the brain engages with writing and the need for reflection and awareness (which are also key to teaching-for-transfer). These categories and individual threshold concepts are held together with a single “metaconcept”: that writing is an activity and a subject of study, perhaps the cornerstone concept threading through all of Writing Studies.

In their introduction to the book, Adler-Kassner and Wardle strive to make it clear that although they and their co-authors are working to bring together what “fifty (plus) years of research has led us to know” about composing knowledge (within the frame of
threshold concepts), the threshold concepts defined and explained in their book cannot represent the full breadth of those that exist in our field. Rather, they offer these definitions as a starting point from which Writing Studies scholars and researchers can spring to design and revise program goals, curricula, and assessment, among other things. Throughout the book, the threshold concepts are presented with citations that cross-reference them to each other, demonstrating their intertwined and integral nature.

For that reason, it is not possible to pluck out two or three threshold concepts to focus on when considering a FYC course design. In their chapter of Naming What We Know, “Threshold Concepts in First-Year Composition,” Doug Downs and Liane Robertson present threshold concepts as a generative frame for factual knowledge that supports two over-arching goals for FYC: 1) to help students consider prior knowledge about writing in light of new experiences, and 2) to teach transferable knowledge of and about writing. These goals, it should be noted, map closely onto my goals for my curriculum and pedagogy of ecological literate development, with the exception that I have included an additional goal of helping students negotiate threshold concepts within the course. Because of the alignment of our goals, it is interesting to give attention to the challenges that Downs and Robertson acknowledge in the process of teaching threshold concepts as declarative knowledge.

Downs and Robertson identify four challenges that tend to arise in pursuit of these goals, challenges that connect to threshold concepts directly, since part of the definition of threshold concepts is: “troublesome knowledge.” By providing descriptions of their own FYC learning outcomes and how they link to respective threshold concepts,
Downs and Robertson provide a framework for adapting threshold concepts to FYC curricula that are already in place.

Like the outcomes presented by Downs and Robertson, the learning outcomes for the course I taught in this study, ENG 1020, overlap and intersect with several threshold concepts of Writing Studies. Multiple threshold concepts can be identified and linked with each learning outcome. For instance, consider the writing learning outcome:

**Writing**

- Compose persuasive academic genres, including argument and analysis, using rhetorical and genre awareness.
- Use a flexible writing process that includes brainstorming/inventing ideas, planning, drafting, giving and receiving feedback, revising, editing, and publishing.

Embedded in this learning outcome are several threshold concepts dealing with rhetorical knowledge, genre awareness and writing process. The threshold concept “Writing Is a Social and Rhetorical Activity” maps on to the first section of the outcome, honing in on rhetorical knowledge. Also, “Writing Speaks to Situations through Recognizable Forms” and “Genres are Enacted by Writers and Readers” present genre awareness and function as well as rhetorical awareness. The second part of this outcome en folds “All Writers Have More to Learn,” “Text is an Object Outside of Oneself That Can Be Improved and Developed,” and “Revision Is Central to Developing Writing,” which all deal with theoretical and practical aspects of the writing process.
**Reading**

- Use reading strategies in order to identify, analyze, evaluate, and respond to arguments, rhetorical elements and genre conventions in college-level texts and other media.

Here we find the threshold concept that rhetorical and genre knowledge apply not only to crafting texts, but also to reading them. In this outcome in particular, we engage the threshold concept of textuality, that “Texts Get Their Meaning from Other Texts,” thus, reading and drawing on ideas from networks of texts are essential to any composition.

**Researching**

- Use a flexible research process to find, evaluate, and use information from secondary sources to support and formulate new ideas and arguments.

Engaging the threshold concepts not only of textuality (“Texts Get Their Meaning from Other Texts”) but also that “Writing Is a Knowledge-Making Activity,” research is presented as a process. Research is very closely intertwined with and is not unlike the writing process itself. We acknowledge that writing—in particular research-writing—employs a process that can be honed with practice (see “Learning to Write Effectively Requires Different Kinds of Practice, Time and Effort”).

**Reflecting**

- Use written reflection to plan, monitor, and evaluate one’s own learning and writing.

Here we engage the threshold concept that “Reflection Is Critical for Writing Development,” that writing development requires metacongition, which can be achieved, specifically, through reflective writing.
From this brief analysis, it is clear that threshold concepts are already embedded within the existing outcomes for ENG 1020. Designing a curriculum that is framed by an ecological model of literate development and that explicitly instructs students to investigate their own literate ecologies, while in pursuit of these outcomes, is my proposed answer to the question, “how do we teach for transfer?” I hypothesize that an explicit curricular focus of reflecting on one’s own writing ecology will promote the mindful abstraction needed for positive transfer—from contexts outside the classroom to FYC, as well as from the FYC classroom to classes beyond. With these learning outcomes, and their embedded and intertwined threshold concepts, firmly in hand, my goal to design a curriculum that will efficiently and effectively support students in achieving these outcomes and crossing these conceptual thresholds is thrown into sharp relief with the questions that focus this chapter:

a. What might Ecological Literate Development look like as part of an explicit teaching-for-transfer writing pedagogy, adapted to existing program outcomes?

b. How might it inform students’ writing development and writing knowledge transfer?

In this chapter, I will work through the answer to the first research question by outlining my designed curriculum, demonstrating what ecological literate development looks like when it is adapted to existing program learning outcomes, their embedded threshold concepts, and composition pedagogy. Next, I will look at the pedagogical moves an instructor must make in implementing this curriculum. Lastly, I will examine the writing my students produced in response to the curriculum to evaluate its effectiveness.
Ecological Literate Development in Curriculum

Wardle and Roozen suggest that any assessment modeled on ecological literate development would require multiple assessment instruments to produce a fuller, more accurate (and more complex) picture of student literate development. In order to gather “data addressing students’ wide range of experiences with writing and the impact those experiences have on their abilities to accomplish academic tasks,” their assessment design includes familiar tools, like portfolios, revisions, and student statements. However, there are elements that might be less familiar, such as assessment in multiple locations, longitudinal ethnographic studies, and surveys given over time, even after graduation. These methods would indeed greatly enhance our ability as instructors and program designers to understand student literate development.

If that is what an ecological literate development model of assessment looks like, what does a writing ecologies FYC course look like? Similar, one would imagine, but with key adjustments to allow the curriculum to function appropriately as organizing frame and content for a college writing course. Such a curriculum would need to present instruction and assignments that attend to student writing development across an expansive ecology of literate activities—academic and otherwise. Students themselves would need to identify their own literate activities and reflect on and perhaps even compose/compile a map of their writing ecology. As a class, students should be prompted to note overlaps, connections, literate activities that are the same or adapt across ecologies, and literate practices that are the same or adapt across activities and ecologies. Guiding questions for such a course curriculum might be:

- How does literacy **function** for us?
- What is my writing ecology?
- What do I already know? Where can or does that apply to my current context? How might it need to be adapted? Changed? Discarded?

In pursuit of these questions, students are prompted to question their own dispositions/habits (this maps onto Bronfenbrenner’s concept of PERSON). Students might be asked to recognize, monitor and even analyze their process when engaging in various literate activities—particularly when threshold concepts are encountered (mapping onto Bronfenbrenner’s PROCESS). Also, students might be asked to recognize, monitor and analyze various micro-ecologies, microsystems or contexts of literate activities—classrooms, home, dorm, work, admissions, online, etc. (mapping onto Bronfenbrenner’s CONTEXT). Finally, students might be asked to be aware of time and its effects on writing development, on prior knowledge that is useful or not in this one semester, on looking forward/over time to multiple courses (mapping onto Bronfenbrenner’s TIME).

In a FYC curriculum like this, we’d really be dealing with a few specific threshold concepts that would map onto the current course learning outcomes as follows:

<table>
<thead>
<tr>
<th>Threshold Concept</th>
<th>Learning Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Writing Is a Social and Rhetorical Activity</td>
<td>Writing and Reading</td>
</tr>
<tr>
<td>2. Writing Is a Knowledge-Making Activity</td>
<td>Writing and Research</td>
</tr>
<tr>
<td>3. Texts Get Their Meaning from Other Texts</td>
<td>Research (and research writing)</td>
</tr>
<tr>
<td>4. Reflection is Critical for Writers’ Development</td>
<td>Reflection</td>
</tr>
<tr>
<td>5. Learning to Write Effectively Requires Different Kinds of</td>
<td>Writing (and even research!)</td>
</tr>
</tbody>
</table>
Table 1: Threshold Concepts and Learning Outcomes

<table>
<thead>
<tr>
<th>Practice, Time and Effort</th>
<th>Writing and Ecological literate development</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Writers’ Histories, Processes, and Identities Vary</td>
<td>Writing and Ecological literate development</td>
</tr>
<tr>
<td>7. Writing Is Linked to Identity</td>
<td>Writing and Ecological literate development</td>
</tr>
</tbody>
</table>

The spirit of Wardle and Roozen’s ecological literate development assessment model is alive in my curricular design, but it emphasizes the students’ awareness of their own experiences over time, in multiple locations and for different purposes. An ecological model literate development in curriculum, then, leads us to design courses and assignments to “address students’ wide range of experiences with writing and the impact those experiences have on their abilities to accomplish academic tasks” (Wardle and Roozen 2012). The main shift being that students are now invited into the process of understanding their own literate development within a writing ecology that is, of course, as unique as they are. In this way, instructors can tap into their students’ work in the course to aid in the ambitious ecological assessment that Wardle and Roozen describe, while also mining the perspectives of the students themselves, with a level of detail and accuracy that may be missed otherwise.

Outline of Curriculum and Assignments

The purpose of this curriculum and pedagogy is to lead students through assignments designed to help them achieve the course learning outcomes, and in doing so grapple with their embedded threshold concepts. The frame of ecological literate development provides the structure for reflection and awareness of writing process and writing identity, as well as the complex network of systems that inform an individual’s writing knowledge and experience.

Course Overview:
Note: Readers can link to the course site to review full project description and the course syllabus, as well as other materials, at www.literateecologies.wordpress.com.

Understanding that students live and write in contexts that include, but are not limited to, the university, this course asks students to undergo a semester-long mapping of their own writing ecologies. Because students are constantly adapting communication to the various contexts they inhabit, an awareness of this adaptation can help foster what Salomon and Perkins name “high-road transfer” of this writing flexibility. The different systems or contexts students inhabit make up their writing ecology, and the ability to transfer knowledge about how they move within that ecology can greatly benefit students’ writing development. Reflecting on writing ecologies will help students develop more intentionally, and will give them a stronger awareness of how they can be flexible (adaptive) writers at the university.

In the overview for the course in the syllabus, students will be quickly introduced to a few key vocabulary terms, including (perhaps most importantly), writing ecology. As students are introduced to the notion of researching, reflecting on and writing about their own writing ecologies, the course learning outcomes are presented and the assignments are framed as tools to help with the broader goal of mapping. Mapping here will be theoretical, in that the purpose is to help students become aware of the ways in which the contexts in which they write connect, interact and even overlap. “Map” will also be the term used to describe the final reflective portfolio project, where students will pull together their conceptual and composition work from the semester to make claims about their writing ecologies.
The first day of class will begin with a generative activity based on Hannah and Saidy’s “class corpus” (CCC 2015). However, in addition to having students brainstorm vocabulary to make a shared class list from which to work all semester, we will also use this activity to begin the mapping process. In class, students will be asked to brainstorm a list of writing knowledge (prior knowledge) and the contexts it comes from. Students will brainstorm individual lists and then as a class we will compile everything on the board. Then, students will be asked to take their own list of writing knowledge and ecologies, and write brief explanations of the prior knowledge and literacy practices—why do they do them? What does this knowledge allow them to do? Our Day 2 activity will be to then use these fleshed-out explanations to create a map of the whole class’ writing ecologies and connections, overlaps, and tensions between individual contexts (microsystems).

**PROJECT 1: Exploring Part of the Writing Ecology You Already Inhabit—Personal Discourse Communities**

This first project is an analysis essay-based project, where students are asked to pick a discourse-community within their ecology of writing that they know well, already comfortably inhabit, and that is outside of school. Students are asked to study and write about this discourse community. Here, students are introduced to the first PEOP “mini-project,” intended to be generative for their study of their writing ecologies.

The PEOP assignment is a multi-modal mini-project that asks students to imitate a genre created by a graffiti artist named Fly. They create portraits of themselves intended to represent their identity in the discourse community under study, and surround that portrait with a written narrative about their role and experiences within it.
The guiding question for this mini-project is, “who am I in this discourse community?” The goals for this mini-project are both to help students write through a metacognitive thought process about their role in the discourse community, but also to help them investigate membership in the discourse community, and also gain information about the expectations of that community.

In preparation for writing up their analysis, students are assigned a process-reflection blog, that asks: “how do I /will I go about writing an analysis?” The goal of this blog is to take students through a metacognitive investigation of a potentially unfamiliar writing task.

As they prepare to write the larger essay portion of this project, the students are asked to approach their chosen discourse community through one main avenue: a survey of the genres that function for the community. Key questions include: What are the genres of this discourse community? How do they function? What do I have to write/compose to inhabit this ecology? Students then put together a multi-genre analysis of the discourse community, including examples of the genres in use and analyses of each one, including a synthesis about how the genres function collectively in that discourse community. The final project includes the mini-project and reflection pieces, as well as the multi-genre analysis. Students will also be asked to compose a reflection letter summing up their challenges and learning moments during the project.
PROJECT 2: Exploring WSU as a Part of our Ecology—Wayne State as a Discourse Community

This project shifts from genre analysis to rhetorical analysis, while maintaining the theme of examining a particular discourse community within students’ writing ecologies. This project parallels the rhetorical analysis project in use in the common curriculum in the WSU Composition Program. The exception is that, rather than focusing on curated essays or editorials, this curriculum asks the groups of students to focus on the university as a discourse community within their writing ecologies and has them analyzing communication within it.

PEOP #2 is assigned as a mini-project to generate ideas and help students work through a metacognitive process of considering their identities as students at the university. The key question of this mini-project is again: “who am I in this discourse community?”

The final project is a group rhetorical analysis project, in which each group is assigned a particular genre used in communication at the university. Students are asked to gather evidence from these genre samples and then to analyze the rhetorical moves and strategies of these genres. The final project includes the mini-project and reflection pieces, as well as the multi-genre analysis. Students are also asked to compose a reflection letter summing up their challenges and learning moments during the project.
PROJECT 3: Making Connections, Drawing Constellations—RESEARCH PROJECT

In this larger research project, students work through an extended research process to investigate connections and divergences between two discourse communities within their writing ecologies, including ways that they engage in writing similarly, differently, or adaptively within these communities. These can be any two discourse communities in their writing ecologies, but the easiest picks will likely be those investigated in Projects 1 and 2.

This project is similar in size and scope to the researched argument essay from the WSU Composition Program’s common curriculum. However, in this project students are asked to research the INTERACTION between the two discourse communities and how they adapt to each as writers. Questions students may consider can include:

- What are the effects of writing in both discourse communities? Is there overlap? Tension? Should there be overlap? Is tension here necessarily negative?
- How are you flexible/adaptive as a person? As a writer? How do you move between these discourse communities? How do you present your ethos differently? Work to compose a different or similar ethos?
- How does you composing process adapt in each discourse community? What composing strategies are the same for you? What composing strategies are different?
- What does the change in context and/or physical environment do to your composing process?
- How has your ability to inhabit these ecologies changed over time? Why?
As they engage in a research process, students will need to:

- Identify the genres of written communication in each discourse community
- Identify the rhetorical situations and rhetorical strategies privileged/most useful in each discourse community
- Take up an issue connecting the two writing ecologies

**PROJECT 5: Mapping Our Writing Ecologies—Digital Portfolio**

For this final project, students create a digital portfolio on their blog sites to present a revised representative genre from a particular discourse community under study during the term, with a reflective description of how this genre demonstrates key features of the discourse community. Students are asked to then create/translate a genre from one discourse community to another, with a reflective description to accompany it describing adaptations needed between discourse communities, from the perspective of the audience, and the author. Finally, students will be asked to generate a reflective essay (a “key” to the map) to describe how literacy functions across their individual ecologies, how each genre example fits into the ecology and how they moved between genres and discourse communities, within their particular writing ecology.

**Assessing Student Understanding**

Student writing within the projects themselves, especially the final project, demonstrates students’ engagement with the threshold concepts and learning outcomes. Student reflective writing, particularly the bi-weekly reflective journal, is used to assess the level of awareness about and connections between prior knowledge and composition threshold concepts introduced in the course.
CHAPTER 3 “TRANSFER WITHIN FYC: WHAT WRITING KNOWLEDGE DO STUDENTS BRING WITH THEM AND GET FROM FYC?”

In Chapter One, I described the current conversation surrounding knowledge transfer and an ecological model of writing within the field. Because research on knowledge transfer is still a burgeoning area within Rhetoric and Composition, studies are only just beginning to investigate a) what writing knowledge transfer looks like, b) how we might conceptualize transfer and develop curriculum to facilitate it. I argued that using an ecological model of writing development as a framework for FYC curriculum is a way to promote the kind of knowledge transfer we are after as writing instructors. In Chapter Two, I described the contexts surrounding my design of “literate ecologies” curriculum and pedagogy, aimed at promoting knowledge transfer of composition threshold concepts that align with my program’s learning outcomes. In Chapter Three, I will present a study of the Fall 2015 semester, where I implemented that curriculum and pedagogy, and then examined how students both transferred prior knowledge into the course, and what threshold concepts they engaged with during the course.

This chapter examines the second research question in the overall project: How can a curriculum based on an ecological model of writing and composition threshold concepts inform a student’s activation of prior knowledge from experience of personal/home discourses within FYC? I first provide a brief review of the literature surrounding knowledge transfer, particularly as it is applied to students’ prior knowledge and the transition into FYC. I then present two studies that examine how students transfer prior knowledge into my fall composition courses, as well as the knowledge they gained in those courses. Specifically, I look at the results from a pre- and post-semester survey to examine student knowledge prior to enrollment in the FYC course.
(ENG 1020) and the change in writing knowledge over the course of the semester. In order to examine student awareness and activation of prior knowledge within the course, I also present findings from Phase 1 interviews with 7 students. In describing and interpreting the research data, I attend to their engagement with specific threshold concepts, as fostered by the literate ecology-focused curriculum and pedagogy designed for this FYC course.

**Background: Knowledge Transfer and Prior Knowledge**

Because the field’s interest in and examination of knowledge transfer is still in its relatively early stages, our understanding of how knowledge transfer works and what practices might support it is still fairly compartmentalized. As questions of transfer have traditionally been addressed in psychology and education, knowledge transfer itself has been distinguished from “mere learning.” In their article, “Rocky Roads to Transfer: Rethinking Mechanisms of a Neglected Phenomenon,” educational psychology scholars Gavriel Salomon and David Perkins provide extended definitions and examples of knowledge transfer, or the movement of learning across contexts (from A to B for example) (116). They present the mechanisms of low and high road transfer as the ways in which knowledge can move between contexts. “Low-road transfer” reflects extended practice, memorization, and is usually context-bound and dependent on how well-practiced a learner is. “High-road transfer,” on the other hand, reflects mindful abstraction of knowledge, a dismantling of knowledge in a controlled manner that requires mental effort.

These two mechanisms, for Salomon and Perkins, describe how knowledge gets transferred from one context to another. It has been a tendency of some studies to
present high road transfer as the “nobler choice;” however, Salomon and Perkins maintain that “both roads can be travelled at once—one can certainly both reflect on a behavior and practice it” (129). What is of more pragmatic concern for the field of Composition Studies, however, is how to make use of both mechanisms in order to promote writing growth for students. Salomon and Perkins give examples to illustrate both mechanisms “in action”, but those examples are generalized and not specific to Composition studies. So, even while they write “transfer may not typically occur in classroom settings on its own, there is every reason to believe that it can be encouraged” (137), in the end, we are only really told that we should try to encourage transfer, not exactly how to do that.

Recent studies in the field have given much attention to this “how” question, investigating both how knowledge transfer functions in the context of composition courses, as well as how courses might be designed and teachers conduct instruction to support or facilitate transfer—from contexts that predate a given course, like FYC, and thence to contexts that proceed after it. Knowledge from previous contexts is termed “prior knowledge.” A useful definition of prior knowledge can be found on Carnegie Mellon’s Eberly Center website, which states that “prior knowledge” in an educational context is “a broad range of pre-existing knowledge, skills, beliefs, and attitudes, which influence how [students] attend, interpret and organize in-coming information.” Making sense of how this works in our courses can greatly help composition instructors and administrators develop curricula and pedagogy that will support the successful intake of writing content and practice within the course. As we consider our students’ trajectories through the university and beyond, the focus shifts from knowledge gained prior to FYC,
and ideally the knowledge gained in FYC becomes prior knowledge that students will draw on in new contexts. For this reason, an understanding of how students navigate prior knowledge is key to understanding writing knowledge transfer beyond FYC.

Rounsville, Goldberg and Bawarshi present initial results from a cross-institutional study using surveys and face-to-face discourse based interviews to examine what genres students already know when they arrive in FYW courses and how students use their prior genre knowledge when writing new genres for FYW courses. They found that though students acknowledge experience with writing genres, they still don’t always transfer that knowledge across contexts. In order to get students to see the value in their prior knowledge, so that they can make use of it in new writing situations, Rounsville, Goldberg and Bawarshi suggest “helping students develop not only writing skills, but also meta-cognitive knowledge that can enable them to reorient their relationship to what they already know, and learn how to use their incomes [prior knowledge] in order to more successfully meet the outcomes that faculty across the disciplines, administrators, and employers use to measure the value of writing programs” (108).

Building on that study, Bawarshi teamed with Mary Jo Reiff to implement another cross-institutional study. They aimed to look more closely at the previous experiences and resources students draw on and why students draw on them. They also examined what experiences and resources students hold on to most persistently, and which they seem to relinquish most easily and why.

To do this, Bawarshi and Reiff conducted retrospective interviews to get at students’ “felt sense” of their experiences, as well as surveys, analysis of syllabi, and assignments. The results revealed two types of stances learners take in negotiating prior
knowledge and new contexts. Boundary crossers, who Bawarshi and Reiff describe as students more likely to question their genre knowledge and to break this knowledge down into useful strategies and repurpose it (who therefore engage in high road transfer), and boundary guarders, who are students more likely to draw on whole genres with certainty, regardless of task (engaging in low-road transfer). Bawarshi and Reiff then point to the effects of explicit teaching of “purposeful reflection on [students’] learning and application of this learning to new contexts,” maintaining that

If we see FYC as a potential site for disrupting the maintenance of strict domain boundaries, if we want to encourage students to draw from their full range of discursive knowledge, and if we want students to draw on antecedent genres they are familiar with in order to negotiate what they perceive as new and future rhetorical situations, we must intervene at the very beginning of the course in order to make possibilities and processes of domain crossing explicit and clear. (331)

In my study, I am attempting to do just what Bawarshi and Reiff describe here through a focus on literate ecologies. Examining students’ prior knowledge which they brought with them into my course is the first step to seeing how much they were able to loosen their grip on “strict domain boundaries” and become “boundary crossers,” if at all.

Yancey, Robertson and Taczack take up this analysis of student prior knowledge and look practically at how students navigate a specific composition curriculum designed to support knowledge transfer from prior contexts. Sketching out their findings in the Composition Forum article “Notes toward A Theory of Prior Knowledge and Its Role in College Composers’ Transfer of Knowledge and Practice,” they describe the starting point of many FYC students as “absent prior knowledge,” or that students “enter college with very limited experience with the conceptions and kinds of writing and reading they will engage with during the first year of postsecondary education” (5). In other words, students are largely unfamiliar with the genres and practices of college writing. This does not mean
that there is nothing to draw on in terms of prior knowledge. However, the prior knowledge may seem irrelevant to the current contexts. As Yancey, Robertson and Taczack began to pay attention to how students work to fit the two together, they noticed patterns. Students’ “uptake” of new knowledge in combination with prior knowledge resulted in the three models of how students use that prior knowledge that Yancey, Robertson and Taczack present. First, assemblage, or “grafting pieces of new information—often key terms and strategies—onto prior understandings of writing that serve as a foundation to which they frequently return.” Second, remix, or “blending elements of both prior knowledge and new knowledge with personal values into a revised model of writing.” Lastly, critical incidents, or use of a writing setback “as a prompt to re-theorize writing and to practice composing in new ways” (18). The typology developed out of Yancey, Taczack and Robertson’s study can enrich and complicate the dichotomy identified by Bawarshi and Reiff, as it helps to highlight the dynamic process of “students working with such prior knowledge in order to respond to new situations and create their own new models of writing” (18).

In light of this existing work in the field, this study seeks to take each step in turn, from 1) designing a curriculum with an eye toward fostering writing knowledge transfer with an ecological model of writing development, to 2) examining what prior knowledge students bring with them and can recognize, to 3) observing what happens when those same students grapple with the FYC curriculum, and noting if and how it affects their awareness of and growth in writing knowledge during, immediately after, and a semester after their experience in that course. The first step, which I will examine in this chapter, is to focus on students’ awareness and activation of prior knowledge, by analyzing survey results and student interviews.
Study One: Pre- and Post-Semester Surveys

Methods

In this study, I conducted surveys of my FYC students at the beginning and end of the course to measure what prior knowledge they had before and after engaging with course content. The pre- and post-course surveys used in this study were distributed to students during the first and last weeks of the Fall 2015 semester, respectively.

Participants

All enrolled students in my three sections of ENG 1020 (the general education first year writing course at WSU) were given the option of participating in the anonymous surveys, and the same questions were given to students in both surveys to compare (via the pre-semester survey) students’ prior knowledge coming in to ENG 1020, and (via the post-semester survey) students’ growth in writing knowledge and awareness after completing the course. All participants provided informed consent. The study was approved by the WSU Institutional Review Board.

Data Collection of Surveys

Students were given the pre-semester surveys during the first full week of class and thirty-nine students responded (n=39). Post-semester surveys were distributed and collected during the final week of class, with sixty-one students responding (n=61) (See Appendix A for survey instrument). Percentages of responses were calculated to adjust for this difference in response numbers, and findings are reported in percentages. I focused in on particular short answer responses to “winnow” the data (Cresswell 195).

Data Coding of Surveys
Following Cresswell, coding for the survey responses began with an initial read through to organize and prepare data for analysis (197). Following Hsieh and Shannon, I used conventional content analysis to develop codes inductively from the short answers in the survey data (1279). In this way, I discovered categories that revealed students’ knowledge about the writing process, prior writing knowledge, and their reasoning regarding the success of their writing. Table 2 presents the coding schema for the short-answer responses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
<th>Textual Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing Process Knowledge</td>
<td>Student response describes writing process as perceived by the student at time of survey.</td>
<td>The writing process to me is gathering info together and starting to write a draft of what you're talking about and reviewing / revisiting it for a final copy.</td>
</tr>
<tr>
<td>Prior Writing Knowledge</td>
<td>Student response describes any prior knowledge gained from contexts (in or out of school) the student finds helpful in current writing contexts.</td>
<td>Taking AP lit has because the teacher really helped us with essays.</td>
</tr>
</tbody>
</table>
| Concept of Writing Success | Student response describes what they perceive as their most successful and least successful pieces of writing, along with why they think it was or was not successful. | Writing Success
A poem I wrote called "the epiphany"; it is filled with literary devices, emotion and truth.                                                                 |
|                     |                                                                             | Writing Failure
my least successful are lab reports because I don't usually explain much and find it hard to analyze (sic) scientific research and results. |

Table 2: Short Answer Response Codes
Data Analysis of Surveys

The content of each survey response code was further analyzed to develop codes describing the writing knowledge students reported at the beginning and end of the semester.

Writing Process Knowledge Codes

Responses to the question asking students to describe what they knew about the writing process were coded into the following categories: Writing Process as Linear Steps, Complex Writing Process, Response is Missing, Describes Writing Product Only, and Vague Description of Writing Process. Table 3 presents the definitions and textual examples for each of the Writing Process Knowledge codes.

<table>
<thead>
<tr>
<th>Table 3 Writing Process Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
</tr>
<tr>
<td>Writing Process as Linear Steps</td>
</tr>
<tr>
<td>Complex Writing Process</td>
</tr>
<tr>
<td>Missing Response</td>
</tr>
<tr>
<td>Definition</td>
</tr>
<tr>
<td>Responses that listed steps of the writing process as typically taught in a linear progression, with little to no deviation or complexity.</td>
</tr>
<tr>
<td>Responses that included more than a linear list of steps in describing the writing process, adding complexity or conditions where steps might be changed or rhetorical situations that might call for a different process.</td>
</tr>
<tr>
<td>Responses not present</td>
</tr>
<tr>
<td>Textual Example</td>
</tr>
<tr>
<td>Start with an idea and then write a rough draft. Then edit those thoughts and re-write the piece. Continue this until you feel it is complete and compose a final draft.</td>
</tr>
<tr>
<td>I know that the writing process requires good reading skills (and research) and much reflection. I go about writing by keeping in mind the nature of the discourse community, the rhetorical situation (message, author, audience) and the appropriate use of rhetorical appeals (accordingly) ethos, pathos and logos.</td>
</tr>
<tr>
<td>Responses not present</td>
</tr>
</tbody>
</table>
Describes Written Product Only | Responses describe a writing product or genre only, and do not describe any aspect of the processes used to create those products. | The typical 3 paragraph structure and a little bit of analysis.

Vague Description of the Writing Process | Responses present a vague description of the writing process that presents no useful specifics. | I know it takes time.

Table 3: Writing Process Knowledge

**Prior Writing Knowledge Codes**

Responses to the question about sources of prior knowledge were coded into the following categories: High School, AP, Other Prior Knowledge, Missing, and Vague.

Table 4 presents the definitions and textual examples for each of the Prior Writing Knowledge codes.

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
<th>Textual Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>Response describes prior writing knowledge from high school perceived as most useful for student in current and future writing contexts.</td>
<td>My high school experiences that will help me most is [sic] my ability to analyze ideas and perceive in my own way.</td>
</tr>
<tr>
<td>AP</td>
<td>Response describes prior writing knowledge specifically from AP courses perceived as most useful for student in current and future writing contexts.</td>
<td>My AP class I took my junior year. I learned a lot of writing skills and tools. I just need a touch-up on them again.</td>
</tr>
<tr>
<td>Other Prior Knowledge</td>
<td>Response describes prior writing knowledge from contexts outside of school, and/or focuses on particular writing strategies not connected to a particular context.</td>
<td>I worked on my long fiction, Disembark, every day. I have to use that experience to push through projects</td>
</tr>
</tbody>
</table>
perceived as most useful for student in current and future writing contexts.

<table>
<thead>
<tr>
<th></th>
<th>Missed</th>
<th>Vague</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responses were missing.</td>
<td>Responses were so vague as to not communicate any useful information</td>
<td>I don't know.</td>
</tr>
</tbody>
</table>

Table 4: Prior Writing Knowledge

**Concept of Writing Success Codes**

Responses to the questions about what students thought of as their most-successful and least-successful pieces of writing were coded based on reasons students articulated for that success. This divided the codes into the following categories: Effort, Result, Grade, Writer’s Feelings, Written Product, Missing, and Vague. Table 5 presents the definitions and textual examples for each of the Concept of Writing Success codes.

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
<th>Textual Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effort</td>
<td>Response describes level of writer’s effort as the main reason for the level of success of a piece of writing</td>
<td>Poems, [were most successful] since I put so much effort into the last poem I wrote.</td>
</tr>
<tr>
<td>Result</td>
<td>Response describes the result of the writing, or the piece either fulfilling or not fulfilling the purpose for which it was written, as the main reason for the level of success of a piece of writing.</td>
<td>My scholarship essay [was most successful] because I actually won.</td>
</tr>
<tr>
<td>Grade</td>
<td>Response describes the grade a piece of writing received as the main reason for the level of success of a piece of writing.</td>
<td>My freshmen paper on the American Dream [was least successful]</td>
</tr>
</tbody>
</table>
Table 5: Concept of Writing Success

<table>
<thead>
<tr>
<th>Reason for Writing Success</th>
<th>Writer’s Feelings</th>
<th>Written Product</th>
<th>Missing</th>
<th>Vague</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Satisfaction</td>
<td>Reason describes reason for a piece of writing’s level of success as personal satisfaction, or writer’s feelings about the piece.</td>
<td>My journals are most successful because it is (sic) my thoughts and no one knows what is in it and no one can read it.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Written Product</td>
<td>Reason describes reason for a piece of writing’s level of success as what was created in the actual written product, such as a rhetorical move or structure.</td>
<td>My most successful is persuasive because I find good points to persuade readers and find my self most organized in that style of writing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>Response is not present.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vague</td>
<td>Response does not offer a reason for a piece of writing’s level of success.</td>
<td>An in-class essay on Gatsby that I wrote form my American Lit class.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Survey Findings

Pre-Semester Survey Writing Process Knowledge

Examining the pre-semester survey reveals some interesting things about students’ prior knowledge when entering the course. Figure 1 presents the distribution of pre-semester student responses regarding writing process knowledge: Writing Process as Linear Steps (n=15, 38%), Complex Writing Process (n=6, 15%), Missing (n=5, 13%), Describes Written Product Only (n=5, 13%), and Vague Description of the Writing Process (n=8, 21%).

Pre-semester survey results (n=39) showed that, when describing writing process knowledge, a majority of students (n=23, 59%) either presented a perfunctory list of steps or a vague description of the writing process, lacking any significant
complexity. Additionally, over a quarter of students either did not respond to the question or seemed to misunderstand the question, giving a description of a written product as an answer (n=10, 26%). Only a small percentage of students were able to respond with descriptions of the writing process that went beyond linear steps, adding complexity and qualifications (n=6, 15%).

Figure 1: Writing Process Knowledge (Pre-Semester)
Post-Semester Survey Writing Process Knowledge

Figure 2 presents the distribution of students’ post-semester survey responses (n=61) regarding writing process knowledge: Writing Process as Linear Steps (n=20, 33%), Complex Writing Process (n=18, 29%), Missing (n=4, 7%), Describes Written Product Only (n=1, 2%), and Vague Description of the Writing Process (n=18, 29%). Comparing the pre- and post-semester surveys, however, shows a change in the percentages, as one might expect after students have engaged in a curriculum and pedagogy that incorporates instruction about the writing process. After a semester of ENG 1020, students responded differently when asked about their writing process.

While a majority of students (n=38, 62%) still described the writing process either vaguely or as a linear set of steps, only one student seemed to misunderstand the question, giving a description of a written product as an answer (n=1, 2%). The percentage of missing answers also decreased (n=4, 7%).

Overall, students’ responses that included steps plus further explanation or acknowledgment of things like “audience,” the need for rhetorical strategies, or flexibility based on genre or rhetorical situation, increased (n=18, 29%). By the end of the semester, fewer students avoided answering the question and more students could articulate additional, nuanced variables related to the writing process.
Pre-Semester Survey Prior Writing Knowledge

Figure 3 presents the pre-semester distribution of student responses regarding prior writing knowledge: High School (n=13, 33%), AP (n=4, 10%), Other Prior Knowledge (n=5, 13%), Missing (n=12, 31%) and Vague (n=5, 13%). At the beginning of the semester, 33% (n=13), or a third of students, stated that their main source of prior writing knowledge that would be most useful in college was a high school class, or simply “high school” in general. Ironically, nearly the same percentage of students (n=12, 32%) reported bringing no helpful prior knowledge at all to FYC. Ten percent of students said that one or more experiences in AP classes served as useful prior knowledge. The same percentages of students (n=5, 13%) either pointed to specific genres they had experience writing, or particular processes of composing as the sources of their prior knowledge, or responded with vague descriptions.
Figure 3: Prior Writing Knowledge (Pre-Semester)

Post-Semester Survey Prior Writing Knowledge

Figure 4 presents the post-semester distribution of student responses regarding prior writing knowledge: High School (n=9, 15%), AP (n=9, 15%), Other Prior Knowledge (n=16, 26%), and Missing (n=19, 31%), and Vague (n=8, 13%). Interestingly, at the end of the Fall 2015 semester, the students citing high school in general as helpful prior knowledge for their current and future writing contexts decreased to 15%, and students citing AP classes specifically rose to 15%. Those reporting absent prior knowledge stayed the same. The percentage of vague responses also stayed the same. The biggest shift upward came from students citing genre and writing process knowledge as useful prior knowledge (from 13% to 26%).
Pre-Semester Survey Concept of Writing Success

Figure 5 presents the pre-semester distribution of student responses regarding concept of writing success (n=78): Effort (n=16, 21%), Result (n=5, 7%), Grade (n=5, 7%), Writer’s Feelings (n=16, 21%), Written Product (n=11, 14%), Missing (n=10, 13%), and Vague (n=13, 17%). Students were asked to name what they perceived as their most-successful and least-successful pieces of writing, and they were invited to include why they thought so. Expected patterns emerged in students’ responses, particularly in the coded category, “grade.” However, the numbers of students focused on grades were not as striking as expected, even at the beginning of the semester. More students did associate negative effort with least successful pieces of writing, for example, “I didn’t do enough work on it.” Surprisingly, students cited either their own experience with and feelings about the writing process, as well as what they thought about the finished
piece, as the overwhelming reasons why they thought particular pieces were successful or unsuccessful (n=27, 35% at the beginning of the semester).

![Concept of Writing Success (Pre-Semester)](image)

**Figure 5: Concept of Writing Success (Pre-Semester)**

**Post-Semester Survey Concept of Writing Success**

Figure 6 presents the post-semester distribution of student responses regarding concept of writing success (n=122): Effort (n=10, 9%), Result (n=11, 9%), Grade (n=6, 5%), Writer’s Feelings (n=24, 20%), Written Product (n=22, 19%), Missing (n=21, 18%), and Vague (n=23, 20%). The post-semester surveys showed that students relied slightly less on their grade or the amount of effort put in when gauging success, and slightly more on the result of their writing’s purpose. In other words, on whether or not the piece “did what it was supposed to do.”
Turning to the Phase I interviews, we can see more precisely how some students used prior knowledge and what threshold concepts they engaged with as they progressed over the course of the semester.

**Study Two: Phase 1 Interviews**

*Methods*

For this study, I conducted a first-round of interviews (Phase 1) with my FYC students at the end of the course to further examine students’ perceived prior knowledge coming into ENG 1020 and how they used that prior knowledge during the course, as well as their engagement with composition threshold concepts throughout the semester. These were discourse-based interviews. Participants brought a sample of their writing from ENG 1020 that semester to serve as an anchor for the interviews.
Participants

Seven ENG 1020 students from Fall 2015 agreed to participate in the Phase 1 interviews. Five of the seven students were honors students. All participants provided informed consent at the beginning of the semester, at the same time as they provided informed consent for the surveys. I did not know the identity of the students who agreed to be interviewed until after final grades were submitted. The study was approved by the WSU Institutional Review Board.

Data Collection of Phase 1 Interviews

Phase I interviews were conducted with participating students (n=7) during finals week of the Fall 2015 semester, after final grades had been posted for ENG 1020. Five of the seven interviewees were honors students. The interviews were approximately an hour long, and required students to answer several sets of questions about writing knowledge prior to the semester, knowledge gleaned in the class, and their awareness of their writing ecologies. The interviews were recorded and transcribed, and then coded to reveal patterns within the responses. Table 6 presents the Phase 1 interview protocol.

<table>
<thead>
<tr>
<th>Table 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1 Interview Protocol</td>
</tr>
<tr>
<td><strong>Background Questions:</strong></td>
</tr>
<tr>
<td>1. From the kinds of writing you listed on the survey as having used in the past in different areas of your life, which ones do you think have been the most useful to you in ENG 1020? Why?</td>
</tr>
<tr>
<td>2. Can you think of a time when you were supposed to write something and you really didn’t know how to proceed? What did you do? What would you do if that ever happened now?</td>
</tr>
<tr>
<td><strong>Questions on prior knowledge with Writing Sample:</strong></td>
</tr>
</tbody>
</table>
3. When you wrote this piece, what did you think you had to do to write it well? What did you think that the assignment was asking you to do, and how did you determine that?

4. What previous kinds of writing did this piece most remind you of, and how did you draw on these to complete it?

5. What was the most difficult part of writing this? The easiest?

6. When you faced this writing task, what previous experiences or kinds of writing did you draw on to help you complete the assignment? How did you decide which kinds of writing to draw on?

7. Underline/point to the phrases or places that you most like in this paper. Explain why you like them.

8. [Interviewer points out conventions and repeated patterns in the student’s writing.*] Why did you choose to do this? Where did you learn to do this?

9. [Interviewer points out any areas indicating variation from conventions in the writing.*] How did you come up with the idea to do X? Where did you learn to do this?

Questions on Ecological Awareness with Writing Sample:

10. What kind of voice or writer-identity did you try to adopt or compose for yourself? How did you know that was something you wanted to project?

11. Were there things you purposely did to try to make the paper what you thought was expected? What did you know about the audience, purpose and context that helped you figure out these expectations?

12. Were there things you didn’t do that you thought you should have done or didn’t do because you didn’t want to?

13. Were there things you didn’t do because you didn’t know how to do them?

14. Were you able to use information you have acquired about writing in English 1020 so far to help you write this piece?

15. Were you able to use information you have acquired about writing in contexts outside of English 1020—even outside of school altogether—that helped you write this piece in some way?

Table 6: Phase 1 Interview Protocol
Data Coding of Phase 1 Interviews

Codes for the interview analysis were developed using directed content analysis (Hsieh and Shannon 1281), wherein analysis starts with theory and/or prior research findings. The research questions that anchor this chapter were used as directed content. Table 7 presents the main coding categories: Prior Knowledge (Yancey, Robertson and Taczak; Reiff and Bawarshi), Composition Threshold Concepts (Adler-Kassner, Wardle, et al.) that align with program learning outcomes (see Chapter 2) and Literate Ecologies (Bronfenbrenner; Cooper).

<table>
<thead>
<tr>
<th>Table 7</th>
<th>Phase 1 Interview Coding Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>Definition</td>
</tr>
<tr>
<td>Prior Knowledge</td>
<td>Responses that describe either the use or the awareness of writing knowledge from experiences previous to FYC.</td>
</tr>
<tr>
<td>Threshold Concepts</td>
<td>Responses that describe either the use or the awareness of threshold concepts aligning with program learning outcomes.</td>
</tr>
<tr>
<td>Literate Ecologies</td>
<td>Responses that describe either the use or the awareness of an ecological model of writing development, via articulation of discourse community knowledge, genre and rhetorical awareness, flexible</td>
</tr>
</tbody>
</table>
writing strategies, etc. emails helped me because they were from my department, and for project 3 I wrote about work and I work on campus so I brought in my personal experiences to that.

Table 7: Phase 1 Interview Coding Categories

<table>
<thead>
<tr>
<th>Writing Strategies</th>
<th>Emails</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helped me</td>
<td></td>
</tr>
<tr>
<td>Because they were from my department, and for project 3 I wrote about work and I work on campus so I brought in my personal experiences to that.</td>
<td></td>
</tr>
</tbody>
</table>

Data Analysis of Phase 1 Interviews

The content of each Interview code was further analyzed in order to develop codes describing more precisely how each code was described by the student.

Prior Knowledge: Absent, Activation and Awareness

The Prior Knowledge codes were broken down into the following categories: Absent Prior Knowledge, Activation of Prior Knowledge and Awareness of Prior Knowledge. Student responses were coded according to articulation of either present prior knowledge or absent prior knowledge. The definition of absent prior knowledge is drawn directly from Yancey, Robertson and Taczak’s typology of prior knowledge. While they categorize the description as “Absent Prior Knowledge,” they also call it “an absence of prior knowledge,” which they identify in two key areas, that of key writing concepts and non-fiction texts that served as models (108). They further articulate that:

What we see here—through these students’ high school curricula, their own reading practices, and their writing practices both in but mostly out of school—is reading culture as a prior experience, an experience located in pre-college reading and some writing practices, but one missing conceptions, models and practices of writing, as well as practices of non-fiction reading, which could be helpful in a new post-secondary environment emphasizing a rhetorical view of both reading and writing. Or: absent prior knowledge. (111)

I further specified articulated present prior knowledge into Activation of Prior Knowledge (applying and deploying previous learning in the context of ENG 1020) and
Awareness of Prior Knowledge (knowing and identifying previous learning). Table 8 presents the definition and textual example of each of the Phase 1 Prior Knowledge codes.

<table>
<thead>
<tr>
<th>Table 8</th>
<th>Phase 1 Prior Knowledge Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>Definition</td>
</tr>
<tr>
<td>Absent Prior Knowledge</td>
<td>Response describes experiences with reading and writing that are missing concepts, models and practices of writing—either via lack of experience with particular genres, concepts, or lack of mastery of previously taught concepts, models and practices.</td>
</tr>
<tr>
<td>Activation of Prior Knowledge</td>
<td>Response describes experiences with reading and writing—including concepts, models and practices of writing—that are applied and/or deployed in the context of ENG 1020.</td>
</tr>
</tbody>
</table>
Table 8: Prior Knowledge Codes

Threshold Concepts: Activation and Awareness

Threshold concepts considered for coding were the seven threshold concepts from Adler-Kassner and Wardle that coincided with the learning outcomes of the course (see Ch. 2). Table 9 presents the definitions and textual examples for each of the threshold concepts.

Table 9
Definitions of Threshold Concepts

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
<th>Textual Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC 1</td>
<td>Response describes use or awareness of the threshold concept: Writing is a Social and Rhetorical Activity, particularly articulating strategies for analyzing or for reaching particular audiences.</td>
<td>It just, it related to the audience more, like if you're reading it and you're like wow, like the sandwich I just ate could give me cancer and I don't even know it. Like it just kind of pulls the readers in more because you're more relating to them.</td>
</tr>
<tr>
<td>TC 2</td>
<td>Response describes use or awareness of the threshold concept: Writing is a Knowledge-</td>
<td>I didn’t realize how important my discourse community was and how many genres there were,</td>
</tr>
</tbody>
</table>
Making Activity, particularly articulating uses of a broad range of genres, as well as “what counts” as writing experience both inside and outside of the ENG 1020.

<table>
<thead>
<tr>
<th>Threshold Concept 3 (TC 3)</th>
<th>Response describes use or awareness of the threshold concept: Texts get Their Meaning from Other Texts, particularly articulating moments where they turned to other texts—via secondary research, looking at sample papers, or other such references—in order to construct meaning within their own writing processes.</th>
<th>I researched and made sure I knew the definition of logos and so I could determine logos between ethos and pathos, so I could know the difference, and I just kept to my own thinking, like, it would be logical if I did this…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threshold Concept 4 (TC 4)</td>
<td>Response describes use or awareness of the threshold concept: Reflection is Critical for Writers' Development, particularly articulating specific instances of reflection during or after a writing task.</td>
<td>I loved writing reflections to think back, and so, definitely you should always keep those in your classes. Because I love just freewriting, I love just putting pen to paper it really gets your thoughts going before class, I love stuff like that.</td>
</tr>
<tr>
<td>Threshold Concept 5 (TC 5)</td>
<td>Response describes use or awareness of the threshold concept: Learning to Write Effectively Requires Different Kinds of Practice, Time and Effort, particularly articulating instances of practice to increase fluency, to practice techniques and strategies, and to engage with other humans as I didn't know how to interpret everything, but as I went down the line, I remember for the last piece, I turned in the reflection piece for that and like I literally looked at the rubric and I was like oh my gosh, this makes so much sense! Like if this is what we’re going to be graded on, then like, make sure that</td>
<td></td>
</tr>
</tbody>
</table>
ways that writers learn.  

you answer these questions! And for some reason, that didn't click with me for the first project, like I would look at it and I would read "introduction" and I wouldn't look at the breakdown or the specifics of it. And I would just go "introduction" and I would do an introduction, but I didn't really know how to interpret it, I didn't know how to use the rubric to my advantage.

### Threshold Concept 6 (TC 6)

Response describes use or awareness of the threshold concept: Writers’ Histories, Processes and Identities Vary, particularly articulating the contexts of schooling and culture, larger personal and relationship structures, work-place sites, the civic sphere, or cultural contexts of writing

I always have to be on a professional level at work. At school I have to be on an academically professional level, um, even at home in um certain cases, when we’re speaking about--like, we have a family chat, and my brother will speak about and will post articles and we’ll get into deep discussions about stuff and then so that genre also is where I’m posting pictures of my nieces and nephews and laughing at them and that’s the only difference but mostly it’s all strictly professional.

### Threshold Concept 7 (TC 7)

Response describes use or awareness of the threshold concept: Writing is Linked to Identity, particularly articulating specific instances where writing processes or products

In some papers, I'll try to include like humor into it; I'll try to be like funny in my writing to like, persuade the reader even more...and it, it kinda spreads out, to the different pieces of writing
were explicitly linked to identity.

Table 9: Definitions of Threshold Concepts

Literate Ecology: Activation and Awareness

Students’ articulations of their own literate ecologies were coded in terms of activation and/or awareness. Activation of literate ecologies, similar to threshold concepts, was identified when students were able to articulate the pragmatic use of the literate ecologies framework, but not explicitly name it. Awareness was identified when students were able to explicitly articulate the conceptual framework. In this schema, a student may articulate the use of the literate ecologies framework without being explicitly aware of it. A student may, however, exhibit both as well. Table 10 presents the definition and textual examples of each of the Phase 1 Literate Ecology codes.

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
<th>Textual Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activation of Literate Ecology</td>
<td>Response describes the use, or ability to practice, apply or operationalize the literate ecology framework, transferring writing knowledge from one context to another without explicit description of the framework.</td>
<td>I think ethos changes from one writing (sic) to another, according to the topic. Like, I know if I’m a specialist in a field, we want to say, or if I’m based on someone who knows what they’re doing. Like, I based my project 3 on someone else’s work, but in project 1 I had to do it myself, because I wrote the position papers, and I know how it was supposed to go.</td>
</tr>
<tr>
<td>Awareness of Literate Ecology</td>
<td>Response explicitly articulates the literate ecology framework itself, particularly describing transfer or connections</td>
<td>I didn’t realize that a lot of them were connected. And so a lot of them were also connected to genres in my other discourse</td>
</tr>
</tbody>
</table>
between discourse communities. communities, which I realized, “oh, I do this on a daily basis...” I didn’t realize that this was going to help me. And I realized that stuff I was doing at work was helping at school, like writing this paper, for example, So that part of the paper, was the most difficult because that was when I had to think about it the most, about what I was writing, but that part helped me for my future papers, especially when it came to my writing ecology, um, when I had to bring in other discourse communities, I connected everything together at the end.

<table>
<thead>
<tr>
<th>Table 10: Phase 1 Literate Ecology Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Each of the question responses was coded for each of the coding schemas, in order to account for the breadth of students’ oral responses.</td>
</tr>
</tbody>
</table>

*Findings of Phase 1 Interviews*

**Prior Knowledge**

The three main categories relating to students’ prior knowledge that were considered were 1) absent prior knowledge, 2) activation of prior knowledge, and 3) awareness of prior knowledge. What the interviews revealed was that, out of the total articulations regarding prior knowledge (n=64), the students demonstrated relatively few instances of absent prior knowledge, when compared to being able to activate prior knowledge during the course, or being aware of prior knowledge.
Figure 7 presents the distribution of student responses demonstrating absent prior knowledge (n=11, 17%), activated prior knowledge (n=23, 36%), and awareness of prior knowledge (n=30, 47%).

**Phase 1 - Prior Knowledge**

- **Awareness of Prior Knowledge**: 30
- **Activation of Prior Knowledge**: 23
- **Absent Prior Knowledge**: 11

*Figure 7: Phase 1 – Prior Knowledge*

**Absent Prior Knowledge**

Students identified a lack of prior knowledge in the fewest instances (n=11, 17%). This may speak to the population of interviewees being particularly well prepared for college writing in high school, or it may be attributed to the high efficacy of the interviewees as students in general (5 out of the 7 were honors students). An example of a student describing absent prior knowledge can be seen in Kayla’s response:

> I didn’t know how to say what argument I was going to do, so at first I didn’t do that, because I didn’t know how to say oh, this is the type of paper I’m going to have because this is the argument that I was going to say, and I knew it was it was some sort of evaluation argument, but I didn’t know how to show how it was an evaluation and I think I didn’t know how to write it.

**Activation of Prior Knowledge**

Students were able to make use of prior knowledge by deploying it to complete assignments in ENG 1020, or other writing contexts during the Fall 2015 semester,
more often than not (n=23, 36%). They were thus identified as activating prior knowledge. The ability of students to use prior knowledge suggests strong support for this active, low-road transfer within the ENG 1020 curriculum. For example, Catherine describes how knowledge from high school—the concept of "proof"—was activated in her work on Project 2 in ENG 1020:

I think I needed to find valid proof and strong proof in the emails we were writing about, because if I didn’t have strong proof, I couldn’t prove, or couldn’t find that logos was used in the emails.

**Awareness of Prior Knowledge**

Students were able to make connections to prior knowledge from school almost half of the time (n=30, 47%), regardless of whether or not this knowledge was useful in grappling with the assignments at hand. For example, Kayla is not only to describe using, or activating, prior knowledge in her ENG 1020 work, but she is also aware that that is what she did. Kayla demonstrates awareness of prior knowledge:

For project 1 it was really a literary analysis that I had done, but it was really different, like you were looking at a whole book. But the genres I looked at for project 1 were figure skating forms, so it was interesting to look at because it’s not enjoyment writing, it’s for a certain purpose, so I would say that I really looked at literary analysis for that…

**Engagement with Threshold Concepts**

During the Phase I interviews, students referenced all of the threshold concepts connected to the learning outcomes (n=92), but some were more dominant than others. Figure 8 presents all of the occurrences of the threshold concepts in student Phase I interviews: TC 1 (n=21, 23%), TC 2 (n=9, 10%), TC 3 (n=13, 14%), TC 4 (n=5, 5%), TC
The most referenced threshold concept was TC 1, “Writing Is a Social and Rhetorical Activity” (n=21). Nabintou exemplified this in one of her responses, as she described considering her audience as she made composition choices while making her infographic:

I was presenting to all students besides a few, so with the infographic I was like, ok, now I’m going to do things to make more sense—like, you remember how I made Bob? And the phases Bob went through? I really wanted to show the students “hey, this is something that effects you, this is why you should care,”

The second most referenced threshold concept was TC 7, “Writing is Linked to Identity” (n=19). Here, Nabintou describes how reflecting on her personality has helped her orient herself to academic research writing:

I realized because at one point in my life I was like extremely outspoken and I wouldn’t say extrovert, but just extremely outspoken and I wanna say if something made me uncomfortable, like you could tell. And really tried to adapt
listening and just researching and that’s more where I am in my life right now, and I really like it.

The least referenced was TC 4, “Reflection Is Critical for Writers’ Development” (n=5).

Petra describes how reflective writing in ENG 1020 helped her when she was “stuck”:

I think [the reflective journal] helped a lot, because I was able to reflect more. Because I was always stuck in this position, where I have a lot to say, but I don’t know how to say it. And, all the reflection journals helped a lot with that, just transferring my ideas to paper.

The remaining four threshold concepts fell in the middle range. For example, Batoul briefly described engagement with TC 2, “Writing Is Knowledge Making” (n=9), “it was really nice that I could just give into detail how important my job is by describing the genres that I write there.” An example of TC 3 “Texts Get Meaning From Other Texts” (n=13), is found in Petra’s description of using model texts and written feedback to compose:

I go and I read what is given to me again and again and again until I get a certain idea, and I submit what I have, and I’ll see later on what I can fix about it, when it’s graded, when I get it back.

TC 5 “Learning to Write Requires Practice, Time and Effort,” (n=13) is described in Nabintou’s realization that her drafting process will indeed require revisions and changes:

And also, it was more than just a saying that writing isn’t perfect, it was more than just a saying and it was more like, no, literally, you’re gonna go back and you’re gonna find mistakes no matter what.

And an example of TC 6, “Writers’ Histories, Processes and Identities Vary,” (n=12), can be seen in Zainab’s description of realizing her own ethos could be strengthened by her identity as Muslim:

So, the kind of ethos is like, my personal experience in everything...and then, also like in my research, my personal experience, cause like I am a Muslim, so I
kind of know what’s going on, but then when I researched I found out other stuff too.

**Engagement with Literate Ecology Framework**

Figure 9 presents the distribution of student responses of either activation or awareness of their literate ecologies.

![Phase 1 - Literate Ecology Engagement](image)

**Figure 9: Phase 1 Literate Ecology Engagement**

During the Phase 1 Interviews, students did not articulate engagement with literate ecologies consistently. Of the seven students, only three students articulated awareness or activation of literate ecologies more than once (n=1, n=3, n=6). Student 3 made connections between her academic voice and both academic and extra-curricular discourse communities, for example:

Ok, so remember in my first essay, where I said that I was in that fellowship program? I wanna say that. I wanna say, um, internships that I’ve done, and just community involvement, because I just think it helps me find my voice.

Student 6, on the other hand, made connections between her job and ENG 1020 concepts, for example:

Some of the writing that I had to do at work, yes. Um, I had to write....my boss requires us to do a write-up of everything we do at work, so he knows that
everyone’s on track, and um, one of my projects was actually, um, recording what everyone was doing in the office, and um, so that’s how when I was writing down all the genres and everything I was like, “oh because of this, everyone had to do this, and because of this genre, everyone had to do this…” and that’s how I got to the whole importance of each thing in my discourse community.

Discussion

For this chapter, I conducted two studies on my FYC courses in order to examine how students transferred prior knowledge, and what threshold concepts they engaged with during the course. This research extends previous work on writing knowledge transfer focused on prior knowledge (Salomon and Perkins, Rounsville, Goldberg and Bawarshi, Reiff and Bawarshi, and Yancey, Robertson and Taczak), as well as student engagement with composition threshold concepts (Adler-Kassner and Wardle) within a literate ecology-focused curriculum (Bronnfenbrenner, Cooper).

Study One

In Study One, I investigated what prior knowledge students brought with them into FYC, and compared that to knowledge gained from FYC. To do this, I conducted pre- and post-semester surveys and described, categorized and connected key short-answer responses, necessarily “winnowing” the data (Cresswell 195).

In Figure 1 I found that, in response to the pre-semester survey, most students demonstrate markedly linear description of writing process (n=15, 38%). The fewest responses (n=5, 13%) erroneously described writing process knowledge as the writing product (i.e., “the typical 5 paragraph essay”) or were missing (n=5, 13%).

Figure 2 shows that in response to the post-semester survey, of those students whose responses contained sufficient information to be coded, the highest percentage of responses show students describing a simplistic, linear writing process (n=20, 33%).
The fewest responses were again describing the writing process as product (n=1, 2%) and missing responses altogether (n=4, 7%). However, it is interesting to note that the percentage of students with a more complex understandings of the writing process increased (from n=6, 15% to n=18, 29%). This aligns with Tremain’s interview-based study, which revealed that prior knowledge of the writing process and rhetorical situation are the types of knowledge that students activate (or detect, elect and connect) most frequently (132). This may be because the learning curve in these areas is steepest, or because FYC pedagogy focuses on them.

Figure 3 shows that at the beginning of the semester, students’ concepts of where they get their prior knowledge from centers mainly on highschool. In response to the pre-semester survey, students demonstrated a highly generalized sense that high school—writ large—was the main useful source of prior knowledge (n=13, 33%). However, in the same post-semester survey, the fewest students responded that AP classes were a useful source of prior knowledge (n=4, 10%).

Figure 4 shows that in response to the post-semester survey, students responses were mostly missing entirely (n=19, 31%). This could be due to the fact that this question was the very last survey question and students were skipping it. The least frequent responses were overly vague descriptions of prior knowledge (such as “I don’t know…”) (n=8, 13%), and may be so for the same reason. This high quantity of missing or vague responses may indicate that students did not fully understand the survey question, or that they did not have time to complete it fully. The design of the survey was likely to long and asked students to answer too many questions.
Interestingly, despite the high frequency of missing responses, Figure 4 also shows that, when students did respond, the frequency of students citing specific writing strategies as their prior knowledge that was useful to them in college increased from the pre-semester survey (n=5, 13%) to the post-semester survey (n=16, 26%). This parallels the realization that many students articulated throughout the course, that “what I thought college writing was” or “what they taught us in high school” was not exactly what they actually encountered in their first semester of college. Many students must disassemble knowledge from high school and create, as Yancey, Robertson and Taczak term it, an “assemblage” of prior knowledge in new contexts. Some students seem to demonstrate this in Figures 3 and 4.

Figure 5 shows that in response to the pre-semester survey, students stated that effort (n=16, 21%) and a writer’s feelings (n=16, 21%) were the biggest indicators of whether or not a piece of writing was considered successful. The fewest student responses stated that the result of the writing, or whether or not it accomplished its purpose (n=5, 7%), and the grade a piece of writing received (n=5, 7%) indicated whether or not a piece of writing was considered successful.

Figure 6, however, shows in the post-semester surveys that though the emphasis on writer’s feelings remained nearly the same (n=24, 20%), students became slightly less focused on grades (n=6, 5%) and effort (n=10, 9%) as a measure of writing success. This suggests that students remain highly attuned to their emotional response regarding the writing they produce. This may be a result of their overall developmental stage in life, or because the literate ecologies curriculum and pedagogy emphasizes students as individuals navigating and negotiating their literate ecologies. Likely the two
work together, though the curriculum and pedagogy do explicitly ask students to examine their individual purposes and contexts for writing, as well as to think of themselves moving between discourse communities and bringing their experiences and knowledge with them. In other words, a feature of knowledge transfer may be a degree of self-awareness, which for writers at this developmental stage may manifest strongly as “feelings.” Either way, it parallels findings in study two, that students see their identity as very important to their writing development.

Findings suggest that the prior knowledge students bring with them into FYC is often absent, or so tacit that it cannot be described in meaningful, specific ways. After FYC, students do increase both in ability to articulate “new” prior knowledge (gained from the course), and in the specificity and complexity of that knowledge, as one would hope. Student growth in Writing Process Knowledge (both in presence and complexity) is to be expected from any FYC course worth its salt. However, the specificity gained in Prior Knowledge points to the course focus on this as an explicit concept, as students are specifically directed to think about what prior knowledge they transfer between discourse communities in their individual literate ecologies. The change in Concept of Writing Success demonstrates student engagement with the concept of themselves-as-agents within their own literate ecologies, in that they identify more with the concept of rhetorical agency (Cooper).

**Study One Implications**

Study One examines prior knowledge transferred into FYC and how that is built on (or not) during the course. The results of Study One demonstrate the potential of a writing ecologies curriculum and pedagogy to support student writing development in
key areas. They also suggest that further development and assessment of this curriculum and pedagogy are needed.

**Study Two**

In Study Two, I focused on how students utilized prior knowledge, and whether and how students engaged with composition threshold concepts throughout the course. I conducted Phase 1 interviews (n=7) at the end of the Fall 2015 semester, in which students described their engagement with course assignments and the writing process, along with the literate ecologies framework of the course. I described, categorized and counted student responses in order to analyze and interpret the data.

Interview results from Phase 1 showed that by the end of ENG 1020, students were able to articulate their absent prior knowledge (n=11, 17%), as well as their awareness (n=30, 47%) and activation (n=23, 36%) of prior knowledge throughout the semester. Findings demonstrate that at the end of the semester, students were overwhelmingly aware of prior knowledge and were also able to articulate activation of prior knowledge during the semester. This suggests that the literate ecologies focus embedded in the curriculum is effective in helping students operationalize prior knowledge in current writing contexts.

Overall findings from Study Two also show that students engaged with some threshold concepts more than others. Particularly, the most frequent threshold concepts referenced in students’ responses were TC 1 (n=21, 23%) and TC 7 (n=19, 21%). The least-referenced threshold concept was TC 4 (n=5, 5%). The differences in threshold concept engagement point to areas where the curriculum and pedagogy resonated strongly for students, as with Threshold Concept 1, “Writing is Social and Rhetorical”
(n=21, 23%) and Threshold Concept 7, “Writing is Linked to Identity” (n=19, 21%).

Engagement with these threshold concepts in particular are not surprising coming from a writing ecologies FYC course, since an ecological model of writing is based on the interplay between the individual and the surround (Cooper). These results demonstrate a strength of the literate ecologies curriculum and pedagogy, which is to resolve and hold together both cognitive and social constructivist theories.

These results also indicate where instruction in threshold concepts was not as explicit as might be hoped, thus indicating areas for revision. This is particularly the case with Threshold Concept 4, “Reflection Is Critical for Writers’ Development” (n=5, 5%). Since the majority of conceptual instruction focused on writing ecologies and discourse communities, reflection within the course was treated more as a tool, a means to work through the ecological model of writing, rather than an end in itself. The lack of explicit instruction around reflection as a concept is revealed in the low student engagement articulated in the interviews.

Students similarly demonstrated sporadic engagement with the explicit Literate Ecologies Framework itself. Though students engaged with parts of the framework, the larger theoretical concept seemed to be of little use while describing their writing development throughout the semester. This suggests one of two things: a) the theoretical framework is too complex and abstract for FYC students to engage with developmentally, or (more likely) b) the theoretical framework was not presented concretely enough for students to make the explicit connections necessary to mindfully abstract and articulate it. Either way, these findings strongly suggest that curricular and pedagogical revisions are needed.
Study Two Implications

This study is important, because it is both focusing on knowledge transfer into FYC, and it is examining how students engage with composition threshold concepts. The results of Study Two demonstrate the potential of a writing ecologies curriculum and pedagogy to support writing development within particular threshold concepts. They also suggest that further development and assessment of this curriculum and pedagogy are needed.

Limitations and Future Research

Limitations for this part of the overall study include the lack of control. Because the survey was only distributed to students enrolled in ENG 1020 courses using an ecological model of writing as curricular framework, it is not possible to tell whether and how that framework might be more efficient or effective in helping students be aware of prior knowledge, activate it, or be aware of threshold concepts in composition. In addition, the short-answer style of survey question allowed for students to compose responses that were vague and impossible to code. This limited the analysis. Future surveys should be revised to help specify student responses and thus, clarify the results.

Given these limitations, we can’t know how an ecological model of writing works in comparison to curricula that do not integrate that framework, but we have good reason to believe that such a curriculum gives students a vocabulary and a reflective practice that supports both the awareness of these transfer phenomena and the specific attention to their experiences with them to foster the awareness and activation we see here.
CHAPTER 4 “TRANSFER BEYOND FYC: WHAT WRITING KNOWLEDGE DO STUDENTS TAKE FROM FYC TO THE FOLLOWING SEMESTER?”

In this chapter, I build on the argument I established in Chapter One for an ecological model of writing as a promising FYC framework. After implementing the writing ecologies curriculum and pedagogy described in Chapter Two, and conducting two studies to examine how students transferred prior knowledge into my FYC courses and how they engaged with threshold concepts during the semester, I turn now to knowledge transferred out of my courses. In Chapter Four, I will present a follow-up study of students in the Winter 2016 semester, after they have taken my courses. Here I explore how, after engaging in a writing ecologies course, students both transferred writing knowledge out of the course, and what threshold concepts they carried with them to their subsequent university courses.

In this chapter I take up the third research question in this study of an ecological model-based FYC curriculum: How does student negotiation of threshold concepts, within an ecological model-based FYC curriculum, inform writing process development and knowledge transfer after FYC? First, I provide a brief review of the literature surrounding teaching for writing knowledge transfer, particularly as it fits with an ecological model of writing development. I also review literature pertinent to the longitudinal design of the overall study as a key method for mapping transfer. I then present the longitudinal component of the project: my follow-up study that examines how students transfer writing knowledge from my fall composition courses into the following semester. In order to do this, I examined findings from Phase 2 interviews with the seven participating students from my Fall 2015 FYC courses. I conducted these follow-up interviews during the semester following enrollment in the FYC course (ENG
1020), and used them to measure student awareness and activation of prior knowledge drawn from the FYC course. In describing and interpreting the research data, I attend to students’ engagement with specific threshold concepts, as fostered by the writing ecologies curriculum and pedagogy designed for the FYC course they enrolled in, to measure significant transfer that occurred.

**Background: Ecological Model of Writing Development to Teach for Transfer**

Urie Bronfenbrenner’s seminal text, *The Ecology of Human Development*, laid the foundation for an ecological model of writing development as a potential framework to teach for transfer. In it, he outlined that an ecological model of human development, centered on the interaction, or *reciprocity* between,

an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by relations between these settings, and by the larger contexts in which the settings are embedded. (21)

This definition is important, because it outlines three main facets of such an ecology. First, that a developing person is viewed as a highly adaptive entity that “progressively moves into and restructures the milieu in which it resides” (21). Second, that it is both environment and individual acting in reciprocity that fully encapsulates this relationship. And third, and perhaps most significant to this study, that “the environment” goes beyond the immediate setting, and includes connections, tensions and overlaps between settings, as well as broader influences from settings not directly experienced by the individual. Bronfenbrenner further argued that this theoretical and methodological framework could drive research on human development to take into consideration both the individual and the (extended, differentiated) environment simultaneously, thus leading to a richer, more accurate understanding of the significance of both.
Furthermore, he points out that there is potentially great significance in what he terms “ecological transitions,” or shifts in role or setting. These ecological transitions can be similarly applied to the experiences that high school students have as they move into first-year writing contexts, and as they move out of them the following semester. Bronfenbrenner’s ecology of human development serves as a theoretical concept of “the environment extending beyond the behavior of individuals to encompass functional systems both within and between settings,” which can then be applied to focus on the settings that individuals, such as FYC students, transition between, thus bringing into focus a clearer understanding of this process (7).

The ecological model of human development was first applied explicitly to college student writing development by Marilyn Cooper in her College English article, “The Ecology of Writing,” in which she places the lens of Bronfenbrenner’s theoretical framework directly on top of a long-standing Writing Studies tension between the cognitive and social constructivist frameworks, seeking to unite them. Like Bronfenbrenner, she centers on the interaction between the individual writer and the influence exerted by context, “purposes, like ideas, arise out of interaction, and individual purposes are modified by larger purposes of groups; in fact, an individual impulse or need only becomes a purpose when it is recognized as such by others” (369). And also like Bronfenbrenner, she recognizes that these interactions encompass a broad and complex system, that in fact “…an ecology of writing encompasses much more than the individual writer and her immediate context. An ecologist explores how writers interact to form systems: all the characteristics of any individual writer or piece of writing both determine and are determined by the characteristics of all the other writers
and writings in the systems. An important characteristic of ecological systems is that they are *inherently dynamic*" (368).

The curriculum outlined in chapter two seeks to help students develop as "ecologists" (as Cooper describes) and turns a metacognitive gaze on students’ own ecologies of writing. In order to measure whether or how well such a curriculum supports knowledge transfer, it is helpful to follow the trail of contemporary scholars of transfer in the field.

**Mapping Transfer: a Longitudinal Approach**

In *College Writing and Beyond*, Anne Beaufort details a longitudinal case study of one student, Tim, in order to map his knowledge transfer. Beaufort claimed that FYC, taught *for transfer*, could help students *learn how to learn* to become better writers as they progress through an academic career and real-world jobs beyond; this contention is supported by Tim’s case study, in which he did not indeed transfer much writing knowledge, and thus he might have benefitted greatly from such a pedagogical approach. Following a student over time further supports, in a pragmatic and unflinching way, what scholars in Writing Studies have long intoned: that learning writing and knowledge transfer of writing is a more complicated process than had been previously considered. Beaufort’s case study of Tim reveals that, “Gaining writing expertise only takes place...in the context of situational problem-solving...” (22). This in turn leads her to propose explicit instruction as a foundational principle of “teaching for transfer.” Furthermore, she maintains that emphasis on discourse community is key to a successful “teaching for transfer” curriculum, including “discourse community knowledge” as one of her foundational “knowledge domains,” along with writing process
knowledge, rhetorical knowledge, subject matter knowledge and genre knowledge. Beaufort maintains that even the discourse community of the classroom is not explicitly acknowledged or taught, and while not opposed to social constructivism or genre theory, she argues that they need to be applied further (i.e. via knowledge domains and explicit instruction).

In many ways, *College Writing and Beyond* laid the foundation for much of the writing knowledge transfer studies to come. Positing that explicit instruction in the five knowledge domains would support writing knowledge transfer, it also demonstrates how longitudinal studies can track said transfer—or the lack thereof—for assessment purposes. Yancey, Robertson and Taczak integrate longitudinal methods as they track writing knowledge transfer in their book, *Writing Across Contexts*. Their study follows seven students through two semesters of college work, examining the students’ writing development through document-based interviews. Their rationale for the second semester interviews was, “to analyze how the [FYC course] content did or did not facilitate students’ transfer of writing knowledge and practice” (66). My longitudinal design is built on this rationale.

More specifically, my study draws on Hannah and Saidy, who in their article “Locating the Terms of Engagement: Shared Language Development in Secondary to Postsecondary Writing Transitions,” looked at students’ prior knowledge from before FYC, as well as the knowledge gained from a semester in a FYC course. Their study surveys high school students and then proposes a collaborative writing corpus as a FYC pedagogy to support knowledge transfer from high school to FYC. Tremain, too, designed a series of surveys to examine how high school students entering their
freshman year of college detected, selected and elected to use prior knowledge, and became enculturated into college writing. In both instances, researchers focused on knowledge transfer bridging from high school—or even outside of high school, simply prior to freshmen year—to the FYC course. In this chapter, I demonstrate how this study took up this approach of focusing on knowledge transfer and built on it, extending from prior to freshman year through the FYC semester, into the subsequent semester. While maintaining a focus on the writing knowledge students bring with them into FYC and examining how they engage with threshold concepts during FYC (Phase 1), I also extend the focus into the following semester (Phase 2). In this way, the scope of the transfer picture is widened, to see 1) how students negotiate prior knowledge as they enter FYC, 2) how they engage with an ecological model of writing and threshold concepts within FYC, and 3) what they take with them into the semester following FYC.

The longitudinal design of this study is necessary to track these phases of writing knowledge transfer. It is also a good way to measure the effectiveness of the ecological model of writing development. Given the importance of ecological transitions and the idea that settings are always changing over time, it is appropriate to follow students through several of the key ecological transitions that are embedded in the freshmen year to examine how individuals develop over time and within the shifts in setting that they encounter.

**Study Three: Phase 2 Interviews**

*Methods*

In this study, I conducted Phase 2 interviews of the same seven students who participated in Phase 1 of the project (described in Chapter 3). The interviews were
conducted at mid-terms during the semester following the FYC course, in order to examine students' perceived prior knowledge coming from ENG 1020 and how they used that prior knowledge during the subsequent semester, both in and outside of school.

Participants

The same seven ENG 1020 students from Fall 2015 who agreed to participate in the Phase 1 interviews returned for the Phase 2 interviews. Five of the seven students were honors students. All participants provided informed consent. The study was approved by the WSU Institutional Review Board.

Data Collection

Phase 2 interviews were conducted with participating students (n=7) in the week previous to and the week after Spring Break, during the Winter 2016 semester. The interviews were approximately an hour long, and required students to answer several sets of questions about writing knowledge put to use during the current semester and their awareness of their writing ecologies. The interviews were recorded and transcribed, and then coded to reveal patterns within the responses. Table 11 presents the Phase 2 interview protocol.

<table>
<thead>
<tr>
<th>Table 11 Phase 2 Interview Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Background Questions:</strong></td>
</tr>
<tr>
<td>1. Which genres of writing that you've encountered this past year do you think have been the most useful to you this semester? Why?</td>
</tr>
<tr>
<td>2. Can you think of a time when you were supposed to write something and you really didn’t know how to proceed? What did you do? What would you do if that ever happened now?</td>
</tr>
</tbody>
</table>
Questions about Piece of Writing from Winter 2016:

3. Did you ever write anything like this before? If you were asked to describe the kind of writing you did, how would you describe it?

4. When you faced this writing task, what previous experiences or kinds of writing did you draw on to help you complete the assignment? How did you decide which kinds of writing to draw on?

5. Underline/point to the phrases or places that you most like in this paper. Explain why you like them.

8. Does this remind you of previous things you’ve written?

Literate Ecology Questions

9. What kind of voice did you try to adopt or image of yourself did you try to project? How did you try to make yourself sound like that in what you write?

10. Were there things you purposely did to try to make the paper what you thought was expected? Why? What did you draw on from past experiences to do this?

11. Were there things you didn’t do that you thought you should have done or didn’t do because you didn’t want to? Why?

12. Were there things you didn’t do because you didn’t know how to do them?

13. Were you able to use information you have acquired about writing in English 1020 so far to help you write this semester?

14. Were you able to use information you have acquired about writing in contexts outside of English 1020—even outside of school altogether—that helped you write this piece in some way?

15. Can you describe your awareness of your own Literate Ecology? How has it changed from the end of last semester to this point in Winter 2016?

Table 11: Phase 2 Interview Protocol

Data Coding

Codes for the interview analysis were developed according to directed content analysis (Hsieh and Shannon 1281), using the research questions that anchor this
chapter, and the coding categories from Chapter Three as directed content (see Table 12 for Main Coding Categories).

<table>
<thead>
<tr>
<th>Table 12</th>
<th>Phase 2 Interview Coding Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>Definition</td>
</tr>
<tr>
<td>Prior Knowledge</td>
<td>Responses that describe either the use or the awareness of writing knowledge from experiences previous to FYC.</td>
</tr>
<tr>
<td>Threshold Concepts</td>
<td>Responses that describe either the use or the awareness of threshold concepts aligning with program learning outcomes.</td>
</tr>
<tr>
<td>Literate Ecologies</td>
<td>Responses that describe either the use or the awareness of an ecological model of writing development, via articulation of discourse community knowledge, genre and rhetorical awareness, flexible writing strategies, etc..</td>
</tr>
</tbody>
</table>

Table 12: Phase 2 Interview Coding Categories

Data Analysis of Phase 2 Interviews
The content of each Interview code was further analyzed in order to develop codes describing more precisely how each concept was operationalized.

**Prior Knowledge: Absent, Activation and Awareness**

As with the Phase 1 Interviews, the Prior Knowledge codes were broken down into the following categories: Absent Prior Knowledge, Activation of Prior Knowledge and Awareness of Prior Knowledge. However, the main change here was a further specification between prior knowledge students either activated or were aware of that *came particularly from ENG 1020*, or prior knowledge drawn from elsewhere. Prior knowledge that students explicitly attributed to ENG 1020 was additionally coded to reflect this connection. Table 12 presents the definition and textual example of each of the Phase 2 Prior Knowledge codes.

<table>
<thead>
<tr>
<th>Table 13</th>
<th>Phase 2 Prior Knowledge Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>Definition</td>
</tr>
<tr>
<td>Absent Prior Knowledge</td>
<td>Response describes experiences with reading and writing that are missing concepts, models and practices of writing—either via lack of experience with particular genres, concepts, or lack of mastery of previously taught concepts, models and practices.</td>
</tr>
<tr>
<td>Activation of Prior Knowledge from ENG 1020</td>
<td>Response describes experiences with reading and writing—including concepts, models and practices of writing—from ENG 1020, that are applied and/or deployed in Winter.</td>
</tr>
<tr>
<td>Activation of Prior Knowledge from Elsewhere</td>
<td>Response describes experiences with reading and writing—including concepts, models and practices of writing—from contexts outside of ENG 1020, that are applied and/or deployed in Winter 2016 writing contexts, either within, or outside of, school.</td>
</tr>
<tr>
<td>Awareness of Prior Knowledge from ENG 1020</td>
<td>Response describes experiences with reading and writing—including concepts, models and practices of writing—from ENG 1020, that are not only applied and/or deployed in the Winter 2016 writing contexts, but are also explicitly known and identified.</td>
</tr>
</tbody>
</table>
| Awareness of Prior Knowledge from Elsewhere | Response describes experiences with reading and writing—including | In high school, I did a lot of research preparing for the ACT, well, now its the SAT,
concepts, models and practices of writing—from outside of ENG 1020, that are not only applied and/or deployed in Winter 2016 writing contexts, but are also explicitly known and identified.

um, so definitely that really helped.

Table 13: Phase 2 Prior Knowledge Codes

Engagement with Threshold Concepts

Threshold concepts considered for coding were, as in Phase 1 interviews, the seven threshold concepts from Naming What We Know that coincided with the learning outcomes of the course (see Chapter Two). See Table 9 for definitions and textual examples of the seven threshold concepts aligned with program outcomes.

Literate Ecology: Activation and Awareness

Students who demonstrated the flexible moves of re-purposing writing knowledge between discourse communities, both within and outside of academic contexts, were considered to be activating their literate ecologies. Students who were aware of their flexibility as writers to inhabit various discourse communities at different times and for different purposes, but not necessarily “cross pollinating” writing knowledge between them, were considered aware of their literate ecologies. Table 13 presents the definition and textual examples of each of the Phase 2 Literate Ecology codes.

Table 14
Phase 2 Literate Ecology Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
<th>Textual Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activation of Literate Ecology</td>
<td>Response describes the use, or ability to practice, apply or operationalize the literate ecology framework, transferring</td>
<td>Twitter has a character limit--and everyone complains about it, but like, that’s the point of the whole thing. And, it’s like</td>
</tr>
<tr>
<td>Awareness of Literate Ecology</td>
<td>Response explicitly articulates the literate ecology framework itself, particularly describing transfer or connections between discourse communities.</td>
<td></td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I guess it's not as branched out as it was before. Because it is just like school and home. Like the mosque, even last semester, I used to go a lot more, but because of SCHOOL, it is literally just school-oriented and then home. So, it doesn't have as many branches, it might not even be as big of a literate ecology map as I had before! I mean, there's (sic) more branches coming out of school, because I have different writing tasks like memos and stuff. But, it's not as much the discourse communities themselves. Less variety in discourse communities, but more genres within school.</td>
<td></td>
</tr>
</tbody>
</table>

Table 14: Phase 2 Literate Ecology Codes

Findings of Phase 2 Interviews

Absent Prior Knowledge, Awareness and Activation of Prior Knowledge

Students were found to have substantially fewer instances of absent prior knowledge (n=11) than instances of activated prior knowledge (n=58) and prior knowledge awareness (n=33). Activation of Prior Knowledge nearly doubled between
Phase 1 and Phase 2 interviews, while Absent Prior Knowledge and Awareness of Prior Knowledge remained steady. Figure 10 presents the distribution of student responses demonstrating Absent Prior Knowledge (n=11, 11%), Activated Prior Knowledge (n=58, 57%), and Awareness of Prior Knowledge (n=33, 32%).

**Phase 2 - Prior Knowledge**

<table>
<thead>
<tr>
<th>Prior Knowledge</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absent Prior Knowledge</td>
<td>11</td>
</tr>
<tr>
<td>Activated Prior Knowledge</td>
<td>58</td>
</tr>
<tr>
<td>Awareness of Prior Knowledge</td>
<td>33</td>
</tr>
</tbody>
</table>

Figure 10: Phase 2 – Prior Knowledge

When they did utilize prior knowledge, students described drawing on it in three distinct “directions:” School-to-School, Outside Contexts-to-School, and School-to-Outside Contexts. Figure 11 presents the frequency of responses in each of these directions.

**Phase 2 - Directions of Prior Knowledge Transfer**

<table>
<thead>
<tr>
<th>Direction</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness (1020-to-Outside)</td>
<td>2</td>
</tr>
<tr>
<td>Activation (1020-to-Outside)</td>
<td>5</td>
</tr>
<tr>
<td>Awareness (Outside-to-W'16)</td>
<td>15</td>
</tr>
<tr>
<td>Activation (Outside-to-W'16)</td>
<td>4</td>
</tr>
<tr>
<td>Awareness (School-to-School)</td>
<td>16</td>
</tr>
<tr>
<td>Activation (School-to-School)</td>
<td>49</td>
</tr>
</tbody>
</table>
First, and by far the most common direction, was from ENG 1020 to students’ Winter 2016 coursework. Students demonstrated the most Activation of Prior Knowledge moving in this direction (n=49), as well as the most Awareness of Prior Knowledge moving in this direction (n=16). Second, some students described drawing on prior knowledge from writing contexts outside of school (home, work, place of worship, etc.) to their Winter ‘16 coursework. Students demonstrated far fewer instances of Activation of Prior Knowledge in this direction (n=4), but demonstrated an almost equal amount of Awareness of Prior Knowledge moving in this direction as the previous direction (n=15). Third, some students also described transferring knowledge from ENG 1020 to contexts outside of school altogether (home, work, place of worship, etc.). Students demonstrated few instances of Activation of Prior Knowledge in this direction (n=5), and the fewest instances of Awareness of Prior Knowledge in this direction (n=2). Figure 12 presents a model of knowledge transfer in all three directions.
Figure 12: Directions of Prior Knowledge Transfer

**Awareness of Prior Knowledge: School-to-School**

Awareness of prior knowledge from ENG 1020 the Winter 2016 semester was articulated more than any other direction (n=16). Kayla described her first encounter with the “memo” genre in the semester following FYC, and how she linked this novel genre to prior knowledge from both academic and non-academic contexts:

I looked up on, I think, I looked it up on Google, and I looked it up on OWL Purdue, and it reminded me a lot of like, a small research paper. But it also reminded me of stuff I've written at work, so kind of like an email, but more formal. So, I based it off of that, and it seemed I got a good grade on it, so I guess it went ok.

Kayla described a process of small-scale research to learn more about the genre she had been assigned, but then also described drawing on prior knowledge from her workplace to connect the unknown genre to her own experience.
Other students, like Batoul, drew many connections between their current writing contexts and the prior knowledge they could draw from ENG 1020. Batoul describes what she sees as “useful” knowledge from 1020:

Mostly in everything that I’m doing, I’m like, “Oh, I did this in ENG 1020. Oh, I learned about this in ENG 1020…” So I’m just like, growing. Everything just adds on top of what I learned in your class. And I put it into everything I’m doing right now.

**Activation of Prior Knowledge: School-to-School**

By far the most common method of prior knowledge transfer was activation, and the most common direction for activated prior knowledge was school-to-school (n=49). For example, Zainab described how she used instructor feedback from ENG 1020 to help her draft her memo for ENG 3050:

I think it was from 1020, too. I used to write like long paragraphs, like, a whole page would be a paragraph! I think I drew on that feedback you gave. And, she [ENG 3050 teacher] asks specific questions, and she says you can answer them all in one paragraph, but I realize that once I choose the questions that all relate, and choose the other questions and put them in a different paragraph, that’s what I learned from before, and I’m definitely using that here. Like, before I was in ENG 1020 and learned that you should put different ideas in different paragraphs, I would probably have put this all in one.

This excerpt exemplifies the typical response of a student articulating activation of prior knowledge from ENG 1020 being used in a Winter 2016 course.

**Awareness of Prior Knowledge: Outside Contexts-to-Winter ’16 Courses**

Awareness of Prior Knowledge moved in the direction of outside contexts to Winter 2016 courses the second-most frequently (n=15). Of the participating interviewees, Catherine demonstrated the most awareness of prior knowledge that did not originate in ENG 1020. Following up to her statement that “if you write a research paper, you know how to write a research paper,” she went on:
Like, the process is the same. You have like, a topic. And um, the process of research is the same: you go to the same websites, you look up the same stuff, um, and then you write about it. You look through your research and then you find what you’re looking for, or you find interesting findings, and then you write about them. I think the process is similar.

Of all the students, Catherine seems to be the most classically like Reiff and Bawarshi’s “boundary guarders” (325). Part of this may be because her writing in college thus far has been fairly successful. This may also be in part to her high school writing experience having prepared her thoroughly for university writing. Whatever the case, in her Phase 2 interview, Catherine stated that she “felt confident that [she] knew what [she] was doing.”

**Activation of Prior Knowledge: Outside Contexts-to-Winter ‘16 Courses**

Activation prior knowledge occurred least in the direction from outside contexts to Winter 2016 contexts (n=4). Petra described her use of knowledge from summer camp as helpful to writing reports for her engineering class, and is careful to point out that reports were not a genre she encountered in ENG 1020.

P-Well we didn’t really work with the report in 1020, uh, like the only thing I had was like, what I mentioned earlier…

N-camp reports?

P-camp reports. And ah, I mean, he (the teacher) gave us kind of like, I mean, the steps of how to do it…to answer his questions, so that was really helpful.

Here Petra is recalling useful prior knowledge that not only does not originate in her FYC course, but it originates outside of academia altogether. Similarly, Adib recalled his use of writing knowledge from his job as relevant to his current academic writing contexts:
A-Well, so for example, at work, cause I’m like a server, and when I’m taking tables I have to abbreviate so I can be faster and like move on to the next person to like get the people done faster.

N-yeah.

A-And in lab, I like try to do the same thing (laughs)

N-yeah?

A-yeah, just to catch up to the professor ‘cause she’s lecturing, and trying to catch up with the slides to make sure I get everything down. So I have to like, code everything and abbreviate so I can understand. So I guess, that can help.

N-wow. That is a pretty important skill!

A-yeah, so I picked that up before I got into the lecture, and then it helped me this semester taking notes.

**Awareness of Prior Knowledge: FYC-to-Outside Contexts**

In terms of awareness of prior knowledge, students described the use of writing knowledge gained from experiences in ENG 1020 in subsequent contexts outside of school the fewest number times (n=2). Students do not explicitly reflection on how knowledge from academic contexts can be applied elsewhere. For example, Zainab described her note-taking skills being of use in her faith community, “Um, like the mosque discourse community, if there’s a lecture I’ll still go and maybe take notes.” But, this description is perfunctory at best, and suggests a lack of explicit reflection on this direction of transfer.

**Activation of Prior Knowledge: FYC-to-Outside Contexts**
There were a few moments of students articulating the use of knowledge from ENG 1020 to contexts outside of school (n=5).

Unlike Adib, Batoul was proud and pleased at her ability to transfer knowledge between academic and non-academic contexts. And unlike Adib, Batoul described transferring knowledge from ENG 1020 to her religious discourse community. When asked to elaborate on what knowledge particularly helped her composing her speech, she responded:

Especially the logos and the pathos. And then the credibility part, like I said before, I didn’t feel like that as much, but especially I had to appeal to the emotional affect of my speech, like it really really helps. Even though speaking is different than writing, but when I was writing my speech, I was thinking about every single one of those aspects, and how important it was! And then when I got up there and I was speaking, everything just, like, ties together, and I was like, really, that made a lot of sense.

Perhaps one of the reasons Batoul felt more comfortable with this transfer between discourse communities is because it drew from the classroom environment to affect her “everyday life.” This seems like a more comfortable concept for students.

Engagement with Threshold Concepts

Students implicitly referenced all of the threshold concepts connected to the learning outcomes during Phase 2 interviews (n=103), and these references were identified by cross-referencing the content of the responses with the definitions of each threshold concept outlined in Naming What We Know. For the most part, frequency in each threshold concept remained nearly the same. The three key exceptions, were TC 1, which nearly doubled in frequency (n=44), and TC 4 and TC 6, which shrunk dramatically to only a single mention (n=1) and two mentions (n=2), respectively. Figure 13 presents all of the occurrences of the threshold concepts in student Phase 2
interviews: TC 1 (n=44, 43%), TC 2 (n=6, 6%), TC 3 (n=18, 17%), TC 4 (n=1, 1%), TC 5 (n=15, 15%), TC 6 (n=2, 2%), and TC 7 (n=17, 16%).

Figure 13: Phase 2 – Occurrences of Threshold Concepts

The near doubling of the occurrence of TC 1 is intriguing, but upon closer inspection, the reasons for this are not so surprising. In the context of the Phase 2 Prior Knowledge findings, it makes sense that if students are activating more knowledge in the direction of school-to-school, and are more aware of this transfer as well, that the threshold concept of “Writing is a Social and Rhetorical Activity” becomes more immediately relevant. A pattern that emerged during analysis of Phase 2 interviews, was that many students described elements of TC 1 in direct connection with classroom situations, particularly, in thinking of various instructors as “the audience.” The tendency of students to attribute “audience” to a particular teacher (n=13) suggests that they are operationalizing TC 1 in a highly specified direction: school-to-school.
Engagement with Literate Ecology Framework

Figure 14 presents the distribution of student responses of either activation or awareness of their literate ecologies.

![Phase 2 - Literate Ecology Engagement](image)

Figure 14: Phase 2 – Literate Ecology Engagement

Phase 2 findings demonstrate that students articulated engagement with literate ecologies more consistently than in Phase 1. On average, students were able to articulate more awareness or activation of their literate ecologies, with all students making at least two references to literate ecology awareness or activation. This suggests that the literate ecologies framework became more relevant to students as they navigated a subsequent ecological transition. However, average activation of the literate ecologies framework was stagnant. The reason for this may be found in another interesting finding: students mentioned feeling a loss of writing practice after their FYC course. Writing less, writing in fewer contexts, not being able to participate in previous non-academic discourse communities or taking classes where writing is not the priority, were all reasons students cited for this lack of practice. Further, many students
mourned this loss of practice as “getting cold” or not “keeping their juices flowing” (Adib, Petra). This may indicate why students did not activate their literate ecologies more.

**Discussion**

In this chapter, I conducted a follow-up interview study with participating students, in order to examine how students’ experience in ENG 1020 helped them transfer writing knowledge to subsequent writing contexts. This research responds to the call for longitudinal scholarship to examine knowledge transfer (Beaufort, Yancey, Robertson, Taczak). It also extends scholarship on composition threshold concepts (Adler-Kassner and Wardle), as well as how literate ecology-focused curriculum and pedagogy (Bronnfenbrenner, Cooper) could be used to Teach For Transfer (Yancey, Robertson and Taczak).

In this study, I focused on how students drew on prior knowledge—from ENG 1020 and elsewhere—during the subsequent semester, and whether and how reflection presented in a writing ecologies curriculum and pedagogy supports knowledge transfer beyond FYC. I conducted Phase 2 interviews (n=7) mid-term during the Winter 2016 semester, in which students described their current writing contexts, whether and how they drew on prior writing knowledge in those contexts, and whether and how they were engaging with composition threshold concepts and the literate ecologies framework. I described, categorized and counted student responses in order to analyze and interpret the data.

Figure 10 presents results from Phase 2 interviews, and shows that following their semester in FYC, students articulated activation of prior knowledge most (n=58, 57%) and absent prior knowledge least (n=11, 11%). Findings demonstrate that at the
mid-point of the subsequent semester, students were aware of prior knowledge and absent prior knowledge with similar frequency as in Phase 1. However, students were able to articulate a much greater activation of prior knowledge, rather than awareness of prior knowledge, following FYC. This suggests that students can more readily articulate prior knowledge when it is in use.

In Figure 11, I found that students demonstrated the most Activation of Prior Knowledge in the School-to-School direction (n=49), and the most Awareness of Prior Knowledge moving in this direction as well (n=16). This direct school-to-school transfer is to be expected from a FYC curriculum designed to particularly support students in the writing tasks they will face in the future at the university. Additionally, students demonstrated fewest instances of Activation of Prior Knowledge in the School-to-Outside Contexts direction (n=5), and the fewest instances of Awareness of Prior Knowledge in this direction (n=2) as well. Figure 12 shows the three main directions of knowledge transfer: School-to-School, Outside Contexts-to-School, and School-to-Outside Contexts. These findings demonstrate that students have the greatest knowledge transfer between academic contexts. This is not surprising when observed between two semesters in the same academic year, as the time between distinct writing contexts is short enough to easily make connections between them.

It is interesting to note that when students talked about transfer of knowledge between school and outside of school contexts, they often did so sheepishly. Students “admitted” to using knowledge from outside of academia. This is one area in particular where a TFT curriculum centered on an ecological model of writing can benefit students
to know that such knowledge transfer can be strategic and useful, and is in fact, something that experienced writers do often.

Figure 13 shows that students once again engaged more consistently with some threshold concepts than others, even a semester after encountering them. The most commonly referenced threshold concept was again TC 1 (n=44, 43%), and the least referenced threshold concept was again TC 4 (n=1, 1%). The main difference between Phase 1 and Phase 2 interviews was that the gap between highest and lowest frequency widened. Students engaged most with TC 1, “Writing is a Social and Rhetorical Activity,” and indeed, references to this threshold concept nearly doubled. This suggests that students operationalize this threshold concept most effectively by “practicing” it, namely, by encountering new rhetorical situations and audiences within academia. Students engaged far less with TC 4, “Reflection is Necessary for Writer’s Development,” and this may also be due to the opportunities—or lack thereof—to practice.

On average, students demonstrated increased awareness of the Literate Ecologies Framework, compared to Phase 1 interview results. The highest instance of references to the framework was seen once again in student 6’s responses (n=8). Though students were overall more aware of their literate ecologies, the activation decreased. The lowest instance of references to the framework was seen in the responses students 4, 5 and 6 (n=0). This supports the previous findings, that students are able to articulate their understanding of concepts after being able to “see them in action.” However, the decreased activation may be attributed to the fact that students’
experiences with writing contexts tend to get less diverse, as they move further into their academic paths.

**Implications**

This study is important, because it is extending the focus from writing knowledge transfer into FYC to writing knowledge transfer out of FYC. Furthermore, it is examines how students engage with composition threshold concepts beyond the composition classroom. The results of this follow-up study further demonstrate the potential of a writing ecologies curriculum and pedagogy to support writing knowledge transfer. They also further suggest that development and assessment of this curriculum and pedagogy are needed to refine this process.

**Limitations and Future Research**

Limitations for this part of the overall study include the lack of control and duration. Because the Phase 2 interviews were only conducted with students enrolled in ENG 1020 courses using an ecological model of writing as curricular framework, it is not possible to tell whether and how that framework might be more efficient or effective in helping students be aware of prior knowledge, activate it, or be aware of threshold concepts in composition. Additionally, though this longitudinal study gives a fuller picture of the knowledge transfer paths of participating students, it does not give us information on what happens outside of an academic year. What happens after summer break? How do students transfer knowledge between academic years? These questions cannot be answered using the current study design.

Given these limitations, we still cannot know how an ecological model of writing works in comparison to curricula that do not integrate that framework, nor how it may
facilitate transfer over longer time periods. But we have good reason to believe that
students are attuned to the possibility of writing knowledge transfer between the various
discourse communities they inhabit, because of their experience with a writing ecologies
curriculum and pedagogy. It would be interesting to extend this longitudinal study over
the course of the entire undergraduate experience, to further explore the nature of
writing knowledge transfer.
CHAPTER 5 “WHAT CAN AN ECOLOGICAL MODEL OF WRITING DEVELOPMENT CONTRIBUTE TO WRITING STUDIES TRANSFER SCHOLARSHIP?”

Discussion

Burgeoning transfer scholarship is beginning to investigate ways to teach FYC “for transfer” (Beaufort, Wardle, Yancey, Robertson and Taczak, etc.) and this study builds on that while also responding to the need for empirical scholarship in this area. Drawing on Bronnfenbrenner and Cooper (and even building a bit on Driscoll and Wells), this study argues that a FYC course built on an ecological model of writing framework can facilitate knowledge transfer, so that students not only activate prior knowledge, but are also aware of it.

The design of the writing ecologies curriculum and pedagogy incorporates reflection through the Writing Ecology Map assignments and the Project Assignments and the Reflection Journals. Specifically, these assignments position students to both activate prior knowledge within the course that they will then be able to transfer out of FYC to new writing contexts; it also requires them to engage with threshold concepts. Presenting course content within the framework of literate ecologies was designed to help students both activate writing knowledge from various discourse communities and to help them become aware of knowledge from various discourse communities.

The research questions taken up in this dissertation were as follows:

- What do curriculum and pedagogy based on an ecological model of writing and composition threshold concepts look like?
- How can a curriculum based on an ecological model of writing and composition threshold concepts inform a student’s activation of prior knowledge from experience of personal/home discourses within FYC?
How does student negotiation of threshold concepts, within an ecological model-based FYC curriculum, inform writing process development and knowledge transfer after FYC?

How does a curriculum based on an ecological model of writing inform student knowledge transfer within and beyond a FYC course?

In Chapter 2, I answered the research question, “What do curriculum and pedagogy based on an ecological model of writing and composition threshold concepts look like?” I presented the curriculum and pedagogy I designed based on an ecological model of writing, along with the rationale behind it. The writing ecologies curriculum and pedagogy developed for the FYC courses in this study provides students with a schematic, a framework to conceptualize 1) that they have prior writing knowledge to draw on and 2) that they can and do draw on this knowledge, in Composition and in other college courses. As students work through the concept of a “literate ecology,” they are asked to draw schematic maps of their own literate ecologies. These maps evolve over the course of the class, and are assigned at three key junctures: the beginning of the course, right after the concept of a literate ecology is introduced, mid-term, after two of the projects have been completed, and at the end of the course, as part of the final course portfolio.

Throughout the semester, students are guided through the creation and revision of these maps, and asked to represent discourse communities in which and for which they write. They also map the genres they compose, and perhaps most importantly, they are asked to think about and represent the connections, overlaps, or tensions between discourse communities and genres. This conceptual reflection serves as the
basis for a shared framework and vocabulary that students can now draw on as they consider what knowledge is available to them to potentially access, revise, or discard in current writing contexts. Figure 15 shows sample ecology maps from students’ final digital portfolios.

Figure 15: Sample Writing Ecology Maps
Along with their writing ecology maps, as students navigate through each of the projects in the curriculum, they engage in detailed consideration of their own writing practices and the discourse communities in which they participate. Navigating through projects that specifically focus on writing knowledge that operates within (and sometimes stretches between) discourse communities helps students practice recognizing writing knowledge and its potential applications in various contexts.

In Chapter 3, I answered the research question, “How can a curriculum based on an ecological model of writing and composition threshold concepts inform a student’s activation of prior knowledge from experience of personal/home discourses within FYC?” Pre- and post-semester survey findings revealed that students increased in their understanding of a complex writing process, decreased in their reliance on prior knowledge from high school, and maintained a focus on how they felt about a piece of writing as the determining factor of its success. The results of the surveys demonstrate that students take up writing process knowledge quickly, and yet do not as quickly untangle their personal feelings about a piece of writing from the concept of its success, or failure.

Interviews with seven students from the FYC courses taught in Fall 2015 revealed that students were surprisingly aware of prior knowledge transferred in to the classroom. However, students strongly engaged with only two of the seven threshold concepts embedded in the course content—Writing is a Rhetorical and Social Activity, and Writing is Linked to Identity. Students seemed to readily take up the explicit instruction about literate ecologies and discourse communities with a strong sense of rhetorical situation and audience-awareness, which is demonstrated by the high
engagement with Writing is a Rhetorical and Social Activity. The strong engagement with the threshold concept, Writing is Linked to Identity, demonstrates the close connection within an ecological model of writing between environment and surround (Cooper). Put another way, an ecological model of writing makes a strong case for a conjunction between social construction and cognitive theories.

In Chapter 4, I answered the research question, “How does student negotiation of threshold concepts, within an ecological model-based FYC curriculum, inform writing process development and knowledge transfer after FYC?” The second phase of longitudinal interviews (Phase 2) with the seven students who were also interviewed at the end of Fall 2015 semester demonstrated consistent results with the Phase 1 interviews. In terms of prior knowledge that was transferred out of FYC, three key directions of this transfer were revealed: School-to-School, School-to-Outside Contexts, and Outside Contexts-to-School. The highest frequency vector of knowledge transferred out of FYC was School-to-School. However, students also transferred knowledge from outside contexts to their classes in the Winter 2016 semester, and they also transferred knowledge from FYC to Outside Contexts as well. This suggests that when students are explicitly instructed about the nature of literate ecologies and are asked to reflect on how their own knowledge transfers, they can identify such transfer taking place. Students also activated prior knowledge to a greater degree after FYC, as compared to being aware of prior knowledge. This suggests that students are able to apply the knowledge gained in FYC in the following semester of coursework. By contrast, occurrence of absent prior knowledge after FYC was low.
The Phase 2 interviews also showed that students’ engagement with threshold concepts held steady even after FYC. The writing ecologies curriculum situates students to think specifically about threshold concepts. The threshold concept that students articulated most in Phase 2 interviews was the same as in the Phase 1 Interviews: Writing is a Rhetorical Activity. The writing ecologies curriculum and pedagogy particularly supports engagement with this threshold concept by emphasizing rhetorical situation, but it also highlights discourse communities and how these two concepts are always dynamic, always shifting (Roozen 18). The variety of rhetorical situations presented through both assignments and students’ choice of research topics creates a rich variety of examples that demonstrate Roozen’s point. As they analyze the genres of their workplace or volunteer organizations, students come face to face with the shapes of genres, tools, artifacts, technologies and places that they engage with, as well as the people who shape them (18). Thinking about one’s literate ecology is, after all, a way to think about one’s socio-cultural contexts, and how one adaptively composes for that environment.

**Ecological Model of Writing Development and Knowledge Transfer**

Here I will take up the final research question in the study, “How does a curriculum based on an ecological model of writing inform scholarship around student knowledge transfer within and beyond a FYC course?” The answer is perhaps most powerfully illustrated by the results surrounding questions of prior knowledge and composition threshold concepts.

*Prior Knowledge*
The analysis of data here shows that students do operationalize the ecological model of writing development—particularly when it concerns transferring prior writing knowledge between similar, or linked discourse communities, such as university classes. However, students also demonstrate writing knowledge transfer between unlinked, dissimilar contexts, such as the work place or their faith communities.

Students demonstrated high levels of prior knowledge activation and awareness after engaging with a writing ecologies curriculum and pedagogy. This is perhaps attributed to the high level of direct instruction around the writing ecology model itself—for example, as students work on drafts of their own writing ecology maps, they are being explicitly asked to think about their writing knowledge in terms of discourse communities they are a part of and genres they write. The levels of absent prior knowledge were the lowest in both Phase 1 and Phase 2 interviews, suggesting that when students are directly prompted to think and write about what writing knowledge they already have, they can identify this knowledge. High levels of activation and awareness in the Phase 2 interviews show that students are able to recognize writing knowledge they are drawing on from contexts outside of their current courses. Student awareness and activation of prior knowledge both during and after FYC can be seen as a strength of this curriculum and pedagogy.

Threshold Concepts

The findings also show that students’ prior knowledge—primarily centered on composition threshold concepts—transferred into and out of FYC. The framework of “literate ecologies” was used to facilitate this transfer. The findings show that students do engage with composition threshold concepts and they do transfer them to other
contexts, however the number of threshold concepts transferred was not as high as expected. While students do not transfer all of the threshold concepts connected to the learning outcomes, they do transfer some key ones.

The student engagement with and transfer of composition threshold concepts was much less robust than expected. The threshold concepts that demonstrated the strongest engagement and transfer, TC 1, Writing is a Rhetorical and Social Activity and TC 7, Writing is Linked to Identity, far outstripped the other threshold concepts that were built into the curriculum and pedagogy. The writing projects throughout this curriculum ask students to choose genres of text from their own literate ecologies to focus on, analyze, and research. The projects themselves focus on course threshold concepts to varying degrees (see Ch. 2). Specifically, Project 1 and Project 2 from this curriculum ask students to pick genres from discourse communities they inhabit in order to problematize them and analyze them. In these two projects, TC 2, “Writing is a Knowledge Making Activity,” is emphasized. TC 2 is embodied as students work together to identify texts that “count” and then to work through both genre and rhetorical analyses of these genres. However, students do not articulate this threshold concept very much in their interviews. This may be because the instruction is not explicit enough. It may also be because the application of this knowledge is not privileged in the university setting, where much of their attention and effort is directed following FYC.

On the other hand, TC 3, “Texts Get Meaning From Other Texts,” is the second-most articulated threshold concept in Phase 2 interviews. This threshold concept is emphasized indirectly in Projects 1 and 2, but is explicitly integrated into Project 3, the research project, and Project 4, the Infographic. Conducting and disseminating
secondary research are the driving processes of both projects, expressed in widely differing products (a formal academic research paper and an infographic). This may be why students are able to engage with this threshold concept more than other concepts; it is integrated into assignments that have more “real world” application, particularly in the semester immediately following FYC.

The reflection that underpins the writing ecologies curriculum and pedagogy runs throughout the course, is present in the larger projects as well as in the bi-weekly reflection journals, and thus prompts students to reflect on micro- and macro-levels. However, TC 4, “Reflection is Critical to a Writer’s Success,” is the least-articulated threshold concept in all of the Phase I and Phase 2 interviews. This seems antithetical to the high levels of prior-knowledge activation and awareness that are shown in the findings. What this indicates is that students are benefitting from reflection tacitly, though not explicitly. Findings demonstrate that the process of engaging in reflection pays dividends in student knowledge transfer, but the process is not explicit enough in the actual instruction of reflection as and end in itself, rather than a means to something else.

The analysis presented here focuses primarily on transfer of prior knowledge and composition threshold concepts, or the outcomes of a writing ecologies curriculum and pedagogy. However, the findings indicate that the threshold concepts that were presented with more explicit instruction and had more immediate application the following semester were transferred strongly, as opposed to the tacit transfer of other threshold concepts. Therefore, I argue that while an ecological model of writing
development within FYC does facilitate knowledge transfer for students moving on to the semester following FYC, more attention needs to be paid to explicit instruction.

**Limitations and Future Research**

In Chapter 3, there were several limitations due to the design of the survey instrument and the informed consent process. The survey instrument was quite long, and the high frequency of either “vague,” or “missing” responses to the last short answer question in particular were troubling. Reasons for the high number of “missing” responses could include students not having enough time to complete the surveys. Whereas the high number of “vague” responses shows that students did attempt to answer the question, but either did not understand it fully, or did not have time to fully answer. These “vague” responses, however, represent a certain level of student engagement. Instead of skipping the question, students “took a stab at it.” Reasons that these stabs were dubbed vague included everything from incomplete responses to those that seemed to miss the point of the question. This could indicate problems with how the questions were worded, or issues with reading comprehension on the part of the respondents. Either way, the term “vague” as a description seems poorly chosen in retrospect. “Incomplete” might more precisely indicate the nature of the responses.

The survey responses also stayed the same for one particular question: how do students measure writing “success.” The number of students citing how they felt about a piece of writing as the main measure of success stayed the same from the beginning of the semester through to the end. This may be because of their overall developmental stage (which tends to focus on personal feelings as a measure for many “degrees of success”). It could also be because of the emphasis of the literate ecologies framework,
which asks students to conceive of themselves as individuals navigating and negotiating through a surround, or writing ecology. Likely, these two factors work together, though the curriculum and pedagogy do explicitly ask students to examine their individual purposes and contexts for writing, as well as to think of themselves moving between discourse communities and bringing their experiences and knowledge with them. In other words, a feature of knowledge transfer may be a degree self-awareness, which for writers at this developmental stage may manifest strongly as “feelings.”

Additionally, the informed consent procedure occurred during the first week of class for both the survey and the longitudinal interviews. Most students likely did not sign up for the interviews because either they did not fully understand what they would entail, or simply because they were too overwhelmed with the first week of their first semester of college. Either way, a redesigned informed consent protocol would give students a reminder or would push the interview consent process to the end of the semester to allow students to participate more.

In Chapter 4, the results of student interviews showed how students were indeed aware of and activating prior knowledge from ENG 1020 in their Winter 2016 courses, while also transferring knowledge in other directions, between academic discourse communities and those outside of academia. However, the main limitation that prevents a fully causal link between such knowledge transfer and the literate ecologies curriculum and pedagogy is the lack of a control group. Without a standard curriculum with which to compare, there are many compelling correlations, but not causation can be firmly drawn. Therefore, future studies should take pains to use a parallel control curriculum and pedagogy in order to make more confident claims.
The results of Chapter 3 and Chapter 4’s studies demonstrate some strong transfer of two threshold concepts, some moderate transfer of four threshold concepts, and virtually no transfer of one. What does this reveal about the explicit instruction designed to be present in the pedagogy? Two things: First, while this pedagogy and curriculum were designed to provide explicit instruction of threshold concepts and literate ecologies, the instruction could be more explicit. Having taught this course once, reflective teaching practice reveals ways in which the framework can be more clearly expressed. For example, reflection could incorporate more explicit prompts to have students reflect on their knowledge transfer between contexts. (Yancey, Robertson, Taczak). Also, the threshold concepts could be more evenly emphasized and explicitly articulated as ends in themselves rather than means to something else. TC 4’s poor occurrence rates in both Phase 1 and Phase 2 interviews is a prime example of this.

Second, the two threshold concepts that saw the strongest transfer were the two most closely linked to the literate ecologies framework for the course. In other words, the two threshold concepts articulated consistently throughout the entire course, during every project (with the exception of the threshold concept of reflection, which therefore must not have been explicitly taught, though it was practiced). The less-frequently articulated threshold concepts are those that were explicitly taught in only one, or perhaps two projects, suggesting that, following Bronfenbrenner, consistent explicit instruction over time is most effective for knowledge transfer. The explicit instruction of literate ecologies and the language used to familiarize students with the framework directly reflects the language used to describe the threshold concepts most strongly transferred. Future studies should acknowledge this and adjust for it accordingly.
Conclusion

When it comes to writing knowledge transfer, the kind of student we send out into the world from our classes is what matters. The most successful students are flexible writers, able to read and analyze various rhetorical situations, and effectively transfer appropriate prior knowledge to their current writing contexts. Students have rich and complex lives. Drawing on the strength of their diverse experiences, successful students are able to access writing knowledge and operationalize key composition threshold concepts across a variety of discourse communities. This is the emphasis of a writing ecologies curriculum and pedagogy. In a literate ecologies classroom, there are many working parts and variables to be attended to, and even more variables that come contingent with students’ personal ecologies, which instructors have no control over. This provides a chance that pedagogical aims may fail as much as they succeed, and the written products of such a composition classroom may seem comparable to any other.

However, the kind of student that emerges from the literate ecologies composition class should be more metacognitive, more inclined to approach the variables in their personal ecologies as reflective and thoughtful scholars, more aware of their writing knowledge from across their ecologies and more fluent in activating it. This kind of student, who has grown in dispositions of scholarship that are interwoven with a literate ecologies approach, will be more likely to positively transfer knowledge and make use of it in future writing contexts.
APPENDIX: SURVEY INSTRUMENT

Survey of Writing Knowledge Gained Prior to ENG 1020 and Writing Ecologies of First Year Composition Students at Wayne State University

This survey is part of a research project on student writing. In order to improve our English writing courses, it would help us to know about the kinds of writing you have done in the past, both in school and out of school, where you wrote, for whom and why. We are hoping you will be willing to help us with this project by completing this survey.

Your participation is completely voluntary. By completing the survey, you are giving us permission to use the information that you provide us here, but your personal identity will remain confidential except to the project researchers. None of the information we gather here will have any effect on your grade in this course.

Major/intended major (if known):
Minor/intended minor (if known):
Post-college plans:

High School Attended:
City, State, County:
Type of School: (public, private, charter, home schooled, other—please specify)

Gender: m/f
Race: (American Indian/Alaskan Native, Asian, Black or African-American, Caucasian, Native Hawaiian/Pacific Islander)
Ethnicity: (Hispanic or Latino, Not Hispanic or Latino)
Economic Class (Upper, Upper Middle, Middle, Lower Middle, Lower)
Languages spoken/used at home, outside of home:
Parent/guardian educational background: (some high school, high school diploma, some college, college degree)

What do you already know about the writing process? What is it? How do you go about it?

Access to technology: Where do you access digital composing tools?

- Home: Family/shared computer or individual computer, computer type/operating system/software used
- School: 1) Computer lab accessible during study periods or other times of the school day, 2) Library with computers accessible during study periods or other times of the school day, 3) Computer used in Language Arts/English/Writing class, 4) Computers used in other classes (specify), 5) Used personal laptop/notebook computer in class, 6) Computer type/operating system/software used
- Other: computer at friend’s house/computer access at work/ smart phone
Types of communication (reading, writing, speaking) you participated in during the last year, and what was the reason, environment or situation that called for it?

- Summary
- Description
- Reports
- Book report
- Oral report or speech
- Lab report
- Lecture notes
- Notes on reading
- Letter
- Business letter
- Email
- Listserv
- Online discussion board
- Class discussions
- Analytical essay
- Personal essay
- Research paper (with information/sources given to you)
- Research paper (with information/sources you had to find yourself)
- Professional article
- Web page text or hypertext
- Web design (including coding)
- Powerpoint slide shows
- Prezis
- Resume or CV
- Interview
- Journalism
- Creative writing
  - Poetry
  - Spoken word
  - Short stories
  - Long fiction
  - Creative nonfiction
  - Song lyrics
  - Graphic novel/comics
- Journal/Diary
- Letters to friends/family
- Letters to the editor
- Instant Messaging
- Blog or online journal entry
- Blog or online journal response
- Chat
- Reddit
● Streaming communication (i.e. chatting with someone on Twitch)
● Newsletter
● Other (Please specify)

Of the kinds of communication you participated in, which ones did you perform most often/most repeatedly? Why?

What is your favorite kind of writing? Why?

What environment or situation do you do this writing in/for?

What is your least favorite kind of writing? Why?

What environment or situation do you do this writing in/for?

What kinds of writing have you had the most success performing?

What do you consider your most successful piece of writing (in school or out) and why?

What do you consider your least successful piece of writing, and why?

In what environment or situation (besides school) do you do the most writing?

In what environment or situation do you do the least writing?

What do you do when you encounter new writing tasks? What resources, skills, or habits do you draw on?

How do you classify your comfort level with writing?

How long does it usually take you to write things? Why?

Since most of you have received your 1020 syllabus and are in the midst of or have completed work on the first essay, what high school writing experiences (if any) do you think will help you most to succeed in this course or in writing at Wayne State University.
REFERENCES


Tremain, Lisa D. "'I Feel Confident Most of the Time': A Study of the Relationships Between Writing Transfer, Dispositions Toward Learning and Writing, and
Perceptions of Classroom Contexts.” University of California, Santa Barbara, ProQuest, 2015.


ABSTRACT

ECOLOGICAL AWARENESS: ENACTING AN ECOLOGICAL COMPOSITION CURRICULUM TO ENCOURAGE STUDENT KNOWLEDGE TRANSFER

by

NICOLE GUINOT VARTY

December 2016

Advisor: Dr. Jeff Pruchnic
Major: Rhetoric and Composition
Degree: Doctor of Philosophy

In 2012, Kathleen Blake Yancey, Karen Taczak and Liane Robertson published a book entitled Writing Across Contexts: Transfer, Composition and Sites of Writing, in which they advocate for explicit instruction to help students transfer the writing expertise they gain in college composition courses to other writing contexts. That same year, the online journal Composition Forum put out a special issue dedicated to knowledge transfer. Since then, the call to investigate, and indeed teach for, knowledge transfer in the field of writing studies has been echoing around the discipline. In responding to this call, this dissertation project applies an ecological model of writing to a First Year Composition curriculum and pedagogy to promote writing knowledge transfer. This study examines how the framework of an ecological model of writing, or “writing ecologies pedagogy” can support students’ transfer of prior knowledge into the FYC classroom, as they encounter threshold concepts identified in composition studies (Adler-Kassner and Wardle, 2015). In addition, this project examines how a writing ecologies pedagogy can support the transfer of threshold concepts beyond FYC. While initial steps have been taken to theorize prior knowledge and teach explicitly for transfer
(Yancey, Robertson and Taczak; Reiff and Bawarshi), the focus to this point has been on genre awareness transferred from prior writing experiences and practices that happen before entering college—contexts solely dependent on students’ experience in school. This project attempts to expand the focus from experiences prior to FYC, to experiences after as well. It also expands beyond the context of school to include home and personal discourse communities to complete the picture of where students write, and for what purposes.

This dissertation triangulates between survey data collected from students at the beginning and end of their FYC courses, and longitudinal interviews with seven students to follow their trajectories of within and beyond the composition course. The surveys reveal that students are, for the most part, able to appropriately negotiate useful prior knowledge with the threshold concepts presented within the writing ecologies courses. The interviews reveal that students are able to transfer the threshold concepts of “Writing is a Social and Rhetorical Act” and “Writing is Linked to Identity,” very strongly. The focus of explicit instruction within the writing ecologies courses promotes the transfer of these two threshold concepts, though not all of the threshold concepts that were initially outlined in the curriculum. Ultimately, therefore, findings from this project suggest that further research on the effects of a writing ecologies curriculum and pedagogy on the transfer of writing knowledge can help pedagogical theorists, instructors and composition researchers develop a deeper understanding of how an ecological model of writing development can support knowledge transfer for students throughout their college careers, and beyond.
AUTOBIOGRAPHICAL STATEMENT

Education
B.S. Lee University, Cleveland, Tennessee (2004)
M.A. Eastern Michigan University, Ypsilanti, Michigan (2009)
PhD. Wayne State University, Detroit, Michigan (expected 2016)

Positions
2007-2009 Graduate Teaching Assistant, English Dept., Eastern Michigan University, Ypsilanti, MI.
2009-2011 Adjunct Instructor, English Dept., Eastern Michigan University, Ypsilanti, MI.
2011- Lecturer, English Dept., Wayne State University, Detroit, MI.

Selected Publications

Journal Articles Published


Papers Presented

1. Invited and/or Refereed Internationally or Nationally
   1. “How Do We Actually Teach for Transfer?—Fostering Student Choice and Inviting Students to Engage.” CCC. Las Vegas, NV. March, 2013.

2. Invited and/or Refereed Locally/Regionally