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FIRST-YEAR DOCTORAL STUDENTS' ACADEMIC WRITING DEVELOPMENT: THE NATIVE- AND NONNATIVE-SPEAKING PERSPECTIVES

by

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the School of Teacher Education in the College of Community Innovation and Education at the University of Central Florida Orlando, Florida

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Major Professor: David Boote

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ABSTRACT

Academic writing is central to doctoral growth. The purpose of this study was to better understand the similarities and differences between first-year native- and nonnative-speaking doctoral students in terms of academic writing and writer development. Data were collected for two semesters, including observational notes, transcribed audio diaries and interviews, and writing samples from three first-year doctoral students from an applied field of social science. Ethnographic data analysis described how text production and composing processes changed over the first year in relation to social and cultural factors. The first year of the doctoral program was critical to their growth as writers and emerging researchers. With diverse cultural, linguistic, and educational backgrounds, all three participants completed similar doctoral-level academic writing tasks with different levels of confidence, yet all achieved reasonable levels of success as demonstrated by grades and overall positive feedback. Their writing processes made evident both similarities and differences in the difficulties encountered and the strategies used to overcome those difficulties. By the end of the first year, all participants had established preferred writing habits and processes; however, text production and composing processes varied depending on the genres of writing and course contexts. In addition, their writing experiences and development were shaped by sociocultural factors: settling into the city and program, competing responsibilities, interactions within the doctoral program, and academic acculturation. Overall, the commonalities and differences observed in the participants' developmental trajectory as academic writers were not determined by their native or nonnative status, but by participants' individual differences. Native-nonnative differences existed but were relatively trivial, suggesting that the two sub-populations at the doctoral level may share more similarities

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than differences. Native or nonnative status did not automatically equate to advantages or disadvantages in the current research context. The study provided theoretical and practical insights into first-year doctoral students' shared experiences and individual challenges as native and nonnative writers, generating implications for doctoral-level student support services and writing pedagogy. The findings demonstrated that only by examining academic text in relation to the context will the researcher gain clarity about the wide range of factors that play into the writer's writing process and product. Methodologically, the study offered recommendations for future studies using a longitudinal and ethnographic approach in examining academic writing development and highlighted the audio diary as a data collection method.

Keywords: academic writing, text production, composing process, sociocultural perspective, L1 writer, L2 writer, writing pedagogy, doctoral education

This dissertation is dedicated to my mother and father who have always encouraged me to be the best version of myself I can be.

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Some say writing a dissertation is a draining experience, so much so that while you are doing it, you constantly feel the task is impossible and never-ending, and by the time you actually finish it, you probably want to stay away from researching and writing for a while. Others say writing a dissertation is a lonely experience. You feel there is no one in the world who understands and cares as much about what you are doing except for yourself. I am a lucky person. Although finishing a dissertation is never easy, I have never felt exhausted nor lonely during the process, and the following individuals are the reasons why.

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I am particularly grateful for the friendship and company of my cohort of doctoral

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The successful completion of this dissertation marks the end of a degree. As I am incredibly honored to have reached such a monumental point in my education, my lifelong journey of learning, writing, and researching has just begun.

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CHAPTER ONE: INTRODUCTION

With limited experience and ability writing in English and no understanding of the academic writing style, I started my master's journey at the University of Sydney, Australia, where I learned to write in an academic setting in a second language (L2) for the first time at the graduate level. My very first written assignment immediately proved my previous ten years of English learning in China insufficient, as I had no idea how to even start writing the 1000-word essay assigned by my professor. After all, the longest piece of writing in English I had experience producing up to that point were 250-word opinion essays required by an English language proficiency test that international students take when applying to English-medium universities.

This first assignment in the master's program was my wake-up call to realize that I was not truly prepared to be a graduate student. The English as a Foreign Language curriculum in China that I experienced did not focus on developing students' writing skills and certainly was not intended to produce L2 writers who can write academically at the graduate level in an English-speaking country where their work is compared with that produced by native speakers. The start of my master's degree marked one of the steepest learning curves for me as an international student living in a foreign country independently for the first time and as an L2 academic writer entering and trying to succeed in a brand-new academic culture and community.

Only one year later when I completed my master's degree, I managed to produce an award-winning master's dissertation (the term dissertation is used at the master's level in Australia) about 15,000 words long. I am proud of what I was able to achieve as well as how fast and how much I improved as an L2 writer, but the whole process was without doubt one of the

most challenging learning experiences of my life. Even now when I read my dissertation again, I do not just see the text I produced; I see my stories and experiences, along with numerous moments of doubt, frustration, and helplessness as well as moments of inspiration, appreciation, and triumph. From then on, academic writing in English has become a topic that I am truly passionate about.

I am beyond grateful that I started my doctoral studies in TESOL in the U.S. with the valuable prior experience learning to write in an English-medium university at the master's level. Had it not been for the master's experience, I cannot imagine how I would have been able to handle the increased volume and the higher expectations of the writing in my doctoral program.

However, even today, after I have produced numerous academic papers and assignments in English and have become acquainted with the writing convention in my discipline, I still have doubts in my ability and identity as an academic writer. As a doctoral student, I know and have experienced firsthand the significance of English academic writing skills in achieving high academic performance and recognition in a doctoral program. I constantly find myself vacillating between self-doubt and self-empowerment as I try to produce increasingly advanced levels of academic texts in English. I continuously encounter new challenges with academic writing socially and culturally as I strive to understand and meet the expectations of my peers, various professors, proposal reviewers, and journal editors. Moreover, as a doctoral student with both teaching responsibilities as a Graduate Teaching Associate and a young family to take care of, I feel deeply that producing a good piece of academic writing requires more than just language proficiency and writing skills, but also work efficiency, time management, and family support. Sometimes, producing a quality written piece in the busy schedule and limited time that I have

comes at the cost of negatively impacting my relationships and health.

What about other doctoral students? Are the feelings or mindsets that I experienced unique to international students who are L2 writers? How are other L1 (first language) and L2 doctoral writers' experiences similar to or different from mine? How do they overcome the difficulties in writing they have encountered and grow as a writer/researcher? What are the stories and the contexts behind their written texts as final products? All these questions based on my personal experiences left me determined to investigate first-year doctoral students' academic writing development as the topic of my doctoral dissertation.

Introduction

In the academic setting, it is through writing that people create, record, and exchange knowledge, assign and fulfill academic requirements, develop and document research and projects, as well as socialize in academic networks. Particularly for those who study or work in a higher education setting, the quality of the academic written product is often pivotal for participation and recognition in the academia social circle and decisive for opportunities in advancing one's education and career (Jakobs & Perrin, 2014).

For students in Ph.D. programs, writing is recognized as central to doctoral growth – not only in the sense of writing or research skills development, but also in terms of identity transformation from students into independent researchers and potential academics (Inouye & McAlpine, 2019). Nevertheless, many doctoral students perceive academic writing and text production as a difficult, tedious, and even painful duty. Graduate students typically begin to learn about and practice academic writing at the master's level (Gazza, Shellenbarger, & Hunker, 2013). Thus, one may assume that by the time students enter a doctoral program, they are no

longer beginner writers. Nevertheless, it is not uncommon to observe new doctoral students feeling overwhelmed and underprepared for the unique challenges of doctoral-level writing, which required learning to write "in qualitatively different ways in order to undertake a significant and largely independent research project that implicates their future career trajectories" (Inouye & McAlpine, 2019, p. 3). Furthermore, to international doctoral students who are L2 writers, the complexity of doctoral-level academic writing is compounded by linguistic and cultural challenges.

For doctoral students, writing is not only at the core of achieving high academic goals, but essential to entering the world of academia and participating in discipline-specific communities. Unlike lower level academic writing, doctoral-level writing typically expects greater breadth and depth, includes a diverse range of high-level academic genres (e.g., article critiques, academic papers, or grant writing), and necessitates new and critical insights, as well as increased levels of research skills. At this level of academic writing, be it native-speaking students writing in their L1 or nonnative-speaking writers composing in their L2, the textual and contextual challenges may be enormous. However, as they transform and acculturate to become scholars in their particular fields and advance their academic careers through writing, L1 and L2 writers may utilize different assets and face diverse challenges linguistically, culturally, and individually. It is therefore important to understand how and to what extent L1 and L2 academic writing at the doctoral level overlaps and departs from each other.

The gap between the importance of academic writing and doctoral students' writing competence raises the questions of how academic writing at the doctoral level can be conceptualized, taught, and learned. Past research has offered a wealth of perspectives and

research angles from which to study academic writing as the subject matter (see detailed discussions in Chapter 2). Conceptually, academic writing research has evolved from analyzing academic writing products and textual structures, to understanding and investigating writing processes, and finally, to perceiving and researching writing as a fluid, socially structured activity. Moreover, there are other major theoretical frameworks adopted by academic writing researchers including critical, feminist, critical race theories, as well as rhetoric and literary analysis.

However, despite the advancement of academic writing as a research area, a review of existing literature has indicated a two-fold critical gap: on the one hand, the studies focusing on the doctoral population do not address the specificity of L2 writing, and on the other hand, L2 writing studies have given little analytical attention to the doctoral population by treating L2 writers separately without referencing and comparing their L1 counterparts. To address this gap, we need studies that allow us to take stock of doctoral academic writing in its own right, and those that unveil what we do not know about its sub-contexts and sub-populations. This research project was an attempt to close the gap by addressing both L1 and L2 populations in a single study.

Research Design

This study intended to take into account the full range of social and cultural contexts impacting L1 and L2 writers' doctoral-level academic writing and writing development over the first year of their doctoral studies. To do so, the study highlighted the multidisciplinary nature of academic writing research and addressed writing as a "situated and mediated activity distributed across temporal, cognitive, social, and material environments" (Prior & Thorne, 2014, p. 31).

Methodologically, the study adopted a longitudinal ethnographic approach and collected qualitative data from multiple sources (i.e., observations, interviews, writing samples, audio diaries) from three doctoral writers. The choice of the naturalistic approach allowed a closer examination of writing development and individual differences among the writers, while situating such examination within socio-cultural contexts (Casanave, 2010). Although the findings of this study cannot be generalized to doctoral writers at large, the collective cases of the doctoral writers provided diverse perspectives on the issue of academic writing specifically at the doctoral level.

Purpose Statement

Considering that the principal objective of academic writing research has been, and continuous to be, the written text, the purpose of this study was to describe the development of academic writing in English in a sample of L1 and L2 doctoral students in an applied field of social science, focusing upon the development of textual production and composing processes during the first year of their doctoral program. The development of academic writing was interpreted through the social, cultural, and contextual factors that shaped each participants' textual production and composition process. Overall, the study aimed at understanding the possible similarities and differences between L1 and L2 academic writing and writing development at the doctoral level.

Research Questions

The study was guided by a single, overarching central research question:

1. In what ways do L1 and L2 doctoral academic writers' developmental trajectories

overlap with or diverge from each other during the first year of the doctoral program in an applied social science field?

Guided by the central research question, the sub-research questions included:

- 1.1 How does academic writing by L1 and L2 doctoral students develop in terms of text production during the first year of their doctoral program?
- 1.2 How does academic writing by L1 and L2 doctoral students develop in terms of composing process during the first year of their doctoral program?
- 1.3 How do social, cultural, and contextual factors shape L1 and L2 doctoral writers' writing development?

Operational Definitions

Academic Writing

Academic writing can be broadly defined as "any writing that fulfills a purpose of education in a college or university" (Thaiss & Zawacki, 2006). This broad definition covers the intersection of (a) writing in the university commonly done by students for assignment purposes and (b) disciplinary writing commonly done by university faculty and graduate students. However, the situation becomes complex when one tries to provide a precise definition of the term or define it according to certain standards. Thaiss and Zawacki (2006) pointed out that textbooks and scholarly writers often imply or assume a definition which could be abstract and not research based. They also emphasized that "there are exceptions to almost every principle an analyst can identify as a characteristic of academic writing" (p. 5), but did come up with three explicit characteristics of academic writing regardless of the differences among disciplines and individual teachers:

1. Clear evidence in writing that the writer(s) have been persistent, open-minded, and disciplined in study. (p. 5)

2. The dominance of reason over emotions or sensual perception. (p. 5)

3. An imagined reader who is coolly rational, reading for information, and intending to formulate a reasoned response. (p. 7)

In this study, academic writing at the doctoral level was narrowly interpreted as doctoral students' writing in response to the requirements of academic assignments in their program and discipline. Under this definition, the characteristics of doctoral-level academic writing may vary as there are differences in how doctoral education is approached by discipline and by country. Nevertheless, doctoral programs in general expect higher level of academic competencies and maturity when judging students' work product as compared to master's student work, as doctoral students are often expected to enter the academic community as a contributing researcher (Dublin Descriptors, 2004). It should be noted that the reason for distinguishing doctoral-level writing from the master's level is to emphasize that doctoral students' academic writing as a separate strand of academic writing deserves scrutiny. The researcher acknowledges that there are diverse pathways to and systems of doctoral education. For instance, students advance to doctoral programs from master's programs with either a research preparatory focus or a professional focus. There are also programs which doctoral students enter directly following an undergraduate degree, not going through the undergraduate-master's-doctoral sequence.

Text Production

The present study examined text production in a doctoral-level academic setting. Text

production was conceptualized as the production of written assignments by doctoral students in a specific discipline under the influence of complex social systems. Following this socially oriented approach, I intended to understand how the participants produced the academic texts not only from the observer's perspective (observable features of the written text such as word count, genre, and academic writing conventions), but also from the participant's own perspective (how doctoral students produced academic texts in relation to the ways that agency, author, and social contexts intersect).

Composing Process

Composing process, or writing process, refers to "the entire action of creating a written text [which] begins with such prewriting activities as considering the prompt or reason for writing and ends at the point of submitting the final product to the reader, or audience." The composing process typically involves "planning, formulating, and revising written text to create multiple drafts before arriving at the final product." (Kobayashi & Rinnert, 2018, p. 2300) In this study, I examined participants' composing process for selected doctoral coursework assignments.

Culture-sharing Group

A culture-sharing group is usually the unit of analysis for the ethnographer as they research the behavior, language, and artifacts of people (Creswell & Poth, 2018). In this study, instead of focusing on an entire target culture sharing group – members of a specific Teaching English to Speakers of Other Languages (TESOL) program in a large research university, I followed the micro-ethnographic approach in which I focus on part of the social-cultural system of the culture-sharing group – three first-year Ph.D. students – and analyzed how they engage in

academic writing activities as defined by the program culture, the interaction of the program culture and other socio-cultural factors that shape their academic writing experiences and development.

L1 and L2 Writers

L1 writers refers to writers who are monolingual native speakers of English and L2 writers refers to writers who use English as a second/additional language. In constructing this paper, the terms L1 and native-speaking as well as L2 and nonnative-speaking were used as synonyms due to pragmatic convenience. It is acknowledged that the dichotomy of L1/L2 or native/nonnative is problematic in its oversimplification of a much more complex phenomenon. In addition, the issues of bi/multi-lingualism and bi/multi-literacy, though interesting and relevant to academic writing, were not addressed by this study. Consequently, the bilingual participant and the multilingual participant in the study, who are of nonnative status, were referred to as nonnative-speaking or L2.

Significance of the Study

The significance of this study lay in the importance of the subject matter as well as the theoretical, methodological, and pedagogical implications the study could provide.

To start with, the complex issue of academic writing and writer development is worth comprehensive investigation. Academic writing plays a key role in doctoral experience and success. For doctoral students who engage in academic writing practices in a specific discipline, they undergo a complicated process of text production, identity transformation, and academic acculturation. When doctoral students write in L2, this process may become more intricate not

only because of possible linguistic difficulties, but also because of the potential preconceptions of academic writing and identity based on the academic conventions in the home culture of the students. The present study collected extensive qualitative data and provided in-depth descriptions of the participants in order to capture and present the intricacies, dynamics, and evolution of academic writing as a social practice.

In doing so, the study enriched the existing academic writing literature by (a) providing detailed and rich accounts of writer development at a doctoral level, (b) exploring relations among doctoral students' text features, composition process and writing contexts, and (c) uncovering shared and unshared patterns through tracing native- and nonnative-speaking doctoral students' writing development. Research on such issues is needed because it helps contextualize the process by which texts are produced, thereby narrowing the ontological gap between text and context in the current academic writing research (see Lillis, 2008, for detailed discussion of the ontological gap).

Methodologically, acknowledging that few studies in the field of academic writing are conducted with a longitudinal lens, this study narrowed the research gap by not only examining academic writing practices at a specific time and a specific setting, but tracing the changes in the writers' text production and composing process over time and exploring the sociocultural factors behind such changes.

Lastly, by providing deeper insights into doctoral students' writing experiences and identity development, the study yielded pedagogical implications for faculty members, academic staff, and institutions to reexamine their writing pedagogy in consideration of how to best support the development of scholarly writing at the doctorate level.

Assumptions

The design of this study was based on several assumptions. I assumed that the participants in this study, both native-speaking and nonnative-speaking, can clearly and accurately articulate and recall their experiences, feelings, attitudes, and perceptions about their academic writing development as they complete their doctoral written work. Considering my nonnative speaking participants are both teachers of English and were admitted to a TESOL doctoral program in the U.S., my assumption about their English proficiency in supporting the oral and written communication in the research process was justified.

I must also assume that the participants' recorded responses in the interviews and audio diaries as well as their provided documents and observed behavior were truthful. I understand that the process and final products of writing can be viewed as highly personal, and my dual role as both the researcher and a fellow doctoral student in the same program might impact the way participants interact with me. However, I believe that my participants had a sincere interest in participating in this research study and provided data with veracity.

Another assumption was related to my choice of researching first-year doctoral students. As I am interested in how doctoral writers develop their writing in order to be successful members of their academic community, I assumed that following the first-year students' experience coming into a doctoral program would capture important changes and growth within each writer as they enter a new academic community and culture. I assumed my participants will continue to develop as academic writers, however, their first-year experience may be the most informative in answering my research questions.

Accounts of Reflexivity

Qualitative researchers (e.g., Lillis, 2008) call for more reflective accounts which present the history and motivations of the qualitative researchers in pursuing a research topic. The effort to be self-disclosing reflects that the qualitative researcher is "ethically and politically selfaware" that they are "part of their own inquiry" and that "all writing is positioned and within a stance" (Creswell & Poth, 2018, p. 337). At the beginning of this chapter, I exercised the researcher's reflexivity by reflecting on my identity, personal experience and motivation in selecting the research topic. In the subsequent chapters, I continue to include reflexive accounts on my research practices, self-disclosing the influences that have shaped my data collection, analysis and interpretation. Through reflexive practices, I help the reader gain insights into the thought process and decisions made as I conducted this study. The sharing of these thoughts assists the readers in judging the validity of this work.

Delimitations and Scope

To manage the scope of this work, I chose to delimit the study in several ways. First, considering the timeline of a dissertation, I decided to examine doctoral writers' development only in their first year of study. Specifically, only two semesters of data were collected in Fall 2018 and Spring 2019. One participant decided to not enroll in any classes in Summer 2019, so the data collection was not extended to the summer semester although technically it was included in the first year. Second, only three participants were included in the study because they were the ones who completely satisfied the determined sampling criteria (see more details in Chapter Three). I chose not to revise my sampling strategy and thus delimited my data collection because

including participants from other doctoral-level academic programs may make the data less comparable in the sense that the writers in other programs will likely perform different academic writing tasks under different program requirements, expectations and culture. With the current pool of participants, I focused on exploring how each participant wrote and developed their writing when facing the same academic tasks and requirements while studying in the same doctoral program.

Overview of the Study

The present study adopted an ethnographic approach to collect and analyze qualitative data (i.e., observations, interviews, writing samples, audio diaries) on L1 and L2 doctoral students' academic writing development during the first year of their studies. I as the researcher focused on a culture-sharing group: a cohort of first-year TESOL doctoral students at a large research university in the Southeastern United States. As I employed a longitudinal approach and followed participants over time, insights were gained on L1 and L2 doctoral students' academic writing practices and development based on the closer examination of the participants' overall writing development and the individual differences among writers.

The dissertation is organized in five chapters. Chapter One introduces the background of the study, illustrating key aspects such as the research design, purpose, significance, and assumptions. The next chapter, Chapter Two, reviews and critiques the research and scholarship on academic writing with specific analytical attention devoted to both native and nonnative English-speaking students at the doctoral level. Chapter Three details the ethnographic methodology and the qualitative research design used in the study and provides information on issues such as data collection, analysis, management, and trustworthiness. Chapter Four presents

the findings of the main research question and the three sub research questions. Chapter Five discusses and draws conclusions from the research findings, while exploring the theoretical and pedagogical implications. It also provides recommendations for future research. Throughout the five chapters, I share reflective accounts as the qualitative researcher to exercise reflexivity, disclosing my personal motivation, role, and positionality in conducting this study.

CHAPTER TWO: LITERATURE REVIEW

Introduction

This chapter reviews and critiques the research and scholarship on academic writing with specific analytical attention devoted to both native and nonnative English-speaking students at the doctoral level. It starts by providing an overview of academic writing research. By discussing the involving disciplines and their various approaches to the topic, this chapter highlights the inter- and multi-disciplinary nature of academic writing as a research field. Drawing insights from high-quality literature reviews and peer-reviewed empirical studies, it then presents, critiques, and reconciles what L1 and L2 writing literature informs us about doctoral writers and its sub-populations. Finally, it discusses key theoretical and methodological insights gained from the literature review to situate this study in the broad and diverse academic writing literature.

Conceptualizing Academic Writing Research

Over the past three decades, academic writing research in English has undergone substantial growth as an interdisciplinary/transdisciplinary area of study. Researchers from a multitude of disciplines including first language composition and rhetoric studies, English for specific purposes, English for academic purposes, applied linguistics, sociolinguistics, corpus linguistics, literacy studies, higher education, as well as information and library sciences have provided diverse perspectives on this topic (Lillis, 2008; Prior & Thorne, 2014). Because of the diversity of the involved disciplines and the multifaceted nature of academic writing as a subject matter, the field has evolved in theoretical perspectives, research approaches, and pedagogical practices (Paltridge, Starfield, & Tardy, 2016). This section aims at identifying research lines and paradigms in academic writing research and offering a conceptualization of academic writing as an object of inquiry.

Research Agenda from Product, Process, to Social Context

Perhaps the most commonly discussed scheme to outline academic writing research (as well as writing research in general) is the product-process-social context way of framing the different research agendas according to a historical sequence (Prior & Thorne, 2014).

Among the investigations on academic writing, there has been a long and varied linguistic-text focused tradition. This approach treats writing product – *text* - as the focus of analysis, starting from simple analysis of paragraph organization to more sophisticated analysis of text written from rhetoric, linguistics, genre, and discourse aspects. Despite its long history, this approach has been criticized for focusing only on academic writing as product and neglecting the context in which the text is produced.

As a radical response to the textualist analytical approach, the process-oriented approach to academic writing aims to examine academic writers' cognitive activities, composing process, and writing strategies (Lillis, 2008, p. 354). Shifting the focus away from the *text* to the *writer as creator of the text*, the composing process approaches to writing research investigate the writer's decision-making process while constructing text. This approach was originally developed in the L1 writing world by cognitive theoreticians Flower and Hayes (1981). The key principles of this approach highlight that writing is the discovery of meaning as well as a systematic process that can be divided into highly teachable steps or stages. As such, the development of ideas or content supersedes the achievement of correct form. What is important to note is that the adoption of these influential ideas by L2 writing pioneers marks the birth of second language writing as a

research field. A large body of L2 writing research employed the process approach and the key research findings in this strand include identification of (1) composing stages, (2) activities that can be applied both sequentially and recursively within the stages, and (3) influences of individual and social factors on the composing process (Kobayashi & Rinnert, 2018).

While both product- and process-oriented studies remain largely formalist or textualist in nature, a more contemporary shift in academic writing research (including L2 writing research) reflects a *post process era* and recognizes the social, cultural, and political dimensions of writing by exploring topics such as the academic writer identity, experience, socialization, and enculturation. These studies typically conceptualized academic writing as a cultural activity (Atkinson, 2003), communities of practice (Wenger, 1998), or discourse communities (Swales, 1990). Researchers explore beyond a specific written product and/or writer expression and instead examine writing as a fluid, socially structured activity. Therefore, the focuses of inquiry in this line of research become "who writes what to whom, for what purpose, why, when, where, and how" (Grabe & Kaplan, 1996).

Towards a Multidimensional Mapping of Academic Writing Research

The product-process-social context as an integrative scheme for delineating the history of academic writing research captures important conceptual movements in how academic writing has been perceived as an object of inquiry. However, Prior and Thorne (2014) pointed out this scheme is not comprehensive and informative enough when used to classify writing research. Knowing a study is focused on texts (product), for instance, does not immediately reveal the study's approach to writing research, as a written text can be analyzed linguistically, visually, or rhetorically.

Moreover, inherited from traditions from diverse disciplines, there are other major theoretical frameworks adopted by academic writing researchers including critical, feminist, critical race theories, as well as rhetoric and literary analysis. As such, Prior and Thorne (2014) proposed a "multidimensional mapping of writing research" which is a set of continua (i.e., object of inquiry; epistemological; theoretical; data collection; data analysis; research presentation) that help categorize writing research which firmly rooted in the tenet of a particular tradition in one case and quite hybrid in another (pp. 36 - 37). Using their map to describe the field of academic writing, one can arrive at the following.

In terms of object of inquiry, academic writing researchers could focus on

- academic writing as text/semiotic artifact (single, multiple, linked by academic genre or situation);
- academic writer (individual, collective, and individuals in a group);
- academic writing activity (locally situated, dispersed, recurrent);
- mediation (technological means of production, distribution, reception; single/multiple modality (-ies);
- society (social categorization of identity, community, institution, or social group);
- temporal scale (one time, recurrent, cross-sectional, longitudinal, etc.).

As for the epistemological stance, a researcher can position their role as (a) disinterested simply describing academic writing in a basic science sense; (b) interested - conducting a study driven by pedagogical, social, or disciplinary-specific needs; (c) participatory - such as a teacher conducting research on their students' academic writing practices; and (d) interventionist research findings used to promote change. Depending on the research object as defined by the broader scheme of "text-personactivity-mediation-society", a wide range of research methods have been used by academic writing researchers. Data collection methods typically include collection of writing samples (existing/related artifacts and elicited production of new artifacts), observation (existing practices, elicited performances, and practices after intervention), interview or focus group (including text-based interviews), and surveys. The accompanying data analysis methods range from statistical analysis (descriptive, parametric, or nonparametric), qualitative analysis (emergent themes), interdiscursive/intertextual analysis (categorical or particular), and interpretive analysis (rhetorical or literary).

To sum up, academic writing is an interdisciplinary/multidisciplinary area of study. Through decades of endeavor to theorize academic writing, researchers have come to the recognition that a comprehensive theory of academic writing (although there has not been one recognized by all involved disciplines of academic writing) should construct writing as "situated and mediated activity distributed across temporal, cognitive, social, and material environments" (Prior & Thorne, 2014, p. 31). As for the sub-field of second language writing, Silva (2016) suggests that eclecticism is at the core of second language writing, so no single theoretical umbrella can suffice. Atkinson (2018) goes as far as to state "there is no comprehensive theory of L2 writing." (p. 2566) Apart from the commonly recognized key notion that writing is both process and product, L2 writing researchers typically argue that L2 student writers' needs are markedly different than those of L1 students, and so must be addressed specifically.

By illustrating major conceptual movements and lines of research in the field of academic writing, I as the researcher have been able to better situate this study in the contemporary

literature. Specifically, I intended to approach doctoral writers as my participants in a comprehensive manner, which requires me to adopt multiple analytical angles. To some extent, my study features all three of the eras of academic writing research. The research design of this study, which is discussed in more detail in Chapter Three, included empirical examination of participants' written products, in-depth accounts of writing processes, and the social, cultural and disciplinary environments that situated and mediated the participants' writing activities and development. This study is also situated at the intersection between the broad academic writing research and L2 writing research, focusing on a particular population of academic writers, L1 and L2 doctoral students. The next section discusses the current literature on doctoral academic writing.

Research on Doctoral Academic Writing

Although writing research has been continuously oriented to writing at all levels of the educational setting, academic writing research typically implies the examination of writing at a university level (see Operational Definition section in Chapter One). On closer look at the existing academic writing literature, however, a pattern has been noted that researchers tend to separate university levels broadly into two categories: undergraduate writing and graduate writing. For instance, in the recently published *TESOL Encyclopedia of English Language Teaching* (Liontas, 2018), there were only two entries (i.e., "Undergraduate Writing" and "Graduate Student Writing", p. 2267) when it comes to the university context of second language writing literature. At least in the second language writing literature, academic writing has been examined at the graduate level as a whole, but little analytical attention has been given to the doctoral or advanced graduate population specifically.

The broad examination of graduate-level writing is problematic because doctoral studies demand students to think and write in drastically different ways from master's studies (Ballamingie & Johnson, 2011; Billo & Hiemstra, 2013). The Dublin Descriptors (see Table 1), developed as part of the 2005 Qualifications Framework of the European Higher Education Area, illustrated the expectations of each level of higher education, and highlight a significant gap in competency goals from master's to doctoral work in terms of (a) knowledge and understanding; (b) applying knowledge and understanding; (c) making judgements; (d) learning focus; and (e) communication. Based on the Dublin Descriptors (Joint Quality Initiative, 2004), there are clear distinctions between the expectations of the master's students work products and that of doctoral students. While master's study marks the onset of autonomous research and critical analysis, a stage that allows one to have a student mindset for learning and growth, the doctoral study requires one to enter the academic community as a contributing researcher, a role with much higher academic competencies and maturity.

Doctoral students are expected to demonstrate comprehensive knowledge of their research area in terms of the literature as well as the research methods; independently produce research of publication-worthy quality; critique and synthesize complex ideas and knowledge; promote and advance a research field; and communicate research expertise with experts in the field as well as the general public (Inouye & McAlpine, 2019).

Table 1	The I	Dublin	Desc	criptors
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	Master's	<u>Ph.D.</u>
Knowledge and understanding	Provides a basis or opportunity for originality in developing or applying ideas often in a research context	Includes a systematic understanding of their field of study and mastery of the methods of research associated with that field
Applying knowledge and understanding	Problem solving abilities applied in new or unfamiliar environments within broader (or multidisciplinary contexts)	Ability to conceive, design, implement, and adapt a substantial process of research with scholarly integrity; A contribution that extends the frontier of knowledge by developing a substantial body of work some of which merits national or international refereed publication
Making judgments	Ability to integrate knowledge and handle complexity, and formulate judgments with incomplete data	Capable of critical analysis and synthesis of new and complex ideas
Learning focus	Study in a manner that may be largely self-directed or autonomous	Able to promote, within academic and professional contexts, technological, social or cultural advancement
Communication	Their conclusions and the underpinning knowledge and rationale (restricted scope) to specialist and non-specialist audiences (monologue)	With their peers, the larger scholarly community and with society in general (dialogue) about their areas of expertise (broad scope)

If it is with these expectations that the doctoral programs are operated, then it is only logical for academic writing research to acknowledge the vast differences in the two levels of graduate studies and consider the unique challenges of the doctoral study. Academic writing research needs to treat the doctoral population as a unique population rather than looking at graduate-level writing in general and understand that the research findings at the master's level may not be adequate for interpreting doctoral-level writing. Academic writing research focusing on doctoral students is needed because it is largely through writing that the higher education system judges a doctoral student in determining whether they have met the doctoral competency goals (see Table 1). For instance, the writing of a dissertation has long been recognized and documented as a common obstacle to doctoral completion (Torrance, Thomas, & Robinson, 1994).

Given that writing by doctoral students is a worthy area of inquiry with important practical implications for pedagogy, researchers, often in the field of higher education, focused on the doctoral population alone. In a recent systematic review published in the *International Journal of Doctoral Studies*, Inouye and McAlpine (2019) examined literature on academic identity as interacting with doctoral students' writing and the feedback they receive. This systematic review is important to discuss because (a) it is found to be the *only* systematic review focusing on doctoral-level academic writing and students; and (b) it features the most recent trend in the post process era of academic writing research – a focus on identity. The authors started with 887 citations, among which only 40 peer-reviewed articles published in English-language journals between 1997 and 2017 met their inclusion criteria and were selected and synthesized. After open coding for all 40 articles using definitions of academic identity, theoretical frameworks, research contexts, and key themes as codes, they confirmed the interwoven relationship between writing, feedback and academic identity development.

Inouye and McAlpine (2019) highlighted doctoral identity development as reflected in the academic writing activities to be a crucial outcome of doctoral education. The themes identified in their review suggest that "the development of academic identity involves a dynamic relationship between feedback and writing" (p. 15). Feedback promotes critical thinking about

(a) research, (b) disciplinary knowledge, (c) writing expectations, and (d) how the writer represents themselves in the text (e.g., Can & Walker, 2011; Friedrich-Nel & MacKinnon, 2015; Odena & Burgess, 2017; etc.). Whether a doctoral writer receives quality feedback or not results in different levels of confidence and awareness of autonomy in the writing process. It also impacts if the doctoral writer can be perceived by other researchers as an expert. Eventually, the writing practices interact with the feedback received in changing doctoral students' overall sense of themselves as researchers and research writers - their academic identity (Anderson, 2017; Inouye & McAlpine, 2017).

In addition, the review provided important insights into what the literature has addressed and conversely, rarely addressed in terms of doctoral writers' identity development in the context of writing and feedback. There is a prevalence among the literature in using a sociocultural perspective when examining identity development. As such, except for two studies that used mixed methods in their investigations, all other studies were qualitative in nature. What the literature failed to address, according to Inouye and McAlpine (2019), are questions such as how individual writers exercise agency to seek out and use feedback and how changes in research thinking originated from the feedback received related to changes in writing. In other words, the role individual context plays in experiences of writing, feedback, and identity remains a key research gap. Furthermore, studies exploring the variation in individual experience of doctorallevel writing with relevance to a writer's prior writing experience is also identified as absent from the literature. Such research is needed because writing is a cumulative activity influenced by a writer's writing histories and prior academic and professional experiences (Bazerman & Graham, 2017). Published in International Journal of Doctoral Studies, this systematic review was written primarily for the audience in the field of higher education. L2 writers and international doctoral students were therefore not a main point of discussion. Out of the 40 studies reviewed, only 6 have a focus on L2 writers (i.e., Chang, 2012; Chang & Schleppegrell, 2016; Cotterall, 2011; Li, 2006a; Li, 2006b; Simpson, 2013).

To seek more empirical insights into L2 doctoral writers and how their writing practices differ from those of their L1 counterparts, Tardy (2006) as well as Flowerdew and Wang (2015) were two high-quality syntheses identified. Their differing theoretical focuses on genre learning and identity issues were of high relevance to the research questions in this study. However, as previously identified as a weakness in the L2 writing research agenda, both reviews produced by the L2 researchers did not distinguish doctoral students as a unique population, instead treating graduate students as a general category.

In her comprehensive synthesis on the genre learning of L1 and L2 writers both in and out of classroom instructional settings, Tardy (2006) reviewed 60 empirical studies. Among these studies, 26 studies were conducted at the graduate level during the period of 1991 to 2005. A closer examination of the 26 studies found that only 10 studies examined doctoral participants ranging from first year students to dissertation writers (e.g., Blakeslee, 1997; Casanave, 2005; Dong, 1996; Gentil, 2005; Gosden, 1996; Riazi, 1997; Shaw, 1991; Tardy, 2005). These studies touched upon topics including experience and practice of academic writing, oral interactions that facilitate writing, writer's textual interactions, composing strategies, instruction and feedback, transferability, development of genre knowledge, mentoring, and individuality and identity.

Among the studies identified, Tardy's (2006) emphasized the dearth of literature focusing on L1 writers, and further, the fact that no studies made explicit comparisons of L1 and L2

writers. Nevertheless, based on research findings of L1 and L2 writers in similar contexts, she proposed tentative similarities and differences between L1 and L2 writers. For instance, all writers seem to (a) be influenced by previous experience and practice, (b) face difficulties transferring knowledge from one domain to another, (c) learn genre implicitly through exposure to texts and explicitly through using model texts, and (d) refer to dimensions (e.g., social, rhetorical, linguistic, etc.) of genre knowledge. Conversely, L2 writers may differ from their L1 peers in that they (a) focus more on linguistic or rhetorical form than on social or disciplinary knowledge, (b) may be at a disadvantage in oral interactions in English due to lower oral proficiency, (c) may have more access to diverse groups of people as resources because of bilingual/biliterate skills, (d) lack membership in and have false expectations of the L2 academic community, (e) can draw on their native language when composing in L2, and (f) have stronger desire for explicit instructions in specialized writing.

While the above observations are based on research findings synthesized by Tardy (2006), it is important to keep in mind they represent only interpretive work. Empirical evidence is needed to test if these observations can be held as true and if so, in what contexts. What remains an important question to academic writing literature is the nature, degree, and significance of difference between writing in L1 versus writing in L2 and, further, the observed distinctions between texts written by L1 and L2 writers at different educational levels.

Another systematic review done by L2 researchers is Flowerdew and Wang (2015). This review of recent journal articles and monographs in applied linguistics specifically focused on identity issues in academic discourse. Their review, similar to Inouye and McAlpine (2019), reflected the shift in L2 academic writing research in the *post process era* which prioritizes the

social dimensions of writing. Even though Flowerdew and Wang (2015) titled their review as *Identity in Academic Discourse*, the identity issues they illustrated were mostly focused on L2 writers. This kind of titling practice is observed in several articles and can be misleading for readers as the findings regarding L2 doctoral population cannot be used to represent the general doctoral student population.

Some key conclusions and arguments relating to L1 and L2 writers' text production and identity formation made by Flowerdew and Wang (2015) were as follows. For all academic writers, "textual production is at the core of negotiating the interactive relationships among the members of academic communities and claiming and constructing academic identities" (p. 82). Nonnative novice scholars, as compared with their native-speaking peers, face two problems at the same time: lack of experience in academic writing and limited proficiency in English. However, as Flowerdew and Wang (2015) observed, scholars working on English as a lingua franca (e.g., Flowerdew & Li, 2009; Rozycki & Johnson, 2013) argue for intelligibility of texts, suggesting that the linguistic practice of L2 writers should be accepted as equally appropriate as those of their L1 peers, considering that the "landscape of academic communication" has been changed by its member makeup (p. 84). In this sense, the traditional distinction between L1/L2writer or native/nonnative users of English has begun to fade, which would contribute to the fluidity of writer identity. Nevertheless, Flowerdew and Wang (2015) argued that even though all writers face unique challenges in learning academic writing methodology, issues related to learners' sociocultural histories, identities, prior learning experiences and expectations, and language proficiencies influence L2 writers differently than L1 writers.

There is a lack of empirical investigation, however, in terms of how and to what extent

L1 and L2 doctoral writers share similarities and differences. Using L2 doctoral students as participants, L2 writing researchers claim their research findings on writing development and identity issues are unique to the L2 population. However, a question deserves consideration: what portion of those findings is truly local to the L2 population and how much is more of a global feature shared by all doctoral students regardless of their language background? For instance, in Gao's (2012) narrative inquiry study, the participants - as well as the researcher herself - were three third-year Chinese Ph.D. students. Using semi-structured interviews, Gao found that among the three key factors that influenced the students' academic writing in English, content familiarity was the major challenge for the students, rather than language and rhetorical differences. This finding suggested that L2 doctoral writers may experience less textual difficulties than one might think.

Another study by Hirvela and Belcher (2001) used ethnographic data to show that international students may experience many unexpected identity issues. The L2 students may have been reputable professionals in their homeland but find themselves in the relatively powerless position of being a graduate student in the new country. Likewise, their counterpart, L1 students, could also experience a similar identity crisis and a challenging adjustment to the discipline-specific culture of academia which may contrast with their former workplace culture.

Similarly, drawing on Activity Theory to analyze the emotional aspect of doctoral experience, Cotterall (2013) examined the longitudinal doctoral learning experiences of six international Ph.D. candidates studying in Australia. The Ph.D. students' experience, as Cotterall (2013) described, is a "rollercoaster of confidence and emotions" (p. 174). For the international doctoral participants, writing and supervision practices are common sites of tension, and such

tension prevails, as Cotterall (2013) argued, because of a culture of silence in the academy. Again, despite these interesting findings, to what extent they are unique to the international doctoral population is a question that remains. If one argues there is a culture of silence caused by the academy's historical distrust of emotion (Leathwood & Hey, 2009) as well as the fear that discussing students' feelings might morph into a "concern for the therapeutic rather than the pedagogic" (Beard, Clegg, & Smith, 2007, p. 237), then one needs to also consider the fact that this disciplinary culture also surrounds the domestic native-speaking students. In other words, the disciplinary culture may be just as foreign and disquieting to L1 as well as L2 doctoral writers.

In summary, the key findings and trends noted in the L1 and L2 academic writing literature suggest that issues of writing development, composing process and strategies, as well as identity formation faced by L1 and L2 doctoral students are worth scrutinizing. However, there is a noted research gap: the studies focusing on the doctoral population in general do not address the specificity of L2 writing, and yet, L2 writing studies treat L2 writers separately and thus fail to empirically compare L2 writers with their L1 counterparts in natural and/or instructional settings (Tardy, 2006). In order to make meaningful comparisons between L1 and L2 doctoral students, I posit that one must include both sub-populations in a single study.

Both L1 and L2 writers may be differentially prepared for some activities and various aspects of the activities they are asked to do. Likewise, it is important to acknowledge that "writing is not a natural or genetically endowed ability for anyone" (Casanave, 2018, p. 2462). Being native speakers of a language does not mean that people can write well academically or that they have stopped learning their first language. Facing similar writing challenges, one may argue that native-speaking students may have more resources that will help them learn academic

writing in their L1 than their L2 peers, but those resources can be unevenly distributed within the L1 population. One should also be critical about the existing literature which focused more on the deficits of L2 writers, as this view ignores the resources that many L2 writers bring to the doctoral program generally and academic writing specifically. Meanwhile, any inquiry into L2 writing must still consider that L2 writers are simultaneously learning to write and learning a second language (Manchon, 2011), suggesting L2 writers may engage in different cognitive processes and need specialized support as compared to their L1 peers.

Implications

The biggest gap in the existing academic writing literature is the paradox that the studies focusing on the doctoral population do not address the specificity of L2 writing, and yet, L2 writing studies give little analytical attention to the doctoral population and treat L2 writers separately without referencing and comparing with their L1 counterparts. Differences between L1 and L2 academic writers speculated by previous researchers were largely interpretive and inductive in nature, rather than based on direct empirical evidence (Tardy, 2006). Corpus analysis provided insights into linguistic/textual differences between L1 and L2 academic writing in similar genres, but this method provides little insight into the social, contextual, and individual aspects that shape and are being shaped by L1 and L2 writers' academic writing engagements. To date, we know little about the ways doctoral-level L1 and L2 writers share similarities and differences in their writing development and how such development can be influenced by social, cultural and contextual factors over time. Investigations into this matter are necessary for developing a more complex understanding of how different populations of doctoral writers both resemble and diverge from one another.

One may assume that L1 writers write easier, faster, and better than their L2 counterparts due to the native language advantage. However, whether this myth applies to academic writing at the doctoral level requires careful scrutiny. Writing at the doctoral level requires both L1 and L2 writers to (a) learn and practice academic genres that they might have never encountered before, (b) gradually develop their academic writer voice and identity, and (c) write for an informed audience that values primary sources and scholarly literature.

Moreover, new Ph.D. students form a particularly interesting doctoral population to examine because they are at the transitional stage from a master's-student mindset to a doctoralresearcher mindset. Often, such transition proves challenging (McPherson, Punch, & Graham, 2018). It seems an unrealistic expectation that new doctoral students could smoothly make the transition without sufficient training and support from the doctoral program and its faculty. Moreover, with the increasingly globalized higher education landscape, universities in Englishspeaking countries have seen a dramatic increase in the number of nonnative-English-speaking doctoral students who often have never studied in an English-medium university before. The universities share institutional responsibilities to understand the issues that first-year international Ph.D. students face in their academic writing and how the universities can meet their needs to support them during the transition. In this sense, from both the theoretical and pedagogical standpoint, researching first-year doctoral students is necessary.

In order to provide empirical evidence on the paths that L1 and L2 students take to develop as academic writers and to shed pedagogical light on doctoral writing pedagogy, this study focused on first-year L1 and L2 doctoral students' writing development over time and explores the changes that took place in the writer's textual production and composing process,

while taking into consideration the social, cultural, and contextual factors that shaped such writing development.

To do so, the most appropriate research design needed to be identified. As discussed earlier in this chapter, methodologically, academic writing researchers have drawn on various research paradigms to pursue their research inquires, including conversation analysis, ethnography, corpus linguistics, longitudinal qualitative research and interview survey (Flowerdew & Wang, 2015). On the textual side, Tardy (2006) suggests that qualitative approaches such as interviews or intertextual analysis are perhaps best fitted to study qualitative changes in writer's genre/textual knowledge development. Meanwhile, corpus linguistics textual analysis has advantages over qualitative studies in comparing larger samples of L1 and L2 writers' writing products. The contrastive rhetoric approach (Conner, 1996), on the other hand, examines cross-cultural aspects of L2 writing only. It identifies problems in composition encountered by L2 writers and explains the problems by referencing the rhetorical strategies of their L1. On the contextual side, researchers (e.g., Flowerdew & Wang, 2015; Lillis, 2008; Paltridge, Starfield, & Tardy, 2016) highlighted the value of ethnographical and longitudinal data in uncovering the complexity and particularity of writing development over time.

The method that supported my research purposes was longitudinal micro-ethnography featuring doctoral student cases within the same doctoral program. Multiple researchers (e.g., Casanave, 2005; Gao, 2012; Prior, 1998; Tardy, 2005, 2009; Cotterall, 2011, 2015) have adopted ethnography at three levels (i.e., method, methodology, or "deep theorizing", see Lillis, 2008) in examining postgraduate level writing. Rather than analyzing texts produced by a student group, ethnographic methods combining observations, interviews, think-aloud, and analysis of focal

texts allow researchers to look deeply into the nuances of how each individual writer functions in academic settings. Ethnographic researchers examine contexts in which writers learn to write by providing rich descriptions of the specific academic programs (e.g., Altkinson & Ramanathan, 1995), as well as class and instructors (e.g., Tardy, 2006).

Considering that both writing, and language development happens gradually over a long period of time, longitudinal qualitative studies of writing suit academic writing research in ways not easily captured by short-term or laboratory-style studies (Casanave, 2018). When the object of inquiry is academic writing produced at the doctoral level, which is neither short-term nor laboratory-style, ethnography is particularly useful to trace patterns in writing and academic identity development over time, revealing how thinking evolves during various stages of the doctoral program in response to various milestones, different types of feedback, and growing knowledge and confidence over an extended time period (Inouye & McAlpine, 2019).

Summary

This chapter has brought together diverse research perspectives in academic writing research as well as empirical findings from insightful research syntheses and studies featuring doctoral writers. Theoretical and methodological insights gained from reviewing the existing literature have contributed to the articulation of the research questions as well as the methodology of this study. The next chapter illustrates the research design of this study.

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

Introduction

The purpose of this study was to describe the development of academic writing in English in a sample of L1 and L2 doctoral students in an applied field of social science, focusing on the development of textual production and composing processes during the first year of their doctoral program. The development of academic writing is interpreted through the social, cultural, and contextual factors that shape each participants' textual production and composition process. By comparing the participants, the study aimed at understanding the possible similarities and differences between L1 and L2 doctoral students' writing and writing development.

The remainder of this chapter describes the methods and procedures used in this study including research sites, sampling strategies, data collection methods and instruments, as well as data analysis and trustworthiness features. My role as a qualitative researcher is discussed as well.

Research Design

With these purposes in mind, the present study adopted an ethnographic approach and collected data utilizing qualitative methods (i.e., observations, interviews, writing samples, audio diaries). This study was defined as an ethnographic study because I as the researcher focused on a culture-sharing group. As mentioned in Chapter One, a culture-sharing group is usually the unit of analysis for the ethnographer as they research the behavior, language, and artifacts of people (Creswell & Poth, 2018). In this study, instead of focusing on an entire target culture sharing group – members of a specific TESOL doctoral program in a large research university in the

Southeastern United States, I followed a micro-ethnographic approach in which I focus on part of the socio-cultural system of the culture-sharing group – three first-year Ph.D. students – and analyzed how they engage in academic writing activities as defined by the program culture and the interaction of the program culture and other socio-cultural factors that shape their academic writing experiences and development. In addition, the study employed a longitudinal approach to follow participants over time, as it has proven appropriate in allowing a closer examination of writing development and individual differences among writers (Casanave, 2010).

Participant Sampling and Recruitment

Sampling Method

The study recruited a cohort of first-year students from the TESOL doctoral program in a large research university in the Southeastern United States. The target population of the present study were the doctoral TESOL students admitted in August 2018. Inclusion sampling was used as the sampling method (Patton, 1990). By and large, the inclusion criteria were as follows:

- Participants should be TESOL doctoral students;
- Participants should be first-year doctoral students in the first semester of the doctoral program;
- Participants should engage in frequent academic writing practices;
- Participants should include both native English-speaking writers and L2 writers who may be from varied L1 and cultural backgrounds.

The purpose behind such a sampling method was to ensure the examination of the shared and unshared patterns between the L1 and L2 writers' academic writing development at the doctoral level.

Recruitment Method

After approval from the University's Institutional Review Board, individuals who met the inclusion criteria were approached and asked to participate. My initial contact with the doctoral program at the planning stage of the study indicated that there would be five newly admitted doctoral students who could be recruited to participate. However, at the time of recruitment, there were only three (as opposed to five) first-year students who actually enrolled in this TESOL Ph.D. program in Fall 2018. As a result, all three of them were recruited.

The following recruitment procedures were taken: as all first-year doctoral TESOL students took the same specialization course in their first semester, I visited all three potential participants at the end of a class with the permission of the course instructor and the students. I shared information about the study, had informal conversations with the students to determine if they met the recruiting criteria, and obtained their contact information. All three first-year students met the recruitment criteria and were willing to participate. I then contacted them individually to go through the formal consent procedure before starting data collection. In total, there were three participants in this study: L1 writer (Chris, pseudonym) and two L2 writers (Kelly and Alex, pseudonyms).

Participants

Background Characteristics

Table 2 summarizes the background characteristics of the three participants.

Differences in	Participants			
Background Characteristics	Kelly	Alex	Chris	
Marital Status	Married with children	Married with no children	Single	
Age	35-40	30-35	30-35	
Country of Origin	Indonesia	Romania	America	
Status in the U.S.	J-1 visa	U.S. citizen	U.S. citizen	
Language and Culture	Bilingual L1: Indonesian L2: English	Multilingual L1: Romanian L2s: English; French; German; Spanish	Monolingual; L1 English	
Education	-B.A. in English Education (Indonesia; 2003) -M.A. in TESOL (Australia; 2008) -Ph.D. in TESOL (U.S.; ongoing)	-B.A. in Political Science (Romania; 2008) -M.Ed. (U.S.; 2017) -Ph.D. in TESOL (U.S.; ongoing)	-B.A. in English and Literature (U.S., 2007) -M.A. in Curriculum and Instruction (U.S., 2009) -Ed.S. in TESOL (U.S., 2014) -Ph.D. in TESOL (U.S.; ongoing)	
Work/Study Load	Full-time student: 9 credits	Full-time student: 9 credits Graduate Teaching Assistant: 20 hours/week	Full-time student: 9 credits Graduate Teaching Assistant: 20 hours/week 2 Part-time jobs: on average 50 hours/week	
Similarities	Doctoral program: Edu Stage of study: 1 st year Gender: Female	cation Ph.D. (TESOL)		

 Table 2 Background Characteristics of the Participants

As can be seen, all three participants fulfilled the recruitment criteria, enrolled as fulltime students, and are females. They are somewhat similar in their educational background. However, they differ in terms of nationality and language backgrounds, marital status, age, as well as workload outside of being full-time students.

Writer Profiles

Kelly

Kelly is an assistant professor at an Indonesian university. She entered the Ph.D. program with a J-1 (visiting scholar) visa and a government scholarship from Indonesia. Prior to her doctoral studies, she had been teaching at the university level in Indonesia for 13 years. Having a university teaching position is considered being a "civil servant", which, according to Kelly, means a long-term secure government job. It was during her employment that she was sponsored to pursue her master's degree in Australia; later on, she applied to come to study for the doctoral degree in the U.S. When I first met her at the beginning of her doctoral studies, she spoke fluent English with a hint of an Australian accent. She also had clear goals as to what she wanted to learn and the area of research she intended to pursue based on her future career goals once she returns to her university in Indonesia.

Apart from work, she is a mother of three children. She started her PhD journey in her late thirties, as she felt "it's my time" "now that my children are a bit older". After her family joined her after her first semester of doctoral studies in the U.S., she set aside time to help her husband and children settle in (moving, finding schools, etc.), but she also had to make sure her career and academics were not impeded by having to take care of family. She was determined to be consistently productive in terms of writing, research, and publication in order to maintain her employment position and government sponsorship.

It was with years of teaching and researching experience that Kelly started the doctoral

program. In fact, she had written and published in the field of TESOL in both Indonesian and in English. She started writing academically in English during her master's program in 2007 and, since then, she has accumulated experience writing a master's dissertation of more than 20,000 words, an unpublished book, journal articles, conference proceedings, and numerous research/grant proposals. Again, it was the intention to build expertise, network, and recognition in the field that kept her writing, learning, and researching. Emphasizing her nonnative background, she described herself as the kind of academic writer who has to start early and plan ahead before taking a long time to write. She might write slowly, but would make consistent daily progress and actively seeks faculty advice while doing so.

Alex

Alex is another nonnative participant in this study. However, unlike Kelly, she is not an international student but rather a U.S. citizen. She gained her immigration status when she came to America in 2013 with her American husband. Since then, she has lived in different parts of America, worked at school districts, finished her master's degree, and is now working towards her doctorate.

Alex stood out as quite a foreign language expert. She speaks Romanian as her L1, studied French, Russian, and English in school, picked up German while studying and working in Germany, and learned Spanish from friends and watching movies. Except for Russian, she speaks the other five languages "pretty well". When asked to reflect on her own language learning experiences, she smiled and said, "I realized I am good at this". Even though Alex is multilingual, she was referred to as a nonnative or an L2 writer in this study, as the issue of multilingualism was not focused in the present study.

Alex gave me the impression of a capable, ambitious, and pragmatic young woman who is embarking on gaining expertise in foreign languages and bilingualism. In our interviews, she frequently spoke of her experience teaching and observing in bilingual schools or programs in Germany as well as different regions of America. Her passion for bilingual education and past teaching experiences have led her to the decision of pursuing a Ph.D. in TESOL. As she started her doctoral studies, she held high standards and expectations towards the doctoral program. Chris

Chris is the only L1 participant in this study and the only American student in the doctoral cohort. She is an African American female with a slow gentle voice who talks with a smile. When I met Chris at the beginning of her Ph.D. program, she had just returned to the U.S. from Kuwait where she had her most recent teaching experience.

Just like the other two participants, Chris also has a language educator profile. Her educational background was in TESOL, Curriculum and Instruction, English Literature, and Spanish. Since 2011, she has been working primarily in a K-12 setting in Korea, America, and Kuwait. Throughout her career, she has taught subjects such as English, Reading, Math, and Social Studies. It is her passion to work with English learners and to experience different cultures.

She made up her mind to come back to the U.S. when she received the acceptance letter from the Ph.D. program and learned that she would receive financial support through a Graduate Teaching Assistantship. She gave up the job offer from the Kuwaiti school and came to the city where the Ph.D. program is based, a city where she had no family and friends and had never visited before. As I have continued to interact with Chris throughout the first year of the

program, it has become apparent that financial struggle has been a main theme of her life as a doctoral student.

Because Chris's teaching career in K-12 settings does not require her to produce formal academic writing, her main experiences with academic writing were from her coursework during her master's and specialist's studies, which were quite practice-focused and different from the research-focused types of writing required by a Ph.D. program. Prior to the doctoral program, she had never received formal training in academic writing, but mentioned that writing has been a skill that "came naturally" to her; she has always helped other people with essay writing and editing. However, as she started to engage in doctoral level of academic writing, she soon felt a lack of preparedness and confidence. Nevertheless, she had high expectations for the Ph.D. program and placed herself as a "growing writer" and a "work-in-progress".

In our initial interview, she also enthusiastically shared an essay she wrote that had won an essay writing contest, proudly saying, "It had to be good for me to win out of all the people who wrote...must be some kind of power behind my words."

Research Contexts

Research Sites

The specific doctoral program in a university setting provided the general context for the present study. However, because the study adopted a naturalistic approach, the data collection took place at different sites. While interviews were conducted at a distraction-free location (e.g., a designated conference room on campus), the observations of participants' writing sessions were conducted at the participants desired location (e.g., home, office, library, study room, etc.).

Other data such as writing samples and audio diaries were obtained through electronic file transfer or email exchanges.

The TESOL Program

In order to contextualize the experience of the doctoral writers described above and understand what they were expected to do, think, and write in the doctoral program, this section offers information regarding the specific academic context. My main research site was the TESOL track of a Ph.D. in Education program at a large research university in the Southeastern United States, which provides a culture-sharing community for the participants and largely defines their daily activities as doctoral students.

As described in the graduate catalog of the university, one unique feature of this particular TESOL program is that it is positioned based on collaboration between faculty from the College of Education and the College of Arts and Humanities. Combining the interdisciplinary expertise of faculty from the two colleges, the stated purpose of the TESOL program is to offer students in-depth experiences in the research, theory, and practice of TESOL.

The TESOL Ph.D. program employs a 72-credit-hour curriculum. The coursework portion of the curriculum includes 24 credit hours of core research methodology courses (e.g., Issues and Research in Education, Qualitative Research in Education, and Quantitative Foundations of Educational Research), 15 credit hours of TESOL specialization courses (e.g., Diachronic Analysis of Second Language Acquisition Processes, Second Language Literacy, and Second Language Vocabulary Acquisition), and 9 credit hours of a cognate that students can choose to meet their professional goals (e.g., Communication Sciences and Disorders, Exceptional Education, Global and Comparative Education, Instructional Technology, and Reading). Typically, full-time students can complete the coursework in two years (3 courses in Fall and Spring semesters and 2 courses in Summer semesters), after which they must complete the candidacy examination before entering the 24-credit-hour dissertation phase.

At the time of data collection, the program had 15 doctoral students: 8 in the dissertation phase, 4 in the second year of coursework, and 3 in the first year. Except for one student, the rest of the students are full-time, required either because they are international students (11 out of 15), and/or they receive funding from the university through graduate fellowships and graduate teaching assistantships (10 out of 15).

As such, the doctoral students in the program are typically occupied with coursework (i.e., attending lectures, reading, and writing assignments) until the end of their second year. Meanwhile, some of them work as graduate teaching assistants up to 20 hours a week facilitating or teaching undergraduate-level ESOL, graduate-level TESOL, or intensive English courses on campus. In addition to the TESOL doctoral student community at the university, the doctoral students are also encouraged to actively participate in the broader TESOL community as both TESOL practitioners and novice researchers through submitting manuscripts to academic journals, attending and presenting at conferences, and assisting research grants led by the faculty members.

The Courses, The Professors, and The Assignments

To further explore what defined the participants' academic writing practices, I gathered information during the interviews about the courses the participants took during the study. I did not attend or observe while the participants took the courses, but as a doctoral candidate in the same program, I have taken the same courses, worked with the same professors, and had to do similar assignments. During the interviews when the participants spoke about the courses and the writing tasks they had to do for the professors, my knowledge about the program helped me better understand the participants when they shared their experiences.

During the two semesters of data collection, all three participants followed the same course sequence and enrolled in largely the same courses. They all retained full-time status, meaning each of them took three courses per semester (i.e., 9 credit hours). As can be seen from Table 3 below, the shared doctoral courses include two methodological courses, two statistics courses, and one TESOL specialization course. The only exception was that in the second semester, when participants could take a cognate course, Kelly and Chris chose to take a course from the Instructional Technology track whereas Alex pursued the Global Education track.

Semester	Course Name	Course Type	Written Assignment Type
Fall (First	Issues and Research in Education	Core (Methodology)	Research Proposal
semester; 9 credit hours)	Statistics for Educational Data	Core (Statistics)	Discussion Posts; Quantitative Research Paper
	Diachronic Analysis of Second Language Acquisition Processes	Specialization	Discussion Posts; Literature Review
Spring (Second	Quantitative Foundations of Educational Research	Core (Statistics)	Quantitative Research Paper
semester; 9 credit hours)	Second Language Vocabulary Acquisition	Specialization	Annotated Bibliography; Book Review
	Exploring Global Educational Issues in International Contexts; Multimedia for Educational Training	Cognate	Video Paper; Focus Question Paper

Table 3 also illustrates the types of written assignments included in each course that defined the academic writing tasks the participants had to complete. These include various types of textual genres including discussion posts, an annotated bibliography, a book review, a research proposal, a literature review, and a research paper. These types of written assignments are typical in the TESOL program and reflect doctoral level requirements and expectations as suggested by Inouye and McAlpine (2019). To illustrate, assignments such as literature review and research proposals require the participants to independently demonstrate comprehensive knowledge on a given topic as well as the research methods. When assigning these written tasks, the professors who were course instructors encouraged the participants to write with publicationworthy quality, motivating the participants with the potential of turning the course assignments such as a quantitative research paper or a book review - into an actual publication. Even in the seemingly easier assignments, such as the annotated bibliography and discussion posts, required the participants to be able to critique and synthesize complex ideas and knowledge. Some professors chose to require certain assignments to be submitted and shared not only with the instructors themselves but also with other fellow doctoral students with the purpose of promoting academic conversations among them. As such, all the assignment types experienced by the participants in the first year of the TESOL Ph.D. program heavily focused on research preparation. This is important to note because in a sub-field of education such as TESOL, it is typical for students to receive only professional preparation at a master's level. Assignments that require research skills upon entering the doctoral program can be challenging for many. Finally, for the purpose of this study, I focused on the shared courses and written assignments, and did

not extend the data analysis to cover the cognate course assignments.

Data Collection

Collecting Data from Multiple Data Sources

Data were collected from the participants over the course of two semesters (i.e., Fall 2018 and Spring 2019). Multiple qualitative data collection methods were used, including (a) observations, (b) interviews, (c) audio diary, and (d) writing samples, in order to track participants' text production, composing process, and writing development on the selected assignments in relation to possible social, cultural and contextual factors. Figure 1 below illustrates the data collection procedures in each semester.



Figure 1 Data collection in the course of a semester.

First, at the beginning of the participants' first semester of the program, an initial round of interviews was conducted with each participant in detailed and conversational ways to establish participants' writer profiles, following Casanave's (2005) approach. Demographic data, along with data regarding the writer's academic writing history, daily writing practices, expectations for the doctoral program, confidence in writing, and self-perceived identity as a writer, were obtained. In doing so, I was able to gain an initial understanding of each participant as an academic writer at the starting point of their doctoral studies and the social, cultural, and individual factors that have played a part in the writer's prior academic writing history. The

information provided in the *Participants* section earlier in this chapter were obtained from the initial interviews. Collecting such data is important for discerning the writers' development before and after the first semester of writing in a doctoral program.

Second, as the semester continued, doctoral course assignments representing several academic genres (e.g., discussion post, literature review, research proposal) shared by all participants were selected as the focal writing tasks for data collection. The expectation was that examining shared written assignments among the participants would yield comparable data regarding the writers' text production.

Once the focal written assignments were chosen, observation field notes, interview data, audio diaries, and writing samples were collected to track participants' text production, composing process, and writing development with respect to the selected assignments in relation to possible social, cultural and contextual factors,

Finally, at the end of each semester, a round of follow-up interviews was conducted again with each participant asking them to reflect on their overall writing experiences and development throughout the semester. The data collection followed the same procedure in both semesters.

Altogether, data collected through audio diaries, observations and writing samples were primarily used to understand each participant's text production and composing process in completing the written assignment (Research questions 1.1 and 1.2), whereas interview data (both initial and follow-up) were primarily used to examine the social, cultural, and contextual factors that influenced the participant's writing process and development (Research question 1.3). The comparison of all the data collected would add to the understanding of each writer' development trajectory during the first semester of doctoral studies, as well as ensure quality

comparison and contrast between the L1 and L2 participants' academic writing (the main research question).

As such, the combination of multiple data sources in this study facilitated reaching a holistic understanding of the phenomenon being studied. Meanwhile, it provides the opportunity for me as a researcher to triangulate the data collected and enhance data credibility (Patton, 1990; Yin, 2003). The following sections illustrate detailed methodological considerations and instruments used for each of the methods used in the study.

Observations

Observational data were collected systematically to gain a sense of the participants' writing habits and composing process. Observation is a key tool in qualitative data collection that allows an observer to use the five senses to note a phenomenon in the field setting (Angrosino, 2007).

For this study, observations of the participants' writing sessions were carried out once per selected assignment. In general, approximately three observations were conducted with each participant in a semester; each lasting for 30 to 40 minutes. The location and time of the observations were based on the participants' preference. It was emphasized to the participants that the purpose of the observations was to see how they compose in their most natural mode of working. Participants chose a time and location that they would normally work on their academic writing tasks and were asked to write as they normally would for the observations.

As I observed, I allowed myself to change my role from that of an outsider (i.e., observer as participant; Bernard, 2011), watching and taking field notes from a distance without direct involvement with my participants and their writing process, to that of an insider (i.e., Participant

as observer; Bogdewic, 1999) who may be partially engaged with my participants as they compose. For instance, sometimes the participant under observation was frantically trying to finish the course assignments under time pressure to meet a deadline, so the participant was totally engaged in the writing process in a very focused manner. In such a scenario, I tended to observe from a distance and took field notes quietly. There were also situations when my participants got stuck in their writing and would turn to me to ask for suggestions and/or feedback, in which case I would start participating in their writing which helped me gain an insider view and subjective data. Such role switch as needed is a well-documented practice in ethnographic field studies (Bernard, 2011) and is considered a beneficial strategy (Creswell & Poth, 2018).

Using a standard observational protocol (see Appendix A), observations of the participants' writing sessions were carried out once per selected assignment. The observation protocol is headed by the date, place, time of observation (Angrosino, 2007) and includes space to record the physical setting, particular events and activities, and my own reflections as a researcher (Bogdan & Biklen, 2006). Post-observation informal interviews were conducted and audio-recorded for member checking purposes. After each observation, the observation notes were re-rewritten into narrative description in a timely manner with thick and rich description of the people and events under observation (Emerson, Fretz, & Shaw, 2011). The observational data were used to provide triangulation in answering research questions 1.1 and 1.2.

Audio Diaries

To gain supplementary data on the writer's actual composing process, the audio diary, a relatively under-utilized method (Williamson et. al., 2015), was employed in addition to the

traditional observational approach.

The rationale behind choosing this method is that, different from a timed writing format where one writes an essay on a given topic in one sitting within a limited time, the composing process of doctoral-level academic writing can take a considerable amount of time and multiple sessions to complete. This very nature of doctoral-level academic writing therefore poses challenges for data collection. For example, simultaneously observing the participants working at their individual timeline at different physical locations seems not only rather implausible, but also limited in the capacity to capture realistic composing processes that doctoral students go through in a naturalistic setting. The audio diary method allowed me to collect more data than I could by observation and allowed the data to be collected in the participants' natural environment.

Moreover, while being continuous and recursive, the process of completing a writing task can also be a personal and emotional process. Using the audio dairy method also provided an entry into capturing practices and perspectives that might have been challenging for participants to articulate or intimidating to discuss in a face-to-face context.

The present study asked the participants to keep audio diaries using their smartphones each time they worked on the assignment from the beginning to the completion of the task to record their composing process, work progress, and strategy use. In doing so, the audio diary method allowed intimate access to individual participants' academic writing experience without the physical presence of an observer, and the data collection was participant-centered and more automatic. Although identity development was not the focus of this study, these personal and emotional data are important to collect because they influence the writing process. The data

yielded from the audio diary method is therefore considered to be a powerful addition to the periodic observation sessions to help me as the researcher make better sense of the participants' composing process (Research Question 2).

To ensure the quality of audio diary data, an audio diary recording training session as well as a phone diary guide for optional use (see Appendix B) were provided to all participants in advance. Feedback were provided to the participants during the data collection process throughout the study. I also sent out emails weekly to remind the participants to record and/or send audio diaries regularly.

Writing Samples

After each focal assignment has been completed by the participants, the final drafts produced by the participants were collected and examined as samples of their writing product (Research Question 1.1). I emailed the participants after the due date of the focal assignment and requested their final draft to be sent as an email attachment. Any relevant information related to the written product such as the instructions and rubrics for the assignment, submission time, and word count were collected. In addition, if possible, an intermediate draft as well as any input or feedback that were provided to the participants by peers or faculty were also collected for document analysis. The assignments and feedback are important to understand both the participants' composing process (Research Question 1.2), and the social, cultural, and contextual features of the writing environment (Research Question 1.3).

In the first semester of data collection (Fall 2018), the writing samples collected included academic genres such as discussion posts, literature reviews, and research proposals. In the second semester (Spring 2019), the writing samples collected included an annotated

bibliography, research papers, and book reviews.

Interviews

The qualitative research interview "attempts to understand the world from the subjects' point of view, to unfold the meaning of their experience, to uncover their live world" (Brinkmann & Kvale, 2015, p. 3). In this study, two major rounds of face-to-face interviews were conducted with each participant per semester. The interviews were conducted at mutually agreed time slots at a distraction-free location (i.e., a conference room). The interviews typically lasted 40-60 minutes and were audio recorded.

The initial round of interviews was conducted soon after each participant was recruited at the beginning of their first semester to establish the writer profile (see Figure 1). A semistructured interview protocol (Brinkmann & Kvale, 2015) was used to collect demographic data, along with data regarding the writer's past/current academic writing practices, perception of doctoral-level academic writing, and perception of self as a writer at the beginning of the first semester of doctoral studies (see Appendix C).

At the end of the first semester, a second round of one-on-one semi-structured interviews were conducted with each of the participants investigating their writing experience and development with regard to relevant social, cultural, and contextual factors that were impacting their experience throughout the semester (Research Question 1.3). Again, a semi-structured interview protocol (see Appendix D) was used to guide the data collection process. Other data collected throughout the semester by following the participants (i.e., written documents, observation field notes, themes emerged from participants' audio diaries) were also used to elicit participants' reflections on their writing experience and development. For instance, participants'

self-reported writing difficulties in the first semester were used in the second-semester interview so that the participants could report whether certain difficulties persisted or were eliminated as their writing skills improved.

Ethical Considerations

Before entering a research site, it is vital for qualitative researchers to carefully consider the ethical implications (Creswell & Poth, 2018). In this study to present minimum risk to the participants, I followed the required ethics approval process by the research site and developed a plan for handling ethical dilemmas that may emerge. My guiding principles in conducting ethical research include respect for persons (privacy and consent), concern for welfare (minimizing harm and augment reciprocity), and justice (equitable treatment and enhanced inclusivity) (Creswell & Poth, 2018).

Prior to conducting the study, approval was gained from the University's Institutional Review Board. The participants in the study do not include any vulnerable populations such as children, pregnant women, or prisoners. During the consent procedure, I took time with each participant to help them understand the purpose of the study, their engagement with the study if they agree to participate, the potential risks, as well as the steps I would take to ensure their privacy and confidentiality. Participants were assured that participation is voluntary, and they may withdraw from the study at any time.

While collecting and analyzing data, I was mindful about respecting the participants' daily schedule and availability to ensure that the data collection posed minimal disruptions to their busy lives as doctoral students. Because of the small number of participants and the longitudinal nature of the study design, I focused on building good rapport with the participants.

Even though there was no compensation, payment, or extra credit for taking part in this study, I have attended to opportunities for reciprocity where possible. For instance, I took the participants to have coffee or lunch after observation sessions or interview sessions, gave thank-you notes and token gifts during the winter holiday season, and offered advice as a senior doctoral student when the participants asked for help with choosing doctoral courses and/or finding channels for academic presentations and publications.

In addition, I attached importance to protecting the privacy of the participants and to maintaining the confidentiality of the identifiable data at each stage of the research. This is particularly important as the study design involves (a) interviewing participants on personal and possibly emotional topics such as who they are as academic writers, (b) observing and recording their composing process of doctoral written assignments, and (c) collecting needed identifiable information and coursework assignments. Participants were treated as autonomous agents able to exercise their autonomy to the fullest extent possible, including the right to privacy and the right to have private information remain confidential. When reporting data, pseudonyms were used so that the participants would not be identifiable.

All data collected including observation field notes, audio-recorded interviews, audio diaries, and writing samples have been kept in a locked filing cabinet or in a password protected file on a password protected computer. All audio recordings from the interviews and audio diaries were destroyed after transcription. The transcriptions were kept on a password-encrypted document, which only I had the key and access to. All identifiable data were destroyed after data was transcribed and identifiers were removed.

Data Management

Appropriate qualitative data storage and management are not only a crucial ethical consideration for the protection of the participants, but a key procedure to ensure effective data analysis considering that qualitative researchers often need to handle a large amount of data.

		Participants	
	Kelly	Alex	Chris
Initial Interviews	Length: 61 mins Location: Conference Room	Length: 49 minutes Location: Conference Room	Length: 55 minutes Location: a quiet student lounge
Audio Diaries	4 Audio Dairies; Length: 30 minutes; each about 7.5 minutes	10 Audio Dairies; Length: 46 minutes; each about 4.5	3 Audio Dairies; Length: 15 minutes; each about 5 minutes
Observations	4 Observations; A total of 1.5 hours of observation time; Locations included a graduate student lab, participant's home, and library.	2 Observations; A total of 40 minutes of observation time; Locations included participant's home and GTA office.	2 Observations; A total of 1.5 hours of observation time; Location: a graduate student lab.
Writing Samples	2 discussion post samples; 1 Literature Review sample; 1 research proposal sample; screenshots of email communication with course instructor (outline and feedback)	2 discussion post samples; 1 Literature Review sample; 1 research proposal sample; 1 word bank by the participants	2 discussion post samples; 1 Literature Review sample; 1 research proposal sample; 1 essay written by the participant prior to the doctoral program
End-of- Semester Interviews	Length: 01:26:01 Location: Conference Room	Length: 01:15:51 Location: Conference Room	Length: 01:23:54 Location: Conference Room

Table 4 A Matrix of Collected Data in Fall 2018

Table 4 reflects the data collected from each participant in the fall semester of 2018 as a demonstration of the sheer volume of data collected in this longitudinal qualitative study. I followed the principles recommended by Creswell and Poth (2018) and Davidson (1996) to manage the qualitative data collected, including (a) always create backup copies of computer files; (b) develop a master list of types of information gathered; (c) develop a data collection matrix as a visual means of locating and identifying information; and (d) protect the anonymity of participants by masking their names in the data.

Data Analysis and Trustworthiness

In the present study, data analysis and data collection took place recursively (Merriam, 1998). Data analysis began from the moment the data was first collected and continued after data collection was completed. In general, the data analysis involved interconnected steps from transcribing and organizing the data, conducting a preliminary analysis of the data by reading through the database, coding and organizing themes, representing the data, and forming an interpretation of them (Creswell & Poth, 2018).

Data Transcription

Data transcription took place immediately after data was collected. As the written samples were electronic files (i.e., Microsoft Word files), no transcription was needed. Handwritten raw field notes of the observations were typed and transcribed. As for the audiorecorded interview data and the audio diaries, rather than verbatim transcription, the descriptive transcription method was used following the seven steps recommended by Halcomb and Davidson (2006). These seven steps are: (1) audiotaping of interview and concurrent note taking;

(2) reflective journalizing immediately after an interview; (3) listening to audiotape and amending/revising field notes and observations; (4) selective verbatim transcriptions; (5) preliminary content analysis; (6) secondary content analysis, and (7) thematic review. In this process, I transcribed the data and conducted the preliminary analysis, and a reviewer periodically sampled the transcribed data along with the themes developed to ensure the quality of the descriptive data transcription.

Data Analyses

To ensure a quality data analysis, I employed qualitative data analysis strategies advanced by selected qualitative researchers (Madison, 2011; Huberman & Miles, 1994; Wolcott, 1994) including

- taking notes (i.e., descriptive note, reflective passages, and short summaries) while reading transcribed data
- identifying themes and categories,
- situating themes and categories in the literature when interpreting the data,
- displaying and reporting data using graphs, tables, figures, case comparisons, etc.

With the research questions in mind, the accumulating transcribed observation, interview, and audio diary data were reviewed constantly with the purpose of identifying sensitizing concepts and emerging themes. Significant statements were extracted and were organized into clusters of themes. As such, the data analysis primarily relied on an inductive approach where I extracted meanings from multiple sources of data in producing findings that were holistic and true to the participant's interpretations of their own experiences. The data analysis was ongoing until the saturation of the data was achieved for the purpose of illustrating each writer as well as the similarities and differences between them and them only. Based on the emergent themes and categorizations, the reporting of the findings was refined until the organization were able to be applied to cover all participants' data systematically.

To arrive at the answers for the main research question, I first examined into the three sub-research questions which focused on text production, composing process, and relating sociocultural factors, respectively. Through these three analytical lenses, I was able to examine each individual participant and arrive at a comprehensive understanding of their first-year academic writing practices and writer development. The meanings and themes generated from multiple data sources from one participant over time were converged in the analysis process rather than handled individually, so that the various strands of data can be braided together to promote a greater understanding of the case (Baxter & Jack, 2008). Informed by the answers to the three sub-research questions, where comparable data emerges, I then compared and contrasted L1 and L2 doctoral students' academic writing development in context to answer the main research question. In this sense, the data analyses aimed at providing rich, thick descriptions of each case (Research Questions 1.1, 1.2, and 1.3) as well as the observed similarities and differences across L1 and L2 cases (Main Research Question).

Trustworthiness of the Research

The trustworthiness of this study is ensured by prolonged engagement with and persistent observation of the participants, as well as triangulation provided by the multiple types of data collected. As I wrote, I intended to provide rich, thick descriptions of the participants and was mindful about addressing how my positionality affected the way I interpreted their stories.

During the entire research process, I kept a research journal as an audit trail (Creswell & Poth, 2018) to provide documented evidence of the sequence of activities or procedures that have affected the data collection and analyses at any point in time.

Furthermore, I engaged in member checking with the participants at different stages throughout the study. Informal member checks constantly took place through online communication and phone conversations. Member checks were also performed after each observation and audio recorded. Formal member checking was conducted at the end-of-thesemester interview. Transcribed data and the researcher's research journals were accessible to the participants if requested. Participants were encouraged to make comments and elaborate on certain points of their academic writing and writer development at any stage of the study. Thus, the participants were frequently updated of the amount of information they shared, as well as how their data was used, interpreted, and reported.

Accounts of Reflexivity: The Insider/Outsider Role of the Researcher

It is crucial to retain a high degree of reflexivity and awareness about my researcher role and personal subjectivity throughout my research practice and analytic processes.

One obvious aspect of my positionality is the fact that I am an *insider* researcher. As previously mentioned in Chapter One, I am a fourth-year doctoral student of the same TESOL program that my participants are in. Being an insider of the program enabled me to understand the research setting and the participants with greater depth and breadth, which for an outsider researcher may not be as easily achievable. As an insider of the program, I have (a) a deep understanding of the culture of the program and discipline, and (b) a clear perspective on the common academic writing practices in the program, all of which likely benefited me as the

researcher in conducting the study, and consequently, (c) a good base to build rapport with the participants.

Moreover, I viewed my positionality as an "insider" by looking at "others" (participants) similar to myself. It is my own personal experience as an international doctoral student that led me to my passion in researching academic writing and seeking answers to the question of how doctoral students, domestic or international, native or nonnative, grow as writers in a doctoral program.

On the other hand, being an insider is not without its potential problems. I had to be conscious of myself as an intentional agent who researches and writes about participants' lived experiences from an insider's point of view. Questions about my objectivity, reflexivity, and authenticity with respect to this research project could be raised because perhaps I knew too much or was too close to the program and may be too similar to those being studied.

Finally, I started pursuing my dissertation topic with certain propositions, which come from the academic writing literature and theories I reviewed, my personal experience as an international student and a L2 writer, and my professional experience as a teacher of academic writing which I had shared in previous chapters. However, I anticipated that my original propositions or assumptions may be challenged by what I learn from my participants and the empirical data as this study progressed. I constantly reflected on what findings corroborated or contradicted my beliefs and what possible biases I might hold as I interpreted the data I collected.

Summary

Chapter Three provided information on the methodology of this study. Methodological considerations and procedures relating to the research sites, sampling strategies, data collection methods and instruments, as well as data analysis and trustworthiness features have been discussed. The next chapter reveals the results yielded from the data analyses. The results are organized according to the research questions.

CHAPTER FOUR: FINDINGS

Introduction

The present study aimed at understanding academic writing and writing development at the doctoral level and the possible similarities and differences between L1 and L2 doctoral writers in an applied field of social science. This chapter offers answers to the main research question and the three sub-research questions of this study, which are as follows:

In what ways do L1 and L2 doctoral academic writers' developmental trajectories overlap with or diverge from each other during the first year of the doctoral program in an applied social science field?

- 1.1 How does academic writing by L1 and L2 doctoral students develop in terms of text production during the first year of their doctoral program?
- 1.2 How does academic writing by L1 and L2 doctoral students develop in terms of composing process during the first year of their doctoral program?
- 1.3 How do social, cultural, and contextual factors shape L1 and L2 doctoral writers' writing development?

To answer the research questions, the chapter first presents the findings for each subresearch question, delineating each participant's writing development in terms of text production, composing process, and the factors that shaped the development. Then, the chapter reveals and discusses similarities and differences among the participants' developmental trajectories and answers the main research question through cross-case comparisons.

Research Question 1.1 Findings: Text Production

This section presents findings on the three participants' development in terms of text production during the first year of the doctoral program. It was found that the participants' text production in the first year was largely shaped by the type and requirements of the assignments as well as their prior writing history. Writing was found to be the main assessment tool in the doctoral program, and the participants produced the most writing in TESOL specialization courses. Even though the three participants each faced unique challenges in text production, it was concluded that the development of participants' text production took place in conjunction with a process of finding their own identity, voices, and work/study/life balance as doctoral students in meeting the academic standard co-constructed by the doctoral program, the faculty, as well as the other doctoral students as peers.

The findings summarized above were generated through investigating the quantity and quality of the participants' submitted assignments in the first two semesters of the doctoral program (i.e., document analyses) as well as interview data of the participants self-reporting on their finished writing product and growth. To contextualize the findings, an overview of what the participants were required to produce as first-year doctoral students is provided as follows. As explained in Chapter Three, during the two semesters of data collection, all three participants (L2 writers Kelly and Alex, L1 writer Chris) followed the same course sequence. Each participant took three courses per semester (i.e., 9 credit hours). Kelly and Chris took the same six courses over the two semesters, whereas Alex shared five out of the six courses (see Table 3). For the this study, the data analyses focused on the five shared courses and their written assignments and did not extend to cover the cognate course assignments.

Specifically, the results were organized in the order of:

- (a) overview of the participant's text production
- (b) evidence of the participant's writing products in meeting the assignment requirements
- (c) the participant's text production development over time

Overall, all three participants shared in their interviews that they felt the writing load as required by the three courses in the first semester (Fall 2018) was heavier than that of the second semester (Spring 2019). This is an interesting finding because the participants' perception was actually false based on the word count of their writing products. The subsequent sections explain each participant's text production in more details.

L2 Writer Kelly's Case

Overview of Kelly's Text Production

Table 5 illustrates the types and the total amount of academic texts produced by Kelly during the first two semesters of her doctoral studies. The word counts included in the table were based on Kelly's final drafts submitted to fulfill the course requirements.

As can be seen, Kelly produced a total of 38,095 words for the doctoral assignments, with 17,589 in the first semester and 20,506 words in the second semester. In both semesters, Kelly produced more words for the TESOL specialization courses than in other types of courses.

Semester	Course Name	Course Type	Written Assignment Type	Submission On time	Word Count
Fall (First semester	Issues and Research in Education	Core (Methodology)	Research Proposal	Yes	3149
; 9 credit hours)	Statistics for Educational Data	Core (Statistics)	Discussion Posts; Quantitative Research Paper	Yes	3748 (co-author)
	Diachronic Analysis of Second Language	Specialization	6 Discussion Posts and Peer Responses;	Yes	6625
	Acquisition Processes		Literature Review	Yes	4067
			First sei	mester subtotal	17589
Spring (Second semester ; 9 credit	Quantitative Foundations of Educational Research	Core (Statistics)	Quantitative Research Paper	Yes	3820 (co-author)
hours)	Second Language Vocabulary	Specialization	Annotated Bibliography	Yes	13142
	Acquisition		Book Review Article Discussions	Yes Yes	810 1448
	Multimedia for educational	Cognate	Video Paper	Yes	1286
	training		Second ser	mester subtotal	20506

Table 5 Overview of Kelly's Text Production

Kelly's Writing Products as Measured by Assignment Requirements

Through examining Kelly's writing samples, Kelly's academic writing products met the assignment requirements set by different faculty members in various courses. In terms of meeting deadlines, all her written products were submitted on time or before the due dates. In

terms of fulfilling the required word count or page limit, Kelly always wrote more than the minimum word requirement but within the maximum of page limit if specified. Kelly also paid attention to other evaluating criteria such as the required number of sources or references, the preferred organization, as well as made sure her writing products went beyond the requirements. When asked about the grades and feedback given by the faculty members, Kelly shared that her assignments consistently received A level grades and complimentary comments. To gain a sense of Kelly's writing, a discussion post submitted by Kelly can be found in the appendix (see Appendix E).

Text Production Development Over Time

Reflecting on her growth as an academic writer after one year of doctoral studies, Kelly mentioned several developments regarding text production.

One obvious development is the ability to produce various types and lengths of academic texts as required by the doctoral assignments. It should be noted that, as a TESOL professor in Indonesia, Kelly came into the program with prior writing and research experience. She was also reasonably familiar with typical academic genres due to the training she received in her master's program in an Australian university. However, because there was almost a 9-year gap between completing her master's and starting the doctoral program, she had to learn, re-learn and/or refamiliarize herself with the style and requirements of different types of genres. For instance, she was familiar with research proposal writing coming into the program and therefore was confident producing a 3149-words-long research prospectus in her very first research methodology course. In the meantime, however, she felt nervous composing a 500-word discussion post because this type of writing was absent in her prior writing experience. After her first-year experience, she

felt she became a more well-rounded and experienced academic writer because she learned to produce different types of texts that meet doctoral level requirements.

Similarly, the frequency and the sheer volume of writing she had to produce as a doctoral student was a shocking challenge and became yet another major area of growth for her. Before she came to the U.S. for doctoral studies, she had to read and write academic texts in English at work, but never so intensively. After the first year, she reported an improvement in her writing productivity and efficiency noting that "The more you do it, the more it is automatic."

More importantly, as her understanding on academic writing deepened, Kelly started to incorporate a more argumentative style in her writing. As she expressed in the interview, "The way I argue has improved. I improved on how to criticize the content of journal articles. I am more a critic now." She attributed her improvement mainly to extensive reading of academic texts. "Before my doctoral studies, I didn't have to read much, but now I've read so many types of articles, publications and books from so many different genres with different point of views. That really changed the way I argue." She also mentioned changing her writing style to be more argumentative was not something that was explicitly taught through doctoral courses or required by faculty members but was more her own realization and reflection of the nature of good academic writing. By reading extensively, she gathered information on a subject matter from various angles and learned how other researchers present arguments and counterarguments. Her changed perception that a good piece of academic writing should display subject expertise through critiquing and synthesizing research on a given topic pushed her to grow to be a more argumentative writer.

Finally, an area she mentioned that did not undergo significant change was language and

mechanics-related aspects of writing. "I didn't change much when it comes to grammar and vocabulary." Similarly, she did not think her familiarity with APA formatting was improved through doctoral studies. "I am familiar. I don't have to always go back to the APA Manual." This is likely because as a TESOL professor in Indonesia, she had academic writing experience publishing journal articles following the APA style.

L2 Writer Alex's Case

Overview of Alex's Text Production

Alex is another L2 writer participating in this study. The types and the total amount of writing produced by Alex in her first year is illustrated in Table 6. As with Table 5, the word counts included in the table were based on Alex's final drafts submitted to fulfill the course requirements.

Over the first two semesters, Alex produced a total of 49,368 words for the doctoral assignments, with 14,137 words written in the first semester and 35,231 in the second semester. Similar to Kelly, Alex produced a higher number of words for the TESOL specialization courses compared with other types of courses in both semesters.

Semester	Course Name	Course Type	Written Assignment Type	Submission On time	Word Count
Fall (First semester	Issues and Research in Education	Core (Methodology)	Research Proposal	Yes	2730
; 9 credit hours)	Statistics for Educational Data	Core (Statistics)	Discussion Posts; Quantitative Research Paper	Yes	3705 (co-author)
	Diachronic Analysis of Second Language	Specialization	6 Discussion Posts and Peer Responses;	Yes	4045
	Acquisition Processes		Literature Review	Yes	3657
			First se	mester subtotal	14137
Spring (Second semester ; 9 credit	Quantitative Foundations of Educational Research	Core (Statistics)	Quantitative Research Paper	Yes	3041 (co-author)
hours)	Second Language Vocabulary	Specialization	Annotated Bibliography	Yes	19986
	Acquisition		Book Review	Yes	1805
			Article Discussions	Yes	782
	Exploring Global Educational Issues in	Cognate	Focus Questions Part 1	Yes	2805
	International Contexts		Focus Questions Part 2	Yes	3867
			Focus Questions Part 3	Yes	2945
			Second semester subtotal		35231
			Tota	l text produced	49368

Table 6 Overview of Alex's Text Production

Alex's Writing Products as Measured by Assignment Requirements

Making sure her written products met the requirements set by her professors was important to Alex. In terms of meeting deadlines, her assignments were submitted usually a day before the due dates. She also noticed that in assignments where she could view other classmates' work and submissions (such as an online discussion), she was usually one of the first students who would post or submit.

As for fulfilling the required word count or page limit, Alex always wrote more than the minimum word requirement but within the maximum page limit if specified. However, she explained that she was not worried about the word limit but whether she contributed substantially to the discussions or assignments through writing. Especially when she felt personally connected with the topic or subject matter, she did not mind going above and beyond the assignment requirements (e.g. writing more words, including more sources, etc.) until she felt her points were fully delivered through writing. A writing sample by Alex can be found in the appendix (see Appendix E).

When asked by the researcher the grades and feedback given by the faculty members, Alex mentioned generally receiving positive feedback but sometimes "harsh" criticisms as well. She mentioned that some professors may have graded based on effort because they gave A grades and comments saying "excellent work" when she believed the depth and/or the quality of her work was inadequate. Other professors, on the other hand, did not have problems giving harsh comments when they saw fault in her work. She experienced ups and downs emotionally as she received professors' feedback especially in the first semester of her doctoral study. She felt the first year of her doctorate was spent on a personal journey exploring and making sense of

what was expected of her as a doctoral student by the different faculty members, the program, doctoral education in general, and herself. The evaluation of whether she fulfilled the expectations successfully was, not surprisingly, largely determined through her writing. Text Production Development Over Time

Over time, there were observable changes and developments in Alex's written texts. In Alex's words, entering the doctoral program was her stepping into the "unknown" (see more in research question 1.3). Therefore, text production was a major challenge and learning curve for Alex as a first-year doctoral student.

Alex spent the entire first year exploring what was expected of her as a writer in the doctoral program, understanding what good academic writing, and particularly, research writing, is, as well as finding her own style and voice to construct her image as an academic writer. Even though she wrote academically in her master's program in education, the types of writing were more practically- and pedagogically- oriented, such as education policies or lesson plans. The research-oriented curriculum in the doctoral program challenged her to enter the new world of research writing as a complete beginner. The assignment types, from the lower-stake ones like discussion posts that require students to critique journal articles, to the major assignments such as literature review and research proposal, were all new genres to her. She found herself lacking basic knowledge in the specific field of TESOL and in the general arena of research, while being under pressure to produce written work to be presented to experts, senior researchers, and peers in the field. As she stepped into the "unknown", her writing experience was about "faking it" (till you make it) ---- figuring out (a) how to produce texts that did not make her look like a beginner but a member of her academic community and (b) what to write about when she still lacked

understanding on the subject matter. Of course, she also had to accomplish the foregoing intensively for every assignment, every course, and every professor before the deadline. Therefore, simply the successful completion of all the doctoral assignments marked a major development for Alex as an academic writer.

Early in the program, Alex's strategy for "faking" academic writing was through changing her language use. For instance, she was intentional about resembling the writing style of the assigned readings. She made sure to use academic vocabulary, jargon, and sentence structures collected from textbooks and published articles. The following quote from an audio diary captured her strategy and thinking (see also in Main Characteristics of Alex's Composing Process).

Usually I have a separate Word doc, a word bank, with phrases and words I kinda think they would sound very nice in my... you know... just fancy and technical terms just like that ... and the words that I like. There is no better place in academic writing to portray that I know what I know even if I am not. You know, throw those words and oh.. that sound good.

This type of text production did help Alex meet the assignment requirements. However, in the meantime, Alex felt the texts she produced, even the types of academic texts she read, were "meaningless". Alex is a practitioner at heart. To her, what she perceived as meaningful learning and writing was "not the theories and literature, not the APA formatting and the number of references, but something that has practical significance and real-world impact to language educators and learners."

Alex continued to adjust her text production as she searched for meaning in the literacy

practices in her doctoral program. On the one hand, she continued to engage in intensive text production, paying attention to the assignment requirements and learning more about academic language and writing conventions. On the other hand, Alex was observed to have incorporated more personal voice in her writing by, for example, discussing her experience as a language learner and professional expertise as a teacher. When the assignments allowed students to choose the topic to write about, she pursued the topics that she felt connected to personally and professionally and the ones that were more practical- and pedagogical-oriented. In such cases, her motivation to write was stronger, and the quality of text production was not solely based on the rubric and requirements, but on whether through the piece of writing she felt able to contribute to the academic conversation or discussion and deliver something meaningful, original and constructive.

At the end of the first year, Alex gradually gained more balance and confidence in producing academic texts as a doctoral student. She became more familiar with the text types, clearer about the program and the professors' expectations and preferences. What used to be "unknown" at the beginning of the program has become the "normal and ordinary" in her doctoral-student life. Looking back to her first-year writing experience, Alex also had a revised perception on what academic writing at the doctoral level truly is about. "It really was not about the big words and fancy academic phrases. They don't equal good writing."

L1 Writer Chris's Case

Overview of Chris's Text Production

Chris is the sole native-speaking writer in this study. To gain an overview of Chris's text

production, the types and the total amount of writing produced is presented in Table 7. Over the first two semesters, Chris produced a total of 44559 words for the doctoral assignments, with 15,021 words written in the first semester and 29538 words in the second semester. Chris produced considerably more words for the TESOL specialization courses compared with other courses in both semesters.

Semester	Course Name	Course Type	Written	Submissio	Word
			Assignment Type	n On time	Count
Fall	Issues and Research	Core	Research Proposal	Yes	2479
(First	in Education	(Methodology)			
semester	Statistics for	Core	Discussion Posts;	Yes	3748
;9 credit	Educational Data	(Statistics)	Quantitative		(co-author)
hours)			Research Paper		
	Diachronic Analysis	Specialization	6 Discussion Posts	Yes	6315
	of Second Language	-	and Peer		
	Acquisition		Responses;		
	Processes		Literature Review	Yes	2479
			First semes	ster subtotal	15021
Spring	Quantitative	Core	Quantitative	Yes	3820
(Second	Foundations of	(Statistics)	Research Paper		(co-author)
semester	Educational		_		
; 9 credit	Research				
hours)	Second Language	Specialization	Annotated	Yes	22243
	Vocabulary		Bibliography		
	Acquisition		Book Review	Yes	1445
	-		Article	Yes	602
			Discussions		
	Multimedia for	Cognate	Video Paper	Yes	1428
	educational training	C	*		
	0		Second semester subtotal		29538
				xt produced	44559

Table 7 Overview of Chris's Text Production

Chris's Writing Products as Measured by Assignment Requirements

In general, Chris's academic writing products met the assignment requirements set by

different faculty members in various courses. To see an example of Chris's writing, please refer to Appendix E.

In terms of meeting deadlines, she often had to work on her assignments until the last minute. Sometimes the assignments were written on the day before or the day of. Nevertheless, usually her written products were submitted on time or right before the due dates. In case she needed an extension, she would notify the professors in advance to obtain approval. Mostly, Chris received positive feedback and grades on her assignments. She made sure that her work met the specific requirements of each assignment. However, she also mentioned as much as she had the willingness to go above what was required, sometimes she would just be sure to meet, rather than exceed, the requirements of the particular assignment due to fatigue caused by an overloaded study/work schedule. Still, she attached importance to the comments and feedback from the professors and viewed them as the key to improve her abilities and do better on subsequent assignments. Reflecting on her first-year text production overall, Chris mentioned:

I feel that it was hard to meet requirements then, but only because I felt overloaded with assignments, work, etc. and needed to create a better balance so that I could get work done more efficiently. I am happy with what I was able to produce, however, I do feel that there was always room for improvement.

Text Production Development Over Time

In the final interview, Chris was asked to review some of the assignments she produced in the first year to comment on her own text production as well as report any changes and development she noticed. Somewhat surprisingly, Chris communicated an overall negative selfperception: "The first year, I felt my writing wasn't that great and that I needed to create more

time for me to focus and produce better quality work." Instead of reporting development or growth, she explained how her writing could have been more focused, cohesive, and concise. She was worried that "the professors would notice a huge problem with the quality of work I was turning in", indicating a lack of confidence in the texts she produced. Even though she emphasized that she had tried her hardest for every assignment, she knew "deep down, that [she] was better." It seems that, for Chris, her overall quality of text production did not improve in the first year and sometimes even fell short as compared to what she believe she could and should produce as a writer.

This finding can be further illustrated. On the one hand, Chris seemed to have established confidence in her academic writing skills. In the initial interview, Chris mentioned that writing had been a skill that "came naturally" to her. Moreover, she was familiar with the typical writing activities and genres required by higher education in the U.S. because of the four degrees she had previously obtained in the American context as well as her experience helping other people with essay writing and editing in various disciplines (see Writer Profile in Chapter Three). Chris recognized her strengths as a writer: "I am good at grammar... I can put a good paper together from anything that you give me... Formatting... definitely APA I can look at it and tell you just like that what goes in and what doesn't. That's a strength." As such, the difficulty in her text production over the first year was not related to writing skills per se, but rather in finding the time and focus to build her content knowledge and write.

"I have two jobs and have to keep up with the study and the GTA. The first-year writing experience hasn't been fun. It has been stressful and overwhelming." Indeed, in the struggle to fulfill all her responsibilities, Chris's text production was not a demonstration of the best writing

she could produce as a writer, but a demonstration of the best writing she could produce at a given time and circumstance. As a result, the quality of Chris's written texts varied over time. Especially when she had very limited time to produce an assignment, she had to consciously lower the standard for her text production. This way of operating led her to explore the baseline of quality control so that her work would qualify as "doctoral-level work" and satisfy the faculty's requirements and expectations at the minimum.

Chris observed that the intensity and extensiveness of doctoral-level writing was much higher than the previous graduate programs she had been in. She used one of the "lower-stake assignments" - discussion post - as an example. In one course, students were asked to submit web postings discussing two assigned class readings weekly. The requirement of writing was merely 250 words minimum for each article plus replying to at least two discussions posted by peers (see Appendix E for examples of discussion post, I mean the requirement is 250 words each article, but everybody went way over... They were like triple the size...so I was like, this is not a discussion post, this is a paper." Seeing both the professor's requirements and the actual work produced by her peers that exceeded the requirements, Chris was caught in the quandary of choosing the proper standard for her text production.

At first, I tried to match everybody's because I didn't want to seem like I didn't want to do the work, or I did not read for that week. But after a while, I started sticking within the professor's requirements and only putting in the information he asked for... I had to stop cuz it was taking too long and I didn't have the time.

In this case, even when facing peer pressure, she had to settle for the lower standard due to time

constraints. What gave her the confirmation that her work was still accepted as having satisfactory quality was the fact that she still received full marks for her submission as everybody else's. As can be seen, Chris adjusted her text production based on the explicit requirements of assignments, the peer pressure of matching what other students were doing, and the score and feedback from the professor as an indication of whether she did enough.

In summary, facing the intensive and extensive literacy practices required in her doctoral program, Chris experienced difficulties in text production over the first year. The difficulty was not caused by the lack of academic writing skills or experience, but rather due to time constrains she experienced with an overloaded study/work schedule. Her prior experience and strengths as a writer enabled her to be able to meet the deadlines and requirements in general; however, she self-reported that she was not able to consistently produce high-quality work which she knew she was capable of. While acknowledging she tried her hardest and did her best given the circumstances, Chris looked forward to improving the quality of her written work by trying "to balance school and work during the second year a little more, to be able to write better and focus more as well." She concluded that "I just always knew that if my circumstances were better, and I was more stable and focused, my work would have been better."

Summary of Research Question 1.1 Findings

Research question 1.1 was an investigation into how academic writing by L1 and L2 doctoral students develops in terms of text production during the first year of their doctoral program. To answer this question, I as the researcher examined each participant's (a) total text production in the first year (the quantity); (b) the writing products as measured by assignment requirements (the quality); (c) the writing products as measured by academic writing

conventions; and finally and most importantly, (d) text production development over time (participants' self-report).

The findings revealed the participants were able to meet the requirements of the first-year doctoral courses and each produced a high volume of academic texts for six different types of assignments (i.e., discussion posts, an annotated bibliography, a book review, a research proposal, a literature review, and a research paper). It is clear that the participants' text production was largely shaped by the course type, assignment type, as well as the assignment rubric and requirements set by the faculty. For instance, the participants consistently generated a higher total of words for TESOL specialization courses as compared to the other research or methodology courses. In particular, the participants wrote 13142, 19986, and 22243 words, respectively, for the Annotated Bibliography assignment alone in the spring semester of 2019. The text production was also impacted by the participants' prior experience in writing. Even though all participants were capable writers, they were challenged by the intensive research writing at the doctoral level soon after they entered the program.

At the end of the first-year experience, the two L2 writers have shown and reported growth in various areas of text production including the ability to produce more academic texts with efficiency, the increasing familiarity and knowledge in coping with various text types, and the deepening understanding of what characterizes quality academic writing. The L1 writer, on the contrary, largely reported a negative perception of her written products. She indicated an intention to improve the quality of her written work through achieving a better study/work balance to allow time and focus on writing. The participants' text production in the first year happened in conjunction with a process of finding their own identity, voices, and life balance as doctoral students in matching the academic standard co-constructed by the doctoral program, the faculty's minimum requirements and preferred practices, as well as the other doctoral students as peers.

Research Question 1.2 Results: Composing Process

This section presents findings on the three participants' development in terms of composing process during the first year of the doctoral program. There were similarities and differences observed in the L1 and L2 participants' composing habits, typical composing process as well as composing activities, goal setting, and strategy use. Patterns and keywords have been identified to describe the significant characteristics of each participant's composing process. Shaped by the individual, contextual and sociocultural factors, participants have shown different levels of growth with respect to composing over the first year.

The findings for Research Question 1.2 was generated by analyzing transcribed observation field notes, audio diaries, and interviews. The triangulation of multiple data sources facilitated validation of data and enabled the researcher to capture different dimensions of participants' composing process. This section offers thick descriptions of each participant's composing process and its development over time, covering findings in the following aspects:

(a) the participant's composing habits (location, time and frequency, technology use;L1/L2 use);

(b) the participant's typical composing process as illustrated by a focal assignment;

(c) main characteristics of the participants' composing process;

(d) composing process development over time

L2 Writer Kelly's Case

Kelly's Composing Habits

Kelly's composing habits as a doctoral writer can be illustrated in terms of location, time and frequency, technology use, and L1/L2 use.

Location

Kelly mostly worked in two locations: at home and at a graduate student study in her college on campus.

Kelly would only come to campus to work on written assignments when she needed to meet with her classmates and/or professors for classes or appointments. On average, she would come to work on campus half a day per week. The graduate student study located in Kelly's college, a space dedicated for graduate students to gather, study, and collaborate, was Kelly's oncampus location to work. Like Kelly, the other two participants in the same doctoral cohort would also come to work at the same study. Thus, the graduate student study has been a shared workspace for all three participants in this study.



Figure 2 Graduate Student Study on campus.

In the first semester, Kelly's preferred location to work and indeed where she spent the most time writing was off campus at home, a location where she felt more "convenient, comfortable, and productive" (see Figure 3). However, since Kelly's family joined her in the second semester, it became a necessity for Kelly to work at home because she had to take care of her youngest child who was age 3 and was not placed in any childcare programs. Home was where she simultaneously performed her dual roles as both a mother and a Ph.D. student. She would work on her assignments while watching over and taking care of her three children.



Figure 3 Kelly's workspace at home.

It should be noted that both the locations Kelly worked at are not noise- or distractionfree. During the observation sessions at the graduate student study, there were other graduate students who would come in and out and have conversations as Kelly was writing. Following Kelly's family's arrival, her home became a household of five people with three young boys (Age 9, 6, and 3). It became normal for Kelly to work on her assignments while her children were making noises and demanding attention. At such instances, Kelly preferred to work on campus. Over time, Kelly mentioned that she has developed the ability to work and stay focused in a distracting environment.

Time and Frequency

In terms of time spent on writing, Kelly consistently demonstrated commitment to all her doctoral writing assignments. As soon as the written tasks were assigned, Kelly would start early and consistently work on the assignments every day until the due dates. In other words, she always ensured that she made use of the full range of time between the assigned date and the due date of a course assignment. Allowing enough time for a given assignment was particularly important for Kelly as this gave her peacefulness during the composing process. She said: "I am not a last-minute person. I cannot start just one week before the due dates. It takes time even just to comprehend the tasks". Thus, she described her composing as progressing "slowly but steadily". Throughout the first year, she usually submitted assignments one or two days early and has never asked for a due date extension or submitted assignments late.

Technology Use

Kelly came into the doctoral program with the habit of using technology during composing. She worked mostly on desktop computers (on campus) or personal laptops (at home) for her writing sessions. She is highly proficient in essential word-processing software and composing platforms such as Microsoft Word, PowerPoint, Adobe Reader, and Google Docs. She was also acceptive of learning and trying out software, apps, websites, as well as web-based tools and services (e.g., Grammarly, Google Drive, Turnitin, Endnote) that she found useful for her doctoral studies. In general, technology supported, rather than posed challenges to, Kelly's composing process.

For composing activities at the pre-writing stage such as researching and reading, Kelly would search for sources online through databases and would be as comfortable reading articles digitally as on paper. During the writing and revising stage, she would type rather than handwrite, stating that it was easier to copy and paraphrase texts from digital reading sources as well as to write and edit. The only time she would handwrite was when she was outlining or creating concept maps at the planning stage of writing. Her typing speed was observed to be fast.

L1/L2 Use

As mentioned in Chapter Three (see Writer Profiles), because of her profession as a university lecturer, Kelly had experiences writing and publishing in the field of TESOL in both Indonesian and in English. However, when asked about L1/L2 use in her process of writing doctoral assignments, Kelly consistently responded that she prefers to use English, her L2. She mentioned: "It's easier for me to think [about the topic] in L2, write [about the topic] in L2, or even dream [about the topic] in L2." English, despite being Kelly's L2, seemed to have become Kelly's most proficient and thus preferred language when it comes to academic activities.

The predominant use of L2 (as opposed to L1) during the composing process as reported by Kelly seemed to be her active choice. In the interviews, she would refer to herself as a second language learner, an international student, a visiting scholar, and someone from an English as a Foreign Language background. She viewed the opportunity of studying in the U.S. and in an English-speaking environment as a once-in-a-life-time-opportunity that she should make full use of before she returns to her country. Therefore, she tried her best to immerse her life, particularly the academic life, in English. She reported that she would be intentional about observing and imitating how American people talk and write in an academic setting. Although she had obtained her master's degree in an English-speaking country (Australia) and had high proficiency in English upon entering the doctoral program, she still maintained a learner mindset and deliberately made effort to be more proficient in English especially in academic settings.

Using L2 during composing also seemed to be a necessity. On various occasions, Kelly mentioned the difficulty of finding references or literature in her L1, Indonesian, on the topic she was working on. She commented,

I find it hard to find references or literature written in my language. I think it's better for me to find peer-reviewed articles which are written in English. I think it's better for me to read, think, and write in English...consistently in one language...than in my first language.

Because of the lack of academic resources in L1, Kelly did not prefer or feel the need to use L1 when engaging in doctoral writing activities. The only scenario where she reported using L1 was for translation purposes. When she "got stuck" with unknown English vocabulary in readings, she would consult the Indonesian-English dictionary.

Kelly's Typical Composing Process

Since the very beginning of the doctoral program, Kelly's composing process has always been systematic and mostly consistent. Overall, Kelly's composing typically involves "planning, formulating, and revising written text to create multiple drafts before arriving at the final product".

To give a concrete example of Kelly's composing process, Table 8 displays the detailed steps Kelly took in completing a literature review for a specialization course as a focal assignment. Kelly started working on the assignment about a month and a half before the deadline, made daily progress on the project, and arrived at the final product after two drafts approximately three weeks before the due date. Her motivation level was high for this assignment as she set the goal to turn this assignment into a potential publication. Among all the identified composing activities, Kelly perceived the most difficult yet the most important step to be global planning/outlining (content and organization). She stated:

It's the most difficult part, because you have to make sure all the variables that you'd like

to discuss later has to be included. It's the most difficult part because it's at the beginning of the paper. Once you have the outline, you'll find it easier to develop your paper. So, the outline for me is basically the most important part of the paper itself.

Kelly's typical composing process reflected the composing behavior commonly found in advanced writers summarized by Kobayashi and Rinnert (2018). As long as she understood what was required by the written assignment, she usually had clear plans and strategies to achieve the goals she set up for each written task. However, it should be noted there were still variations in her otherwise-established composing process. These variations were mostly shaped by the type and requirements of assignments as well as the goal and motivation level she had for completing the assignments. Table 8 Kelly's Composing Process

	Literatur	e Review as a Focal Assignment
Stages	Composing Activities	Additional Notes
	global planning-choosing	selected a topic that was previously worked on in
	topic	Indonesia; already have references
Pre-writing	researching (identify	searched for journal articles and books as materia
_	sources)	to develop the paper; used library resources,
		search engines, databases, metanalysis,
		previously identified references
	reading	observed to be very critical about the reading
	-	material; reading while highlighting; one reading
		material led to further reading; reading to increase
		content knowledge and gain insights to different
		perspectives
	selecting information	selected articles based on topic relevance, quality
	C	and timeliness of research; experienced
		difficulties in deciding which information with
		articles to use;
	global planning-outlining	worked out an outline with first- and second-
	(content and organization)	level headings and subheadings; identified
		sources included
	seeking feedback on	exchanged emails with the professor until positive
	global planning	feedback and confirmation were received
Writing	drafting and composing	focused on making sure the arguments were
		correct and interpretations were appropriate;
		didn't like to use direct quotes and preferred to
		paraphrase from the readings;
	translating	checked meaning of unfamiliar English words in
		English Indonesian dictionary
	word-searching	searched for vocabulary in the readings and online
	grammar checking	self-check grammar and formatting
	seeking feedback on	sent first draft to the professor; sought feedback
	intermediary drafts	on the second draft from the professor and peers
Post-	revising and editing	revised first draft based on professor's feedback
writing		on the first draft; added and deleted sources;
		emphasized on clarity, transitions and flow of
		writing
	evaluating (comparing	went above and beyond the assignment
	written product to rubric)	requirements; publication quality as the goal
	proofreading	university writing center visit (double check
	· U	
		grammar and APA)

Main Characteristics of Kelly's Composing Process

Kelly's composing process can be characterized using the following keywords: systematic, organized, committed, informed, and strategic.

As previously stated, Kelly's composing process was observed to have been highly systematic over time. If she fully comprehended what was required by the written assignment, she usually was able to lay out clear plans and strategies to achieve the goals she set up for each writing task. She followed the same "pre-writing, writing, post-writing" procedures for most of her assignments.

Connected to Kelly's systematic way of working, her intention to stay organized during writing was apparent. To begin with, she was very goal-oriented. She would determine a goal for each assignment, which sometimes was merely to produce the written product needed to fulfill course requirements, but more often she would seek to achieve higher goals such as writing something of publication quality or presentable at a conference. Furthermore, as she set out to work on the assignments, she would plan a timeline and checkpoints in her mind and was able to coordinate timelines when working on multiple assignments simultaneously. Because of this habit, she never failed to turn in assignments on time, and was able to fulfil each step she planned in her composing process without haste. Moreover, Kelly's organizational habits and how she used organizational tools was revealed in the observation sessions. In her flash drive, her files were organized by course and by assignment following certain naming conversions. Later in the first year, she was observed to have drawn concept maps or utilized Microsoft Excel worksheets to organize her thoughts and references as she read and/or outlined for assignments.

"I have to be organized.", said Kelly. When asked about why she was so intentional about

staying organized, Kelly says "I often forget things, every time I need about something, I just do it immediately or I write it down on my planner. If I don't, I will forget." It seems that Kelly was mindful about her own weakness (i.e., forgetfulness) and was strategic in finding tools and establishing good habits to overcome this issue.

Another salient characteristic of Kelly's composing process is the long- and consistenttime commitment she put in writing each assignment, especially the bigger writing projects that could not be completed in a short amount of time. She describes her composing as process as "slowly but daily". Because she was able to plan for an adequate amount of time for each written assignment, she could write a section every day as well as review and edit as she continued to write. She deliberately committed the time to write and make progress daily, as she believed she wouln't be able to complete the assignments otherwise. In her words, "I cannot start just one week before the due dates. It takes time even just to comprehend the task. I am a nonnative speaker, and I cannot write so fast." In this regard, it seems that Kelly's identity of a nonnative speaker as well as her expectation of herself producing quality doctoral assignments in order to become a high-achieving doctoral student are two major factors that led to Kelly's choice of committing a long time to each assignment.

Perhaps what demonstrated Kelly's agency the most is her effort in actively seeking expert feedback in every phase of her composing. Among all the doctoral assignments Kelly had to complete, some written tasks were set up by the faculty in a way that requires multiple drafts to be submitted. In this case, it is implied that the students would receive a round of feedback before submitting a second or a final draft, which allowed students to have the opportunity and time to improve their writing. In other cases, assignments were set up to require one submission

only. The only feedback students were guaranteed to receive was when a grade was assigned.

To Kelly, expert feedback was extremely important. This is why, regardless of how the assignments were set up, she would reach out to faculty members for feedback. In other words, she voluntarily built the feedback component into her composing process by actively and intentionally seeking advice for improvement, which in turn, motivated her to produce drafts for review much earlier than the due dates. Kelly also saved all the drafts, so she could access the professor's feedback and compare different drafts to make sure all necessary edits were done before submitting the finished writing product.

Kelly shared in her audio diaries and was observed to have used many strategies during the composing process, including what was previously mentioned such as starting early, making timelines, using organizational tools, actively seeking feedback from faculty, saving copies of all intermediate drafts, and using the writing center for proofreading. Kelly was also strategic in making use of her prior knowledge when it comes to finishing the doctoral assignments. For instance, when given the choice, Kelly chose to work on topics that she was already familiar with and had references for because it would allow her to write with confidence and continue to build on her previous research. As Kelly gained familiarity with the doctoral writing assignments, she was mindful about reflecting which strategies were more helpful and practical to her in improving the efficiency and quality of her writing.

Last but not least, another finding that emerged from the data worth noting is how Kelly described the academic writing process at the doctoral level from an affective perspective. In general, Kelly perceived engaging in doctoral-level academic writing tasks as a "serious" but "interesting" process, and she withheld the feeling rewarded until the end when the task has been accomplished. For instance, the audio diary guide consistently asked the participant to share how a particular writing session went or whether the participant experienced any joyful or difficult moments. Below is a typical answer from Kelly.

I think it's something serious. I am not sure about happy... I wanna say it's interesting ... you know when you read something, and you find information you don't know, and it adds to your knowledge... this is the most exciting part... It's so... encouraging when you read an article and you found something worth investigating further. It's really intriguing... As for happy, I think I will have my happy moments later. At the end of all my writing sessions and when I have my literature review paper, I think that will be my happy moment.

Development in Kelly's Composing Process through Time

Since the very beginning of the doctoral program, Kelly's composing process has always been systematic and mostly consistent. She seemed to have good writing habits and to know what methods would work well for her. Therefore, there were not big changes or considerable growth in the way Kelly composed at the beginning and the end of the first year. However, as she gained familiarity to the types and requirements of assignments required in the doctoral program and experienced an increase in her family responsibility after her family arrived in America in the second semester, Kelly did self-report the following aspects that have improved over time:

- Increased frequency and quantity of writing activities
- Improved writing fluency while maintaining quality (when there was less time)
- Identified more resources and tools (e.g. Grammarly, concept mapping) to support

writing.

L2 Writer Alex's Case

Alex's Composing Habits

In this section, Alex's composing habits as a L2 doctoral writer is described in terms of location, time and frequency, technology use, and L1/L2 use.

Location

Similar to Kelly, Alex also mostly worked in two locations: at home and on campus. Living 75 miles away from the university, Alex would only come to campus when she had to (Ph.D. classes, GTA assignments, or other appointments). Depending on the schedule, she would work on campus two to three days per week. Since it took so long to commute to campus, Alex would stay on campus for the whole day and work on written assignments in between her classes and appointments. When writing on campus, Alex would either be found in the graduate student study located in her college where she would work alongside her fellow classmates, or her GTA office, a shared office space with other doctoral students. Neither location was distraction-free, but both can be good places to network and collaborate. Because she usually had lower efficiency writing on campus, she would strategically plan to work on tasks that did not require a high level of mental energy (such as proofreading or working on references) or assignments that were smaller in size or for lower stakes.

Most of the time, Alex chose to write at home where she has a designated study area (see Figure 4). She described her work environment at home as very quiet, peaceful, relaxing and comfortable. The creative process of her writing or tasks that required high concentration and

clarity of the mind were usually done at home.

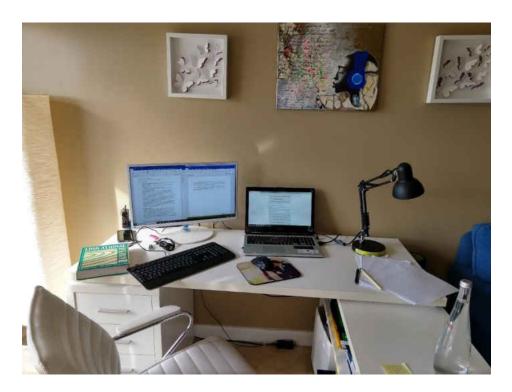


Figure 4 Alex's workspace at home.

Time and Frequency

During the first year of doctoral studies, Alex found herself engaging in academic writing activities all the time. Writing was not just writing but was perceived as a "time-consuming" process that entails multiple activities such as reading, understanding, gathering ideas, and editing. For this reason, she tried to "write something every week" and "work more...10 hours per week at least". In her words, "it is not like I sit down for 30 minutes, and I have a beautiful paper." Being in a work mode consistently was the key.

Technology Use

Alex can be described as a technology-savvy writer. Her composing process was often observed to be computer-based and paperless. Her workstation at home, the place where she did most of her writing, includes one big monitor connected to her laptop. "I had an article on one monitor, and the TESOL words and resources... where I find synonyms and antonyms on another, then my word document, and my notes. With two monitors, the font can be bigger. It worked faster." As she composed, she navigated smoothly among all the documents, webpages, and software displayed on multiple screens on the monitor(s). The setup increased her work efficiency, as she shared in her audio diary quoted previously. She also mentioned that becoming paperless is a deliberate choice so she could "save some tress". In general, technology usage is a necessity for Alex's composing process.

L1/L2 Use

As introduced in the Writer Profile section in Chapter Three, Alex was the only multilingual participant in the study. She speaks five languages fluently including her L1, Romanian, and four other foreign languages, English, French, German, and Spanish.

Among the five languages, English has become the language Alex uses daily, professionally (as she worked as a teacher in bilingual schools), and academically (for her master's and now doctoral studies), ever since she established her life in the U.S. At the time she started her doctoral program (Fall 2018), she had been living in America for 5 years. She reported that for doctoral studies, she uses English only, a foreign language that has become a main language for her. By default, she searches sources and databases, reads, thinks, and writes

only in English. Even though she believes that she could read and write at the same level in her L1, she simply did not need to use her L1 in the composing process because of her high English proficiency. It should be noted that when pursuing the master's degree, Alex still used both her L1 and L2 in writing her assignments. By the time Alex entered the doctoral program, she never tried or intended to do that again as she realized it is more efficient to use English only because she does not need to translate or codeswitch between her L1 and English. As such, English has become Alex's academic language, whereas her L1 is used in limited social settings with Romanian-speaking family members and friends. However, Alex's L2 writer identity was still present in that she identified herself as a nonnative writer and often distinguished her composing process as different from that of a native speaker in that she assumed her writing took longer time and had more language-related mistakes and therefore needed more editing and proofreading.

Alex's Typical Composing Process

Overall, Alex's composing typically involves planning, formulating, and revising written text to create one complete draft for submission. Only when the assignments were structured to involve multiple draft submissions would Alex go through the required number of revisions based on faculty feedback before arriving at the final product.

To give a concrete example of Alex's composing process, Table 9 displays the detailed steps Alex took in completing the literature review for a specialization course as a focal assignment (The same example was used to illustrate the two other participants' composing process). Alex started working on literature review three weeks before the deadline and worked concurrently with other assignments such as the article critique and research proposal. She did

not particularly enjoy the process of writing this assignment because she experienced confusion and uncertainly not given a specific outline or rubric to follow. She comments on assignments like the literature review as "a grey area" in which she had to come up with the structure as well as content for the writing project.

	Literature Review as a Focal Assignment		
Stages	Composing Activities	Additional Notes	
Pre-writing	global planning-choosing topic	selected a topic based on personal interest	
	researching (identify sources)	searched for journal articles and books as materia to develop the paper; used library resources and search engines	
	reading	reading while highlighting key information and helpful vocabulary/phrases	
	selecting information	selected article and information based on the developing outline	
	global planning-outlining	identified an example article to follow the	
	(content and organization)	structure and layout; revised outline twice	
	Building academic language	developed personal word bank	
Writing	drafting and composing	reading more on the topic helped generating ideas for writing; intended to make the article reader- friendly	
	word-searching	searched for vocabulary ideas in the readings and the word bank	
	grammar checking	self-check grammar and formatting	
Post-writing	revising and editing	added and deleted sections/sub-headings	
	evaluating (comparing written	comparing written product to the example article	
	product to rubric)	and peer's writing	
	proofreading	reviewing grammar and APA	
	presenting	in-class presentation based on the writing produc	

Table 9 Alex's Composing Process

It should be noted that even though Alex' composing process presented in Table 9 followed a general sequence of pre-writing, writing, and post-writing, in reality, several identified composing activities took place simultaneously and sometimes recursively. For instance, as Alex read, she was also selecting information and building her word bank. When she was still finalizing the outline, she already started writing. As she wrote more, she realized she needed to add more sources.

Main Characteristics of Alex's composing process

From the data gathered from the audio diary as well as observations, Alex's composing process in the first semester of her doctoral studies can be characterized as constantly adjusting and highly emotional. She was observed to have experienced adjustment and re-adjustment before identifying a pattern of composing that worked for her. She tried different strategies. Some worked and were adopted as a regular step in her composing process.

One of these useful strategies Alex developed was building what she called a "word bank" (see Figure 5). She had a running document in which she built a bank of words, academic terms, sentence starters, filler phrases, and even whole sentences that she handpicked to be used with the purpose of enhancing her writing product. The sources from which she identified these words, phrases and sentences were either her own writing in previous assignments or the articles she had read. As discussed previously, this strategy use was related partially to Alex's identity as a second language writer in that language use is still a difficulty in her writing process, but more because she believed as a doctoral writer she needed to produce writing that is "fancy", "academic" and makes her sound like "she knows what she is talking about".



Figure 5 Screenshot of Alex's word bank.

Alex was self-conscious and analytical in reflecting on her composing process. She gradually realized what would work for her as a writer and what would not, as can be seen the following quote.

I am quite pleased with my work because I wrote a page and a half today, which I didn't set a goal... because every time I set a goal, I just start feeling pressured that I have to accomplish that. Emmm...somethings it's not working. And I feel like I am wasting my time. Sometimes I am just reading articles or working on my bibliography. If I don't write per se, I feel I am not accomplishing anything. But by not having a goal, I actually worked quite well today.

Alex was particularly verbal in sharing her personal feelings and emotions as a writer.

She frequently described her writing experience in the doctoral program as "riding a roller coaster". She had high moments of satisfaction, happiness and relief as well as low moments of self-doubt, anxiety, and defeat. How smoothly her writing session went on a given day directly impacted her mood and her mood on a given day also impacted her writing process. Her disclosure on the emotional aspect of her writing experience corroborates with the data gathered from audio diaries of individual writing sessions. In one audio diary, she would explain how she was not able to concentrate and be productive during her writing session, and in the audio diary the next day, she would share how her mood was better and she felt happy about her writing progress. Below is a typical example.

My writing process during this time was influenced, honestly, by my mental state. Yesterday I received not very good feedback from one of the professors, and that's not helping anyone. It is very rarely when anyone says anything positive...it's just... squashes your inner... your soul... Anyway, that's my personal issue right now... but that really affected my writing. So today, I am re-analyzing everything. I am just thinking is this good is this good. If it's not good enough let's re-think and re-write it. I am not overall satisfied with anything. I hope I will be better. I hope I am going to do better. It's such a roller coaster when writing, and I look forward to a better day than today.

Throughout the collected data on her composing process, Alex has mentioned that her emotions were impacted by factors including the struggle with adjusting expectations for the Ph.D. program, feedback (both positive and negative) from professors, energy level/ tiredness and fatigue, deadlines, and goal setting.

It was in these kinds of ups and downs that Alex was learning to be the best writer and

doctoral student she could be. It can be seen that Alex was a determined writer, but because she was determined, she sometimes put too much pressure on herself. Whether she was able to maintain a peaceful state of mind as a doctoral student and writer was observed to be directly impacting her writing process and product.

Development in Alex's Composing process

As mentioned, Alex composing process was in development as she learned the process of research writing in the first year and especially in the first semester of her doctoral studies. She adjusted and readjusted before identifying a pattern of composing that worked for her, as can be seen in the quotes below:

This semester is kind of...when I am figuring out what works for me; what all these papers should look like; what is the goal and outcome; what is the expectation. There is a lot of figuring out, but I hope it is going to get easier once I get a system in place.

At a macro level, she explained that her composing process became less stressful and easier as she developed various research skills such as reading, understanding, and judging a scholarly article, taking notes, creating outlines, searching effectively in databases. Her developments were shown in the following areas.

- Increased frequency and quantity of writing activities
- Improved writing fluency while maintaining quality (when there was less time to complete an assignment)
- Identified strategies, recourses and tools (e.g. word bank, reading example texts, spending time outlining) to support writing.
- Improved confidence level and emotional stability during the process

Alex was still not fully satisfied with the way she wrote at the end of the first year. In the final interview, she expressed a willingness to continue growing.

There are areas I am trying to improve every day. And I hope my self-rating is to go up. It is going up... I mean... I need to trust myself more and acknowledge that it is going to be a very sinuous path. I am just hoping I can make it. I think I can.

L1 Writer Chris's Case

Chris's Composing Habits

Chris's composing habits as a doctoral writer can be illustrated in terms of location, time and frequency, and technology use. Since Chris is the only monolingual L1 writer, the discussion of L1/L2 use is not applicable.

Location

As with the other two participants, the two locations where Chris completed her doctoral assignments were at home and on campus. Chris lived far away from the university and had two part-time jobs, so she would only come to campus when she had classes, GTA assignments, and meetings or appointments. Depending on the schedule, she would go to the campus two to three days during the weekdays and occasionally on the weekends. When writing on campus, Chris was often found in the graduate student study located in her college where she would work alongside her fellow classmates. However, most times, Chris wrote at home. Chris lived independently in a two-bedroom apartment she rented where she enjoyed having personal space, privacy, and quietness. Figure 6 shows Chris's workspace at home.

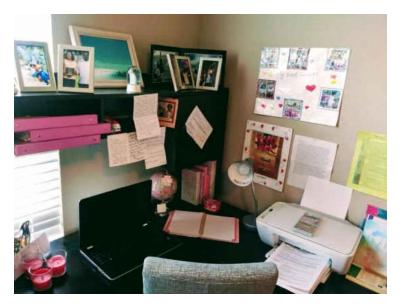


Figure 6 Chris's workspace at home.

Time and Frequency

As discussed in the findings for Research question 1.1, Chris reported that she had very limited time writing for her assignments because of an overloaded work/study/life schedule. Chris was certainly the busiest among the three participants because she was not only studying as a full-time doctoral student taking three courses per semester, but also worked for the university as a GTA for 20 hours a week. Furthermore, she worked two part-time jobs that added up to approximately an additional 50 hours a week of work in order to sustain her life. Because she lived independently, she had other life responsibilities that she could not rely on anyone else to fulfil. The work and life responsibilities competed with her academic responsibilities and unfortunately took the time and attention away from her academic writing. Even though she was able to meet most assignment deadlines with a few exceptions when she had to ask for an extension, her writing process was mostly completed at the last minute. In the end-of-the-semester interview, Chris addressed this composing habit with honesty.

As I mentioned before, I was a last-minute writer. I would look at the assignments ahead of time, but only get to them right before the day they were due. I felt embarrassed, and like I was the only one doing this. I didn't want to fail, or for my professors to think less of me, but my habits were bad sometimes. Sometimes I would write the papers and do the research the day of, or only the day before, but not by choice. Other times, I would do the required research, make an outline, and write using the information I'd gathered from the sources and edit and revise as needed.

Technology Use

Chris's composing process was mostly computer-based. She sometimes printed out articles and book chapters to read, but mostly the researching, reading, highlighting, note-taking, writing, and editing were done digitally.

She used two separate computers for work. Having two screens helped her read on one and type on the other, thus avoiding the time and energy outlay of having to switch between windows. She also mentioned that the composing process for some doctoral assignments, the statistical ones especially, required her to navigate between multiple articles, websites and software applications, as well as her working document. Having two computers working simultaneously also prevented one computer from being overloaded and becoming dysfunctional, which had happened to her in the past and seriously impacted her work efficacy.

The most frequently used website observed in her composing process was the university library website which granted her access to research and download scholarly articles in various databases commonly used in the discipline. Struggling with "going all over the place researching and finding sources", Chris used the Quick Search function on the university library website.

Other tools she used while writing included essential word-processing software and composing platforms such as Microsoft Word, PowerPoint, Adobe Reader, and Google Docs.

Chris's Typical Composing Process

According to data yielded from observations and audio diaries, Chris's composing process for an assignment involved a single draft typically done in one or more lengthy and intensive writing sessions within one or two days, rather than spreading the workload into daily writing sessions over a longer period of time. When multiple assignments were due at the same time, Chris found herself concurrently working on different assignments. For each assignment, regardless of whether it was written at the last-minute or not, Chris went through a pre-writing, writing and post-writing process, which can be seen from the quote below.

I make sure to understand the purpose and objective of the assignment. I come up with questions I may need to answer or address and also arguments as well. I make sure to create a running list of experts, scholars and researchers to reference, use libraries, databases to do the research, create an outline, then I write the draft, edit, revise, and review.

However, when composing under extreme time pressure, each of the composing stages mentioned in the quote was rushed. She emphasized that she enjoys writing and has confidence in her writing ability. "It was just so many other factors that interfered with me being more focused and strategic, which I knew I could be."

Take Chris's literature review assignment as an example (The same example was used to illustrate the two other participants' composing process). Table 10 displays the steps Chris took in completing the assignment. As it was the last assignment Chris worked on at the end of the

first semester, she spent about 5 hours on the day before the due date to complete this

assignment. By that time, Chris had a relatively established routine in her composing process.

The goal of the assignment was to complete it by the deadline.

Table 10 Chris's Composing Process

	Literature Review as a Focal Assignment	
Stages	Composing Activities	Additional Notes
Pre-writing	global planning-choosing topic	selected a topic based on personal interest
	researching (identify sources)	used the first 10 sources found by keyword search in the university library search engines; used class readings relevant to the topic
	reading	reading while highlighting key information to be included in the paper;
	selecting information	selected article and information based on the outline
	global planning-outlining (content and organization)	Used a generic outline rather than develop a topic-specific outline
Writing	drafting and composing	Organized highlighted information from reading into sections of the writing and make the writing cohesive
Post-writing	evaluating (comparing written product to rubric)	comparing written product to assignment requirements
	proofreading	reviewing grammar and APA
	presenting	in-class presentation based on the writing product

Main Characteristics of Chris's Composing Process

Overall, Chris's typical composing process turned out to be a fast-paced, high-

productivity, high-pressure process. In her own words, "honestly, key words...distracted,

stressed, fast, but at least [the writing] were organized and met requirements."

It has been discussed previously that Chris' 70-hour per week work schedule (part-time

and GTA combined) and other life responsibilities competed with her academic tasks and

unfortunately took the time and attention away from her academic writing. Chris was observed and self-reported incidences of her losing track of assignment deadlines and at times had to finish major assignments in a matter of hours to meet the deadlines. For instance, she once finished writing a literature review assignment in about five hours. She forced herself to rush through each stage of composing, saying she was "speed writing" and "the research was rushed".

As a last-minute writer, Chris composed under a high-level of pressure as well. The pressure was not only caused by the fast-approaching deadlines alone, but also the fact that errors and mistakes were likely to occur in the rushed composing process. In one audio diary, Chris described her making mistakes in writing a research proposal.

It is so rushed that I actually made a few mistakes on the way and I realized after I submitted the today that I didn't even include an important part of the assignment which is the research question, so I definitely need to find a better way to go about my assignment. Usually, the pressure kept building up until Chris was able to complete and submit the particular assignment, and then she could experience some sense of temporary relief which she referred to as "happy moments at the end". However, the final moment of relief would be when she received positive grades and/or feedback. She took pride in what she did and how hard she worked, but knowing her composing process was rushed, she also "took criticism well" and used suggestions to address what she was doing wrong for subsequent assignments.

Granted that Chris's composing process was not ideal, Chris was, without question, a hardworking and highly productive writer. The facts (a) that she managed to "get it done" in the midst of all responsibilities within the limited time left for writing, (b) that she produced a total of 44559 words for the doctoral assignments over the first year (see Table 9), and (c) that she

received "positive feedback and grades on mostly all assignments" deserve recognition.

As such, the time pressure Chris had to face constantly in her composing process had increased her speed and productivity in writing for doctoral assignments, but the quality of her writing suffered to an extent (see Research Question 1.1).

Development in Chris's Composing process

Over the first year, Chris's composing process was found to be increasingly condensed as she (a) became more occupied with work and life responsibilities and (b) developed confidence in her established composing process in meeting the writing requirements of the program. At the beginning of the first year, Chris still referred to herself as a "slow" writer. She mentioned it would take her a whole day to write a discussion post because she would "start out slow", but "once I start writing, things start to flow a bit better". Towards the end of the first semester, Chris was able to finish a major writing project in a matter of hours. Throughout the first year, given the circumstances, Chris's composing process developed in terms of

- improved writing fluency while maintaining reasonable quality
- developed strategies for speed research and speed writing

Chris indicated strong motivation in changing her composing process, saying "it should have been better" and that she would "enjoy the writing process a lot more" and be "more focused and strategic" if she could achieve a better work/study/life balance.

Summary of Research Question 1.2 Findings

In summary, there were commonalities and differences observed in the way the participants composed the doctoral assignments in their first year. In terms of composing habits, all participants composed mainly at home and on the university campus. Using technological tools (e.g., computers and personal laptops, word-processing tools, reference tools, etc.), their composing process largely encompassed the stages of pre-writing, writing, and post- writing. Facing the challenge of intensive text production, the participants either demonstrated patterns of planned and regular writing sessions or engaged in lengthy intense writing sessions right before the deadlines. Thus, differences can be observed at the micro level of the participants' composing activities, goal setting, and strategy use at each stage of composing. Differences were also observed regarding the emotions and motivation in the composing process: Kelly gained increasing confidence over time; Alex's emotions changed constantly, and she experienced a lot of self-doubts; Chris was frustrated.

Compared to the L1 participant, the L2 participants paid more attention to sentence-level composing and vocabulary building. On the macro level, keywords have been identified to describe the significant characteristics of each participant's composing process. Over the first year, the participants have shown different levels of growth as shaped by the individual, contextual and sociocultural factors, with one aspect of shared growth being that they all settled into a routine writing process with improved writing speed and fluency.

Research Question 1.3 Results: Social, Cultural, and Contextual factors

Findings of Research Questions 1.1 and 1.2 provided insights into the participants' firstyear doctoral experience as academic writers in terms of written texts and the composing process. However, the examination of written texts and writing behavior should not take place in a vacuum because writing is a "situated and mediated activity distributed across temporal, cognitive, social, and material environments" (Prior & Thorne, 2014, p. 31). Therefore, when

presenting the findings of the first two research questions, I as the researcher did not display the texts and composing processes in isolation, but was intentional about providing the related social and cultural contexts by including discussions on "who writes what to whom, for what purpose, why, when, where and how", as suggested by Grabe and Kaplan (1996).

In Research Question 1.3, I foreground the discussion of social, cultural, contextual, and individual factors which emerged from the data analysis. Several sociocultural themes were identified across the three participants: (a) settling in, (b) competing responsibilities, (c) social interactions within the doctoral program, and (d) academic acculturation. These sociocultural factors provided the broader context for the participants' academic writing practice and interacted with each other in influencing the performance and growth of the participants as academic writers. In doing so, the study responded to the need of narrowing the ontological gap between text and context in the current academic writing research.

Settling In

First-year doctoral students are not only newcomers to a doctoral program, but often newcomers to the university, the city, or the country that their program is located at. In this study, settling in has been identified as a major sociocultural factor that affected the participants' writing and learning in the first year.

For L2 writer Kelly, unlike many international students and L2 writers who had difficulties transitioning to a new country as documented in the literature, she did not seem to have experienced much difficulty moving from her home country to the U.S. Kelly made full use of her high English proficiency, prior life experience living and studying abroad, as well as organization and communication skills in navigating through the necessary adjustments. For

instance, she rented an apartment close to campus and researched the nearby area online long before she arrived. She also received funding and assistance from her government during the process of settling in. Having lived in another Western country (i.e., Australia) before, she did not experience as much culture shock as she probably would have had it otherwise. When the program started, she was ready to concentrate on her studies and writing without many interruptions.

However, Chris, the L1 participant, did not experience as smooth of a transition, and it can be argued that the problems she had in settling in were the origin of her subsequent struggles in writing and learning in the doctoral program. Even though Chris was born, raised, and educated in the United States as a native speaker, her professional experience as an English language educator was diverse and international (see Writer Profiles). She left Kuwait, where she was teaching, in June and came to America, her home country, to start the doctoral program in August. However, coming back to her home country did not mean she had fewer adjustments to make. Like Kelly, Chris came from Kuwait to a U.S. university in a city and state completely new to her, a social environment where she had no pre-established connections or support upon arrival. "Life had totally changed since being in the program." Chris said. In the short amount of time she had to settle in, she had difficulties finding an affordable accommodation and ended up paying for an expensive apartment far away from the university campus for the rest of her first year. To make things worse, she had to pay financial penalties for leaving the Kuwaiti school because she had to terminate her contract early. All these factors led her to work multiple parttime jobs in order to sustain her life while being a full-time doctoral student with GTA duties. As a result, Chris faced significant time constraints in her composing process for the doctoral

assignment text production, as discussed in the first two sub-research questions.

The participant that perhaps faced the least impact in terms of settling in was Alex. Even though the U.S. is not Alex's home country, it has become her home. When she joined the doctoral program, she had lived in America for five years as a green-card holder and later a citizen. She has lived and worked in the same state as the location of her doctoral program. She also had the support and companionship of her husband who is American. Therefore, unlike the other two participants, settling in socially and culturally was not an impactful factor in Alex's text production, composing process and writer growth.

Competing Responsibilities

Competing responsibilities is another main theme that emerged in answering Research Questions 1.3. It is clear that the participants, while taking on the role and responsibilities as doctoral students and academic writers in the first year, simultaneously engaged with other family or work responsibilities in their everyday lives. This means the participants had to write with different degrees and types of distractions. The amount of distractions and their ability to cope with them directly impacted the participants' writing process as well as the quality of their writing product.

For Kelly, in the first semester, her only role being a full-time student taking three courses allowed her to fully commit to doctoral studies and writing. However, a major interruption took place when her family joined her in the second semester. Kelly then also had to be a wife and a mother and had to represent the family in all social interactions as she was the only one who spoke fluent English. To prepare for her family's arrival, Kelly had to spend a considerable amount of time at the end of her busy first-semester while juggling all assignment

deadlines to move to a bigger apartment, buy more furniture, apply for social security number, and enroll her children in the local schools, all of which took time and attention. After the family arrived, Kelly's working environment at home changed from no distraction (a household of one, herself) to always distracting (a household of five with her husband and three young boys). Although her preferred environment for writing at that point changed from home to campus, she had to work from home more often because of the responsibility of watching over her youngest son who was at age three. It became normal for Kelly to work on her assignments while her children were making noises and demanding attention. To approach the competing responsibilities, Kelly had to be strategic. For instance, she mentioned getting her husband to agree on "taking shifts" watching the children so she could go to the campus to write. She trained all her children to go to bed at 7 pm because "if they don't go to bed, I don't have the evenings to work anymore". Eventually, Kelly managed to balance her family/study responsibilities, as demonstrated by her patterns of planned and regular writing sessions when composing for doctoral assignments.

Alex's writing was also somewhat challenged by competing responsibilities. At home, she referred to herself as the "Romanian wife" who "did all the housework", so in her writing sessions at home there were "always some distractions here and there". On campus, what competed with her academic responsibilities was her GTA workload which was supposed to be 20 hours a week. However, she suggested more time was spent on working as a GTA because "it's never 20 hours". With that said, she appreciated her GTA position as it funded her study, helped her gain more information and membership at her university, as well as increased her professional experience in preparation for her future career.

Chris was the one whose writing was most severely impacted by competing life/work/study responsibilities. Chris was unusually busy as a doctoral student: she studied fulltime, had 20-hour-per-week GTA duties, and worked other part-time jobs (unrelated to her study) for an additional 50 hours per week. Living by herself, she had to take care of her own life and at one point traveled and cared for family in another state as well. These "circumstances", as Chris called them, caused her learning, writing as well as personal health to suffer.

I just always knew that if my circumstances were better, and I was more stable and focused, my work would have been better...The multiple responsibilities negatively impacted me, took a toll on my health overall... At one time, I was working one job overnight, another during the day plus classes, also working on weekends and trying to work to meet GTA responsibilities. I started to realize that I was fatigued and during some of my classes I found myself struggling to process information. Some classes I had to miss because I was plain sick.

Chris struggled to prioritize her academic responsibility over others because she needed to fulfill the other responsibilities to sustain her life as a doctoral student. As such, academically, Chris was not able to devote nearly as much time and attention as the other two participants to read, research, write, and improve.

Social Interactions Within the Doctoral Program

Outside the academic setting, settling in and competing responsibilities were two salient socio-cultural factors impacting the participants' writing. Within the academic setting, the participants' social interactions in the specific university and program was, not surprisingly, found to have shaped the participants' writing. These face-to-face or online interactions took

place in written or oral form inside or outside classroom settings, but generally within the academic social circle comprised of the faculty, other first-year students, senior doctoral students, and university support staff.

The following types of interactions with the faculty members or lack thereof have shaped the participants' writing experience and process: (a) communicating assignment expectations; (b) receiving feedback; (c) seeking additional mentorship or support. Example quotes are included below:

- "I had to send an email to ask the professor to give me an example of what she really wants." (Alex asking for clarification of assignment expectations)
- "Yesterday I received not very good feedback from one of the professors...and that's not helping anyone...that's my personal issue right now... but that really affected my writing." (Alex receiving negative feedback)
- When I get positive feedback, I work better. There are some things that really help me when I am writing and the quality of my writing. (Alex receiving positive feedback)
- "I didn't want to work on it before I received feedback on the outline." (Kelly seeking additional faculty feedback)
- I am happy about the feedback. I agree with the professor on the need to narrowing down the topic." (Kelly- feedback in shaping text production)
- "I would look forward to comments and feedback from my professors and use them as ways to improve or do better on future assignments." (Chris feedback in guiding future writing)

• "I am surprised by some faculty's lack of empathy and human contact. It's just... very cold." (Alex - failing to obtain faculty understanding)

• "If late, I would let the professor know." (Chris - requesting an extension)

Successful interactions with their peers (both students in the first-year cohort or in the second year) or lack thereof also impacted the participants' writing experience and process. Specifically, to complete their doctoral assignments, the participants interacted with their peers to (a) communicate assignment requirements; (b) collaborate and co-author; (c) exchange academic arguments (in the form of discussion posts); (d) seek academic and emotional support. Example quotes can be found below.

- "I ask my peers what they have done in my domain and read their work, so I have a template in mind and work from that." (Alex using a peer's writing as an example to guide text production)
- "The writing session went smoothly. I am happy with the progress. Plus, I work with a partner; she is a native speaker. So, we can divide the load, check each other's work so we both get immediate feedback." (Alex working with a peer as co-author on a group project)
- "I am good at writing, and they are good at the stats, so I am happy to be in charge of the introduction and background sections and do the final proofreading (Chris dividing workload based on strengths of the group members)
- "I ask my native-speaking peer to read my work and give me a second opinion."
 (Kelly seeking writing support)
- "I sought advice from classmates and help as well" (Chris peer support).

• "I tried to match everybody's [writing] because I didn't want to seem like I didn't want to do the work, or I did not read for that week." (Chris - feeling peer pressure after seeing peer's discussion posts)

Finally, among the three participants, Kelly also reported interactions with the university writing center tutors in supporting her writing. She mentioned they were helpful only in the mechanical aspect of writing (e.g., checking the use of linking words, prepositions), but "not helpful enough" because each interaction/appointment was only one-hour long which was not enough for them to review a doctoral assignment which is typically complex and lengthy.

Interestingly, even though the above forms of interactions were reported by the participants, they still perceived writing as a largely independent and sometimes lonely process. Among the three participants, Kelly was the most active and successful in her academic socialization, which can be seen especially in her initiatives seeking additional feedback from the faculty members who she viewed as experts in the field as well as the graders of her assignments (see also in Research Question 1.1 findings). However, as for the other two participants, Chris mentioned feeling "unsupported, but I felt I had to be able to get through on my own." Alex even went as far as saying "Perhaps 3% [of her growth as a writer] came from program or faculty support, 97% was me figuring it out by myself". All three participants indicated strongly that it is key for first-year students to receive more support and mentorship. In the absence of the kind of guidance and mentorship the participants had wished for, Kelly was able to exercise her agency in academic socialization, whereas Alex and Chris were not.

Academic Acculturation

As newcomers, the three participants all went through an acculturation process to become

a member of the new culture-sharing group, the doctoral program. This process and the adaptation required was another theme identified in shaping the participants' academic writing and writer development. Interestingly, the most important cultural adaptation was not found to be related to the L2 participants' native cultures, but was connected to understanding and entering into the specific academic culture manifested in the doctoral program and the general academic culture of doctoral education in the U.S.

For L2 writer Kelly, several academic cultural transitions took place simultaneously as she entered the doctoral program. She made sense of the doctoral program culture, specifically how the members interacted and negotiated rules and expectations as mediated by the academic culture, by comparing and contrasting it with the different academic cultures and conventions in various higher education settings she had encountered. For instance, compared to her doctoral experience in America, she noticed that the Australian academic culture created a stronger sense of closeness in the relationship and interaction between the professors and the students, as exemplified by the fact that she could refer to her professors by their first names and that she received more "hand-held" type of support in her academic writing process. In contrast, in the doctoral program, such interactions as shaped by the new program culture were "more formal and serious." She also commented on the differences in the academic culture between the master's level and the doctoral level, saying that the doctoral program is intended to produce researchers, rather than practitioners, and thus the culture, the interactions, the expectations, the profile of students were all different. In addition, with extensive prior academic writing and researching experience in both her L1 and L2 as a university lecturer, Kelly also intentionally played different roles coming into the new doctoral academic culture. Through demonstrating

her academic literacy skills, Kelly intended to project an image of, not an international student or a language learner, but an existing member in the discipline and research community, and that the process of learning how to read, write, and research at the doctoral level was a furthering of her career and academic pursuits. Because her intended identity as a doctoral student seemed to have aligned with the doctoral program culture and expectations she observed, Kelly did not report many difficulties in her academic acculturation or related conflicts that negatively impacted her academic writing.

In contrast, the other L2 participant, Alex, experienced tremendous peaks and valleys as a newcomer into the doctoral program in her acculturation process. In acculturating into the unknown academic culture, her academic writing was both the evidence and the product of the tension she experienced between (a) not knowing and faking the writing to show that she knew, (b) the self-imposed pressure that she must do well and the "painful" realization that she was not always going to be an "A student", (c) the passion and expectation to gain practical knowledge in the field and the gradual acceptance that doctoral program is theory- and research-heavy, and (d) the need for explicit guidance and support from faculty and the frequent lack thereof in some cases. As discussed in the previous two research questions, the misalignment between her preconceived expectations and the reality of the doctoral program shaped and influenced Alex's academic writing practices.

Over time, all three first-year doctoral writers perceived the doctoral program as a pathway to enhance their career potential and/or gain senior membership in academia and a cultural environment that expects newcomers to demonstrate academic independence in meeting the high expectations in a research-oriented curriculum through academic writing. The following

quote from Chris can be used to demonstrate her understanding of the doctoral program.

The program has been quite a challenge but taught me to survive and be very strong. I have been able to expand my knowledge base and learn so much from the professors and about the field of TESOL and SLA overall. The program is equipping me in various ways to be influential in the field and to have a positive impact on ELs etc., which I've always had a passion for. There are some who inspired me very much, which I am very grateful for and always will be. Even if my work was not top quality, I hope in the end my efforts will pay off and that our professors will see past what was put on paper.

In short, the participants' prior academic/educational, professional, and research experience, as well as their willingness to understand, adapt, negotiate, or deny entry to the new academic culture marked another impactful socio-cultural factor in shaping the doctoral writers' growth as first-year students.

Summary of Research Question 1.3 Findings

In Research Question 1.3, the three participants' cases are telling examples that the doctoral writer's writing experience, process, products and development can be profoundly impacted by not only the program-specific academic culture and interactions, but also the broader socio-cultural factors such as native/nonnative status, immigration and relocation, family responsibilities, and employment and financial status.

It is clear that learning to write academically at the doctoral level should not be viewed as merely a set of technical and instrumental skills that students have to learn, and which are then transferable to other contexts. Instead, learning to write in the doctoral program should be seen as a human activity in which first-year doctoral writers' developmental trajectory is mediated by how they devote labor, follow rules, develop tools, interact with communities, in order to achieve their desired objectives/outcomes in and through academic writing (Foot, 2014; Beauchamp, Jazvac-Martek, & McAlpine, 2009). In this study, the participants' developmental trajectories as academic writers have overlapped with and diverged from each other, which is discussed next.

Main Research Question Results: Cross-Case Analysis

The previous sections presented findings of each sub-research question, delineating each participant's developmental trajectory in terms of text production, composing process, and the factors that shaped the development. This section intends to answer the main research question (see below).

In what ways do L1 and L2 doctoral academic writers' developmental trajectories overlap with or diverge from each other during the first year of the doctoral program in an applied social science field?

Informed by the findings yielded from the sub-research questions, the following presents each participant's developmental trajectory as first-year doctoral students and academic writers in a summarized form. The similarities and differences observed among the participants were then analyzed in relation to L1/L2 differences. It should be emphasized that the intended purpose of the cross-case analysis was not to judge or evaluate if one participant's academic writing as inferior or superior than others, but to gain insights into first-year doctoral-level academic writing.

Examining the Participants' Developmental Trajectories

With diverse cultural, linguistic, and educational backgrounds, all three participants

completed similar doctoral-level academic writing tasks with different levels of confidence and preparedness coming into the program, yet all achieved reasonable levels of success as demonstrated by marks received and overall positive feedback. In the process of writing, however, they shared similarities and differences in the difficulties they encountered and the strategies they used to overcome them. At the end of the first year, all participants have established preferred habits and processes in writing for various types of doctoral assignments; however, the text production and composing process varied across genres and instructors. All participants' writing experiences and development over the first year were shaped by several sociocultural factors described as settling in, competing responsibilities, interactions within the doctoral program and academic acculturation, but each participant at a specific time was impacted to a different degree by the factor types.

L2 Writer Kelly's Case – Settling in and Making it Work

Upon reviewing Kelly's development trajectory, Kelly's story can be given the title of "Settling in and Making it Work". Kelly can be described as a mature L2 academic writer and an existing member of the discipline upon entry to the doctoral program. With (a) clear academic and professional goals, (b) prior research writing experience, (c) prior study experience in an English-medium university as an international student, and (d) social, financial, and career stability in life, her path to learn to write academically at the doctoral level was not a bumpy one. Being able to mostly concentrate on her studies (without GTA or other work responsibilities), Kelly was observed to have skillfully and gracefully adapted to the new academic culture and environment through successful academic socialization. Her composing process and habits were systematic and effective in helping her produce written products that met, and in some cases

exceeded, the requirements of the doctoral assignments.

Throughout the first year, Kelly demonstrated a strong willingness to engage in academic writing and improve as a writer. She perceived academic writing as key to achieving success in the doctoral program and her career in academia, and that through continuing to improve her already-acquired academic literacy and research skills, she would be able to produce high-quality doctoral assignments that could later be turned into publications or contribute to her dissertation, thereby furthering her career and academic pursuits. Such vision and awareness was evident even in the first semester of her doctoral program, which was not the case for the other two participants. In order to perfect her writing products and processes, Kelly held high standards for herself, committed considerable amount of time to writing on a regular basis, navigated through family responsibilities and distractions, exercised agency in seeking support, clarity, and feedback from the faculty, utilized writing services in the university, as well as frequently and critically reflected on her own writing. The end result was that, indeed, Kelly settled in and made it work.

L2 Writer Alex's Case – Rollercoasting into the Unknown

Alex's first year experience as a doctoral writer was about "Rollercoasting into the Unknown." Yes, she knew the area and the university, she had related educational and professional background and writing experience, and she made the decision to embark on doctoral study as the next step in her education, but she did not truly know to what she was committing herself. As seen in Research Question 1.3, the broader sociocultural adaptation was not the main stressor for her writing in the first year. Instead it was the acculturation process to the specific program and doctoral education in general. In her own words, "I chose to be here. I

was not exactly informed about what I am putting myself into. I did not know what I was doing".

Clearly, as an L2 writer, Alex was much different from Kelly in that, as a newcomer to the doctoral program, she was a complete outsider of the research community in the discipline, and thus, the first-year writing experience was a reflection as well as an essential part of her academic acculturation process. Academic writing, more specifically research writing was a central aspect of the doctoral program culture, and Alex found it to be new, challenging, and confusing. Tensions were high and constantly present as Alex tried to understand, adapt, negotiate, or at times deny entry to the new academic culture. Alex experienced much confusion, trial and error, adjustments and readjustments before she gained an understanding of what good academic writing is, what was expected of her as a doctoral writer, and what strategies, processes and resources worked for her as she composed for her assignments. Her first-year experience learning to write in the doctoral program was an emotional roller-coaster. It was in these kinds of ups and downs that Alex gradually became more comfortable and confident with the types of academic writing required in the program.

L1 Writer Chris's Case – Not Just a Doc Student

"Not Just a Doc Student" was the title chosen to describe the L1 writer, Chris. From what has been discussed in Chapter Four, we can see how Chris's academic writing experience was complicated by a series of interconnected sociocultural and contextual factors starting from her unsmooth settling in, to the financial pressure, lack of social support, and most importantly, the life and work responsibilities that took time and focus away from her academic study in general.

By understanding that Chris was "not just a doc student", one could then recognize why passing the classes and "managing to go with the flow" had to be the primary goal and indeed

her best effort in the first year; why the academic socialization almost had to be secondary when she barely had enough time to finish writing her assignments; why her text production was about meeting the deadlines regardless of the quality; and why the composing process was characterized by the last-minuteness. In our final interview, Chris shared the powerful quote below describing her imaginary optimal environment as a doctoral writer.

I would create an environment that is stress-free and that allows me to focus on important research. I would follow important writing strategies, conduct continuous research, look at past mistakes and do the opposite to always improve and become better. I would seek the counsel and advice of experts or professors with profound knowledge and experience. In the perfect environment, I would write in silence, in a calm atmosphere, read continuously using effective writing/note taking strategies, no distractions using an organized filing system, and find time to meditate on several materials noticing relevant differences, strengths vs weaknesses, etc. distinguishing one from the other in order to contribute to the field of education.

What she said she would want can be seen as a reflection of what was lacking. Fortunately, Chris's story as a doctoral writer is not one of failure because of her already-developed academic writing skills and past experiences, but it is, without a doubt, a story of struggle and perseverance.

As illustrated in these three narratives, in completing the same academic writing assignments, the three participants' developmental trajectories in the first year of doctoral study, indeed, had moments of overlap, but in many aspects, were unique and divergent. The next question, then, is to what extent were the differences caused by or related to an L1/L2 difference,

as discussed next.

The Native- and Nonnative-speaking Perspectives

In the current pool of participants, it was found that the differences in the participants' trajectory in becoming successful writers were less of an L1/L2 distinction, but more of individual differences. The following points emerged from data analysis deserve attention.

First, the two L2 participants in the study are both advanced learners and users of English and have lived and studied in English-speaking environments. In fact, they are teachers (Alex) and professors (Kelly) of English who hold high standard for and have acute awareness of their English and writing skills. Moreover, in their composing process, both participants reported that English as their L2 was already the academic language for them at the beginning of the program. Kelly reported using her L1 only to support or add to the reading/writing/research process and was the one who had more research and publication experience in English as a newcomer than the other two participants. Alex mentioned that she searches for sources and databases, reads, thinks, and writes only in English and her L1 was not part of her academic life at all. Even though both L2 writers still claimed their nonnative status in terms of language and cultural aspects, their language proficiency and skills were sufficient in coping with the academic writing tasks in the doctoral program. In this aspect, there was not a significant gap between the L2 writers and their L1 counterpart (who was also an English-teaching professional with strong writing skills and sufficient writing experiences).

Second, it is vital to consider that the nonnative perspective still existed. It has been mentioned above that the two L2 writers still claim their nonnative status in terms of language and cultural aspects despite that they were advanced users of English. They often attributed their

writing difficulties to a deficit view of themselves as L2 writers, including their grammatical errors, unnatural expressions, collocations, and sentence structures, the slow writing speed and the need for more faculty guidance and support. In their writing process, it was found that they paid more attention to the language aspect of writing such as mechanical errors, sentence-level composing, and academic vocabulary building, as compared to their L1 peer. Their anticipation of L2-related errors and difficulties, their pride as English teaching professionals, and their perception that some faculty members lacked tolerance of grammatical and mechanical errors were all contributing factors that made Kelly and Alex more cautious in their writing process. They were also more strategic and intentional about committing additional time to write and seeking faculty feedback and confirmation whenever possible.

However, this is to not say that the L1 writer, Chris, did not have to pay attention to the language use aspects of composing, but she was able to rely on and have faith in her developed writing skills and fluency in English as a native-speaker when she had to compose a doctoral assignment within a limited time. Finishing a writing product last minute thus became a viable option for the L1 writer, but if L2 writers were to do the same, they might not be able to achieve a satisfactory result. On the other hand, it can be seen that the L1 writer, though happy that she was able to fulfill the program and course requirement as a last-minute writer, did not enjoy the process and acknowledged that writing to meet the deadline did not produce the best academic writing products. In this regard, the caution and the time that L2 writers chose or had to devote to writing helped them produce higher quality products.

Overall, however, the major writing difficulties as reported by both the L2 writers as well as the L1 writer were not language-related, but rather, content-related. The six major types of

assignments (i.e., discussion post, annotated bibliography, book review, research proposal, literature review, and statistics research paper) required the doctoral writers to demonstrate their content knowledge, professional expertise, and research skills. The academic writing convention required them to develop and demonstrate genre knowledge, present strong evidence-based arguments, and in some cases, original interpretations or contributions. Whether the participants were able to address these challenges at the doctoral-level did not seem to relate to their native or nonnative status, but the participants' individual differences, for instance, in the goalsetting for the assignment, the depth of reading and research engaged, the resources and support used, the familiarity with specific topics and strands of research in the discipline.

Finally, native and nonnative writers, understanding their individual strengths and weaknesses, were achieving similar levels of success in the program. Consider the example when Chris and Kelly collaborated on the same writing task – a statistics research paper. In a way, they showed a sense of co-dependence on each other's expertise through their division of work. Chris was perceived as the better and faster writer, thus she played dual roles in the writing process of this 15-page article: she authored the introduction and background sections and was the editor/proofreader to ensure the flow and consistency in the writer voice throughout the document. Kelly was perceived as stronger in her statistical knowledge; thus, she oversaw the drafting of the results and interpretation sections while being the overall statistician on the project. They relied on each other's perceived strengths and had a smooth collaboration that led to the successful completion of the assignment. To this end, the native or nonnative status does not appear to automatically equate advantage or disadvantage at the doctoral level.

Summary of the Main Research Question

In summary, there were commonalities and differences observed in the participants' developmental trajectory as academic writers. The native-nonnative differences existed but were relatively trivial for the participants in this sample, suggesting that the two sub-populations at the doctoral level may share more similarities than differences.

Accounts of Reflexivity - The Expected and the Unexpected

This section is intended to provide reflective accounts regarding my data collection and analysis process.

In the present study, data analysis and data collection took place recursively (Merriam, 1998). I enjoyed the intellectual process of diving into the data when it was freshly collected and making sense of the data, while suspending any conclusion knowing that more data was being collected. At this stage, I became increasingly familiar with my participants' academic writing experience and ability, working patterns and preferences, successes and struggles, and life stories that set the background for their role as a doctoral writer/student. In many ways, even though I have not had opportunities to interact with them beyond the research activities, I became deeply connected with each of them. Indeed, I analyzed the data to tell their stories as my participants, but at times I could not help but see them as my peers. I realized differences between my own experience and path of growth as a doctoral writer in the program as compared to theirs, but without question, we were on the same path of learning to become better academic writers in our discipline.

Emotionally, I relate to their struggle, fatigue, self-doubt, as well as the light-bulb

moments and sense of achievement as I listened and transcribed pieces after pieces of data. Analytically, however, I remembered to remind myself to leave my own feelings and experiences out of the data interpretations, so I would not be biased by my perceptions of the participants' decision making with respect to the program, professor, or the assignment. As I reached my interpretations or conclusions on the data, I always asked myself "Did I say this or my participants say this?", "Is the reasoning offered to explain my participants' behavior or decision making perhaps my own assumptions based on my knowledge and experience in the program?" The process of analyzing data in this study is without a doubt a process of me negotiating with my dual role as both an insider and an outsider (see Chapter Three).

As for the findings generated from my data analysis, I thought it is most helpful to reflect and disclose which of my assumptions before the data collection were confirmed and what emerged from the data that I had not anticipated. My assumptions prior to data collection were based on the literature review that I conducted for this study (see Chapter Two), but also, inevitably, on my identity as a nonnative writer, an international doctoral student in the same program as my participants, and an ESL writing teacher.

Because the recursive process of data collection and analyses took over a year and a half to complete, most of the findings I finally arrived at were expected. For instance, the participants' text production met the program expectations; the participants' composing processes were very different; the L2 writers claimed their nonnative status a disadvantage while the L1 writer did not acknowledge L1 advantage; to name but a few. However, there were also some somewhat unexpected findings. One example is that the participants who struggled and felt unsupported did not exercise agency in using university writing support services or building a

peer support network within the program. I also did not expect that the three participants' experiences in the first year were so uniquely different from one another. I had anticipated to see clearer L1/L2 differences, but my anticipation was not supported by the findings in the current sample.

The interesting findings yielded so far enhanced my confidence in continuing the exploration of the shared and unshared patterns in L1 and L2 doctoral writing. All participants have proven to be effective communicators and provided information-rich data, through which themes were developed to answer the research questions.

<u>Summary</u>

The study examined the text-context relationships and what they mean for becoming successful academic writers at the doctoral level for L1 and L2 writers. Chapter Four presented findings to the main research question and the three sub-research questions, delineating each participant's writing development in terms of text production, composing process, and the related sociocultural factors. Then, it compared and contrasted the three participants' developmental trajectories. Chapter Five concludes the study by synthesizing and discussing findings presented in Chapter Four as well as offering implications theoretically, methodologically, and pedagogically.

CHAPTER FIVE: CONCLUSION

Introduction

This chapter presents a conclusion to the study. It starts by reviewing the purpose, theoretical framework, and design of the study, followed by a summary and discussion of the research findings in relation to previous literature. After acknowledging and addressing the limitations, a discussion of the theoretical, methodological as well as pedagogical implications drawn from the study follows. Recommendations for future studies are also provided.

Summary of Study

The present study was a qualitative investigation of first-year doctoral students' academic writing and writing development in an applied field of social science. With the purpose of identifying possible similarities and differences between L1 and L2 doctoral writers, the researcher collected and analyzed qualitative data such as observation notes, transcribed audio diaries and interviews, as well as writing samples from three participants, one native-speaking and two nonnative-speaking, from the same cohort.

Using an ethnographic approach, the study provided thick descriptions of the features and developments of each participant's text production and composing process during the first year of their doctoral studies. While analyzing the participants' written products and composing behavior, the study focused on identifying the social, cultural, and contextual factors that shaped each participants' writing and writing development, foregrounding the participants' voices when telling the stories behind their work and work process and identifying what factors have supported or impeded their growth. In addition, the study employed cross-case analysis, not to

judge or evaluate whether one participant is inferior or superior as compared to others, but to gain insights into possible L1/L2 differences in the trajectories of the participants' growth.

The research findings aimed to provide theoretical and practical insights into first-year doctoral students' shared experiences and individual challenges as native and nonnative writers, generating implications for doctoral-level student support services and writing pedagogy. Methodologically, the study intended to offer recommendations for future studies using longitudinal and ethnographic approaches in examining academic writing development, especially in terms of using the innovative method of the audio diary.

Summary of the Theoretical Framework

The present study recognized academic writing as an interdisciplinary and multidisciplinary area of study and conceptualized writing as a "situated and mediated activity distributed across temporal, cognitive, social, and material environments" (Prior & Thorne, 2014, p. 31).

To situate this study in the broad and diverse academic writing literature, Chapter Two reviewed the conceptual movements in the history of academic writing research, highlighting the progression from the linguistic-textual tradition of focusing on written texts as products, to the process-oriented approach that analyzes writers and the writing process to decode stages of writing, to the post process era that recognizes the social, cultural, and political dimensions of writing and exploring topics such as the academic writer identity, experience, socialization, and enculturation. As the study intended to approach first-year doctoral writers in a comprehensive manner, theoretically it featured all three of the eras of academic writing research, involving an empirical examination of participants' written products, in-depth accounts of writing processes,

and the social, cultural and disciplinary environments that situated and mediated the participants' writing activities and development.

In addition, Chapter Two presented, critiqued, and reconciled what L1 and L2 writing literature informs us about doctoral writers and its sub-populations. One key research gap was identified: studies focusing on the doctoral population in general do not address the specificity of L2 writing, and yet, L2 writing studies treat L2 writers separately and thus fail to empirically compare L2 writers with their L1 counterparts in natural and/or instructional settings (Tardy, 2006). The present study thus aimed to address the research gap and make meaningful comparisons between L1 and L2 doctoral students by including both sub-populations in a single study.

Summary of Methodology

Guided by the research purpose, research questions and theoretical framework, the study adopted an ethnographic approach and collected data utilizing qualitative methods including observations, interviews, writing samples, and audio diaries. As an ethnographic study, the researcher focused on the social-cultural system of three first-year Ph.D. students who belong to the same culture-sharing group - a specific TESOL doctoral program in a large research university in the Southeastern United States. Specifically, the study analyzed how the participants as L1 and L2 doctoral writers engaged in academic writing activities as defined by the program, the interaction within the program culture, and other socio-cultural factors that shaped their academic writing experiences and development (e.g., native/nonnative, immigration, financial, and/or marital status, etc.). In addition, the study employed a longitudinal approach and followed participants over time, so as to gain a closer examination of the individual writer's

naturally occurring writing process and development as they grow as a writer and researcher in the doctoral program.

Summary of the Findings

Similarities and Differences in Text Production

Findings of Research Question 1.1 revealed that all three participants were able to meet the requirements of the first-year doctoral courses and each produced a high volume of academic texts for six major types of assignments (i.e., discussion posts, an annotated bibliography, a book review, a research proposal, a literature review, and a research paper). The participants' text production was, first and foremost, shaped by the course type, assignment type, as well as the assignment rubric and requirements set by the faculty. For instance, the participants consistently generated a higher number of words for TESOL specialization courses as compared to the other research or methodology courses.

The differences in terms of text production among the participants pointed to the level of challenges and difficulties they experienced. In other words, the participants could face different levels of difficulty in completing the same writing task due to differences in their prior experience in academic writing, goal setting, and content knowledge on the topic.

There were also differences among the participants with regard to growth. At the end of the first-year experience, the two L2 writers have shown and reported growth in various areas of text production, including the ability to produce more academic texts with efficiency, the increasing familiarity and knowledge in coping with various text types, and the deepening understanding of what characterizes quality academic writing. The L1 writer, on the contrary,

largely reported a negative perception of her written products. She indicated the intention to improve the quality of her written work through achieving a better study/work balance to allow more ample time to focus on writing.

Overall, the participants' text production in the first year happened in conjunction with a process of finding their own identity and voices, as well as a new study/work/life balance in order to meet the doctoral-level academic standards co-constructed by the program, the faculty, their peers, and themselves.

Similarities and Differences in Composing Process

Findings of Research Question 1.2 showed that there were commonalities and differences observed in the way the participants composed the doctoral assignments in their first year. In terms of composing habits, all participants composed mainly at home and on the university campus. Using technological tools (e.g., computers and personal laptops, word-processing tools, reference tools, etc.), their composing process largely encompassed the stages of pre-writing, writing, and post-writing.

Facing the challenge of intensive text production, the participants either demonstrated patterns of planned and regular writing sessions or engaged in lengthy intense writing sessions right before the deadlines. Thus, differences can be observed at the micro level of the participants' composing activities, goal setting, and strategy use in each stage of composing. Compared to the L1 participant, the L2 participants paid more attention to sentence-level composing and vocabulary building. On the macro level, keywords have been identified to describe the significant characteristics of each participant's composing process.

Over the first year, participants have shown different levels of growth as shaped by the

individual, contextual and sociocultural factors, with one aspect of shared growth being that they all improved writing speed and fluency.

Similarities and Differences in Factors Impacting the Participants

Findings of Research Question 1.3 illustrated that the three participants' writing experience, process, products and development can be heavily impacted by not only the program-specific academic culture and interactions, but also the broader sociocultural factors such as native/nonnative status, immigration and relocation, family responsibilities, and employment and financial status.

However, each participant at a specific time was impacted to a different degree by the factor types. While one writer did not encounter many difficulties overall and was able to seek support in the new sociocultural environment, the other two writers reported struggles and challenges relating to competing responsibilities in one case, and academic acculturation in the other.

Similarities and Differences in Overall Writer Developmental Trajectories

The finding of Research Questions 1.1, 1.2, and 1.3 informed the answer to the main research question of the present study: with diverse cultural, linguistic, and educational backgrounds, all three participants completed similar doctoral-level academic writing tasks with different levels of confidence and preparedness coming into the program, yet all achieved reasonable levels of success as demonstrated by grades received and overall positive feedback. In the process of writing, however, they shared similarities and differences in the difficulties they encountered and the strategies they used to overcome them. At the end of the first year, all participants established preferred habits and processes in writing for various types of doctoral assignments; however, the text production and composing process for each assignment were still context-specific. All participants' writing experience and development over the first year were shaped by several sociocultural factors including settling in, competing responsibilities, interactions within the doctoral program as well as academic acculturation, but each participant at a specific time was impacted to a different degree by the factor types.

Thus, there were commonalities and differences observed in the participants' developmental trajectory as academic writers. Whether the participants were able to address these challenges at the doctoral level did not seem to be related to their native or nonnative status, but to the participants' individual differences. The L1/L2 differences existed but were relatively trivial, suggesting that the two sub-populations at the doctoral level may share more similarities than differences. Native or nonnative status did not automatically equate advantage or disadvantage in the current research context.

Discussion of the Findings

After reviewing all the findings yielded from a prodigious amount of qualitative data collected over two semesters, this section situates the findings into the current literature and highlights new understanding or insights gained from the findings.

Towards Theorizing First-year Doctoral-Level Academic Writing

The present study was a qualitative investigation of first-year doctoral students' academic writing and writing development in an applied field of social science. By examining the three participants' developmental trajectories as doctoral writers, it became clear that learning to write

academically at the doctoral level should not be viewed as merely a set of technical and instrumental skills that students must learn, and which are then transferable to every other context. Instead, learning to write in the doctoral program as a first-year student should be seen as a human activity in which the writer's developmental trajectory is mediated by how they devote labor, follow rules, develop tools, and interact with communities, in order to achieve their desired objectives/outcomes in and through academic writing.

In line with the view above, the Cultural-History Activity Theory (CHAT) (Engeström, 1987) seems to be a particularly suitable framework for understanding how first-year doctoral students engage in academic writing as a collective learning activity, as illustrated in Figure 7.

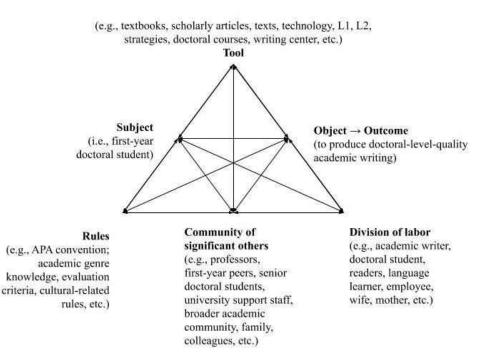


Figure 7. First-year doctoral-level academic writing as a learning activity (adapted from (Engeström, 1987, p. 78)

Following CHAT (Engeström, 1999, Foot, 2014), the model above was developed based

on the three participants' experiences. In the model, learning academic writing during the first year of the doctoral program is the activity system as a unit of analysis. The first-year doctoral student is the subject, using an array of tools (e.g., texts, L1, L2, laptop, reading materials, citation software, study lab on campus) to mediate (a) the object - completing doctoral assignments with reasonable quality, to then achieve the multi-dimensional objects (e.g., pass the doctoral course, getting A-level grade, turn the assignment into future publication, learn to write better) as well as (b) the interactions with the professors who assign the writing tasks, as well as with the community of significant others which may include students' family, peers, employer, and the university support staff.

Various rules - both explicit and implicit, both stemmed from the community of significant others and from the broader cultural, economic and political context in which the interactions are taking place - mediate how the first-year doctoral writer acts and functions in relation to the object(s). These rules can be culturally related (e.g., L2 writer's native culture and the U.S. culture), conventional in the discipline (e.g., follow APA style, demonstrate research genre knowledge, mechanical rules), locally constructed (e.g., the professor's rubric and evaluation criteria, required page number, word count, number of references), as well as legally mandated (e.g., plagiarism policies).

The division of labor refers to roles and responsibilities that community members adopt in relation to the object. For instance, within the faculty-student interaction, the first-year student can be the writer, the learner, or the presenter, whereas the faculty is the reader, the teacher, the facilitator, or the evaluator. Within the peer-peer interaction, the first-year student can be the coauthor, the supporter, or the competitor. The division of labor is typically mediated by power and relations both within the community and the larger sociocultural environment the community is situated in.

In the present study, all six elements were observed within the three participants' cases. Moreover, in CHAT, all the elements above are subject to change over time and tensions/contradictions can be discussed within the framework, which is another aspect why this framework is particularly useful in theorizing the research findings in this study. For instance, we can see from the research findings that one participant's definition of a quality assignment may be different from the professor's or peers'. The CHAT explanation would be that based on the subject's personal experience, position in the power structure, and role within the team, each object may be constructed or perceived differently by various members of the community. Another example can be found in the case of one participant feeling unsupported by the faculty member in the writing process, which negatively impacted her text production. The CHAT explanation would be that tension/contradiction was manifested between the differences in the perceived division of labor in the subject's mind (faculty as facilitator) and the professor's mind (faculty as evaluator).

Therefore, CHAT, as a "practice-based and practice-oriented theoretical framework that focuses on tool-mediated actions by collective actors as well as socioeconomic relations within and between institutional contexts over time", provided an approach and an analytical framework in theorizing doctoral-level academic writing as a human activity (Foot, 2014, p. 31). The present study adopted an ethnographic approach to data collection and data analysis; thus, CHAT was not used to guide the investigation on first-year doctoral writing. However, the findings in this study evidenced that CHAT can be particularly instrumental for future studies that aim at

examining and theorizing academic writing "from actual human practices rather than from abstract ideas or normative ideals or standards" (Foot, 2014, p. 31).

Situating the Current Study in the Broad Literature

As discussed in Chapter Two, a multidimensional mapping of writing research, proposed by Prior and Thorne (2014), offers a comprehensive and informative method to classify writing research. Following their set of continua (i.e., object of inquiry; epistemological; theoretical; data collection; data analysis; research presentation) to situate the current study in the broad and interdisciplinary academic writing literature, the present study conducted a qualitative research in which the researcher as both an insider and outsider in the target research context used ethnographic data analysis to touch upon the following aspects of academic writing:

- academic writing as texts (multiple, as linked by academic genre or situation);
- academic writer (L1 and L2 individual writers in a group);
- academic writing activity (locally situated, dispersed, and recurrent);
- mediation (technological means of production);
- society (social categorization of identity, community, and institution);
- temporal scale (longitudinal).

As other qualitative studies of writing, this study overall tends to be more naturalistic, holistic, and locally situated than quantitative studies. The study focused on particular writers and their practices on the macro level with some mentioning of countable features of writing at the micro-level. The data analysis of the text and the writer was inductive and interpretive, and deeply concerned with the ecologies, contexts and social aspects of writing practices. In many ways, because this study was comprehensive, its findings paralleled or added to previous academic writing studies with specific focuses (e.g., genre, identity, academic socialization, academic acculturation) in many disciplines. The following four aspects are highlighted in this discussion: individual differences in tension and difficulties, composing and strategy, the emotional and affective aspect, and the L1/L2 difference.

Individual Differences in Tension and Difficulties

In the current literature, types of tension and difficulties have been examined and categorized based on the doctoral student population as a whole. However, what has been lacking is the account of the role individual context plays in experiences of writing (Inouye & McAlpine, 2019). This study addressed this research gap by providing thick descriptions of each participant's context and discussing the context in relation to their writing product and process.

As shown in the participants' experiences in this study, doctoral-level text production, as shaped by the course type, assignment type, as well as faculty requirements, was not easy for all three first-year doctoral students. All three participants noted that the intensiveness and extensiveness of doctoral level academic writing (including the related reading, researching, editing activities) posed challenges, expressing that there were noticeable differences between the level and/or type of writing they produced in previous degree programs and the doctoral degree.

However, zooming into each writer's individual experiences was when clear distinctions in the types and the degree of tension and difficulties they each faced can be identified. For instance, this study found that some variations in the individual experience of doctoral-level writing were related to a writer's prior writing experience and genre knowledge (compare Kelly

and Alex, for instance). Other variations were involved sociocultural factors (such as financial stability and family responsibility, compare Kelly and Chris, for instance). Even within the same writer, variations existed when the individual's context changed from time to time (for instance, consider Kelly's family's arrival, or when Chris took on more part-time jobs).

As such, the present study provides insights on how individual context impacts writing and writer development, a much-needed missing piece in the current literature on doctoral-level academic writing. The three participants' cases reminded us that the doctoral students' starting line may indeed be drastically different and yet they are running the same race of academic and research writing under the same timeline and requirements.

The Composing and Strategy

In an effort to cope with the challenges of academic writing over the first year, the participants in this study have used many strategies that previous studies also identified, such as Kelly's concept mapping (see e.g., Kamler & Thomson, 2006; Lee & Kamler, 2008) and Alex's mimicking academic language from example text (e.g., Kiley, 2009).

Particularly, all participants perceived faculty feedback as critical in benefiting their writing, with Kelly actively seeking faculty opinion for additional support and guidance. The importance of feedback has long been established in the writing literature, as Inouye & McAlpine (2019) concluded in their systematic review, "the development of academic identity involves a dynamic relationship between feedback and writing" (p. 15). This study corroborates the previous research as it found that feedback promotes critical thinking about (a) research, (b) disciplinary knowledge, (c) writing expectations, and (d) how the writer represents themselves in the text (e.g., Can & Walker, 2011; Friedrich-Nel & MacKinnon, 2015; Odena & Burgess, 2017;

etc.). Also, in the findings of this study, incidences were described to show how types and quality of feedback that the participants received resulted in different levels of confidence and awareness of autonomy in the writing process (consider how positive or negative feedback have impacted Alex's composing process) or how participants as individual writers exercised agency to seek out and use feedback and how changes in research thinking originated from the feedback received related to changes in writing (consider Kelly's strategy in seeking faculty feedback at each stage of her composing). Eventually, the writing practices interacted with the feedback received in changing doctoral students' overall sense of themselves as researchers and research writers - their academic identity (Anderson, 2017; Inouye & McAlpine, 2017).

Overall, the findings of the study, as with many existing literature, showed that first-year doctoral students require "a guide who can help demystify the writing process and provide opportunities to discuss and experience different ways of writing", in order to achieve writer growth (Cotterall, 2011, p. 415).

The Emotional and Affective Aspect

In the present study, academic writing triggered a range of emotion before, during and after each participant's text production. Differences were also observed regarding the emotions in the composing process over time: Kelly gained increasing confidence over time; Alex's emotions changed constantly, and she experienced a lot of self-doubt; Chris was frustrated. The participants also experienced "happy and exciting moments", usually when they submitted the assignment on time (Chris), received positive feedback (Alex), or felt the text production helped to gain knowledge on a topic of interest (Kelly). Thus, the present study is an addition to the few studies (e.g., Schutz et al., 2006; Pare´, 2010; Manathunga, 2007; Herman, 2010) that explored

emotional aspects associated with doctoral-level academic writing. One such study is Cotterall (2013). Focusing on emotions in the doctoral experience, the researcher found that, her six participants who were doctoral candidates also experienced a "rollercoaster of confidence and emotions" (p. 174) much like what Kelly had experienced. Like the present study, Cotterall's (2013) overall findings also pointed to an interplay of positive and negative emotions.

Thus, this study acknowledged the emotional dimension of doctoral students' experiences and produced consistent findings with previous studies that emotion plays a complex role in the doctoral experience. To better support first-year students' writer development, the emotional aspect of doctoral students' writing experience deserves the attention of the faculty, departments, and institutions. As Cotterall (2013) concluded, "If acknowledged, emotions can inspire, guide and enhance research; if ignored or suppressed, they can delay and even derail it" (p. 12). The L1/L2 Differences

In Chapter 2, it has been identified that the biggest gap in the existing academic writing literature is the paradox that the studies focusing on the doctoral population do not address the specificity of L2 writing, and yet, L2 writing studies give little analytical attention to the doctoral population and treat L2 writers separately without referencing and comparing with their L1 counterparts.

The separation of the two populations in the literature caused a potential danger that one might think that the research findings are exclusive to one population and do not apply to other. This study is one example that showed this is not true. For instance, in the international student literature, prior research (e.g., Wu, Garza, & Guzman, 2010) has shown that international students (as compared to domestic students) face more challenges in terms of initial transition,

academic life, social life, and psychological experiences when adjusting to living and learning in a new culture. However, in the present study, the L1 writer Chris struggled socially and financially, far more than the L2 counterparts, as she settled into the doctoral program. This struggle was present throughout her first-year writing experience.

As demonstrated by this study, L1 and L2 students at the doctoral level may have more similarities than differences especially when the program requires L2 newcomers to have high English proficiency and writing background. For instance, Gao (2012) found that among the three key factors that influenced the three L2 participants' academic writing in English, content familiarity was the major challenge for the students, rather than language and rhetorical differences. In line with Gao (2012), this study also points to the same conclusion that L2 doctoral writers may experience less textual difficulties than one might assume.

Also, differences within the L2 population and the similarities among L1 and L2 writers deserve as much scrutiny as the L1/L2 differences. In this study, many differences were observed between Kelly and Chris, the two L2 writers, with one outstanding difference being that Kelly had much more research writing experience and thus, acquired the identity of an existing member of the discipline. This difference directly impacted Kelly and Chris's levels of confidence and difficulty in completing a certain assignment.

Therefore, the differences observed among the first-year doctoral writers cannot be explained through the simplified view of L1/L2 distinction. Many similar challenges confront L1 and L2 writers, given that writing is not anyone's natural ability. This study contributed to a more complex understanding of how different populations of doctoral writers both resemble and diverge from one another. Empirical, evidence-based understanding of how the two populations

compare is still much needed in the body of knowledge in the field of academic writing.

Limitations

This study is not without limitations. The main one is that all the conclusions drawn in the study are subject to the limited number of participants and the focus on one academic program. Only three participants were included in the study because they were the ones who completely satisfied the determined sampling criteria (see more details in Chapter Three). Even though longitudinal data from multiple sources were collected on the three participants so that each participants' writing development could be adequately traced and described, new data or meaning units may have been discovered if the sample size were bigger. In other words, in the present study, the saturation of the data was achieved for the purpose of illustrating each writer as well as the similarities and differences between them and them only. Such findings provide insights into how native and nonnative doctoral writers write and develop their academic writing skills but do not represent all native and nonnative writer's experiences and perspectives.

Likewise, the results of this study have limited generalizability because of the ethnographic nature of the study - it intended to focus on participants who belong to the same culture-sharing group in a specific local context. Students from other doctoral-level academic programs are likely to have different profiles as academic writers and perform different academic writing tasks under different program requirements, expectations and culture. Thus, the research context of the present study is not representative of doctoral education in general, but the findings and implications yielded still contribute to the body of knowledge in the field of academic writing and doctoral education.

Another limitation may be the uneven amount of data gathered from the participants. The

researcher collected more data from two out of the three participants. This is partly due to the differences in the participants' work patterns. For instance, for the same assignment, more audio diary data might have been gathered from the participant who completed the task in many writing sessions than from the participant who did so in fewer sittings. However, another reason for the uneven amount of data gathered is simply the research design - it is somewhat unrealistic to gather equal amounts of data from busy doctoral students using ethnographic methods in a longitudinal study. The research design required time commitment on the part of the participants through recording themselves, carving out time to meet with the researcher, to be observed and interviewed - all during probably the busiest and the most stressful year of the doctoral program if not their life. It is only natural that not all participants were able to commit at the same level. Researchers who intend to replicate the study or plan on working with a bigger sample size should anticipate this challenge to arise.

Implications

Implications for New Doctoral Students as Academic Writers

This section is intended to address what first-year doctoral students need to know and be able to accomplish to join the conversation of their discipline through the means of academic writing.

What do first-year doctoral students need to know? Reflecting on their first-year experience, the participants in this study shared what they wished they had known before they entered the program or at an early stage of the program. The first one is the understanding of academic writing at the doctoral level. It is beneficial for first-year doctoral students to reflect on

their prior academic writing experience, as well as anticipate and actively explore the differences in terms of quantity, quality, and depth between doctoral level academic writing and, for instance, what they have done for their master's program and/or professional purposes. Furthermore, first-year students should carefully research the purpose and the anticipated outcome of doctoral education in general and the doctoral program specifically. In doing so, students may be more mentally prepared knowing what new skills, expertise, and identity they are committing themselves to develop throughout the doctoral program. In addition, even when anticipated, the actual academic challenges still remain and may be compounded by other life challenges as first-year students start a new chapter of life and adopt a new identity.

To combat the challenges, what do the students need to be able to do to join the conversation of their discipline? Drawing on the experiences of the participants in this study, some key abilities or strategies that first-year doctoral writers should develop include (a) the academic ability to read, understand, write, critique, edit, and present on various types of research-based academic genres in the discipline; (b) the ability to stay organized and focused, manage time well, and maintain work-life-family balance, so as to maintain a high level of productivity, and (c) the social and networking skills to build and maintain relationships and seek recourse, support and help academically, emotionally, and financially in an academic setting.

Finally, regarding the native and nonnative doctoral writers, it is found that the native or nonnative status does not automatically equate advantage or disadvantage. In this study, the differences found in the participants' trajectory in becoming successful writers reflect less of the L1/L2 distinction, but more the individual differences. Therefore, native and nonnative writers, understanding their individual strengths and weaknesses, are equally valuable contributors to the

academic conversation in their discipline.

Implications for Doctoral Level Academic Writing Pedagogy

This study provided an insider view of the participants' doctoral program. Through the findings on the three participants, practical implications for doctoral education and writing pedagogy can be gained by providing insights about the factors that trigger or impede first-year students' growth in their ability to write effectively to become a member of the program as well as the discipline at large.

From the findings in this study as well as many previous studies (e.g. Can & Walker, 2011; Friedrich-Nel & MacKinnon, 2015; Odena & Burgess, 2017), we know that faculty members and supervisors are key players in shaping a newcomer's writing expertise. Faculty members exert enormous influence on first-year writers through the types of written text they assign and the way the assignments are structured, the level of clarity on the expectations and grading they provide, the style of feedback and support they give, the preference and potential bias they hold, and the flexibility and understanding they have towards students facing difficulties. As one participant in this study put it, "Faculty are the key. It's all about who you have as faculty in the first year. It could make or break your experience."

The quote indicates that the way faculty members handle the aforementioned aspects can differ dramatically and, consequently, the doctoral students' experiences can diverge broadly. To address this issue, universities and programs should encourage doctoral faculty members to take up opportunities to reflect on, compare, and develop their pedagogical repertoire. Oftentimes doctoral students, like the participants in the current study, do not have the option to choose faculty as they have to go through a certain course sequence enabled by course and faculty

availability. In some cases, first-year and second year doctoral students, or doctoral and master's students may be mixed in one course. To facilitate students' different learning needs, it is vital for the faculty members to understand the composition (e.g., who are the first-year, second-year doctoral students, and who are master's students) and the characteristics of the students, and reflect on the issue of differentiation in the course design, assignment types and requirements, as well as grading standards and expectations. Doctoral programs should encourage and facilitate conversations among faculty members on issues surrounding standardization and differentiation, thereby helping them gain understanding of each other's pedagogical approach, exchange best practices, align expectations to minimize student confusion caused by different teaching philosophies and treatment across the board. Even the simple action of faculty who teach different courses that students are taking concurrently communicating with each other to separate out assignment due dates can make a big difference in the doctoral students' writing experience, and quite possibly, in the quality of their final written products.

Another pedagogical implication yielded from the data is that first-year doctoral students desire and appreciate mentorship and guidance as they enculturate into the program. In this study, the doctoral program employs a coursework approach in the first two years of doctoral curriculum in which students take graduate-level specialization, research methods, and cognate courses. Under this structure, doctoral students develop relationships and interact with the professors as faculty and students, which is different from the more one-on-one, individualized relationship between mentors and mentees. In the absence of mentorship, the participants in this study largely attributed their first-year growth to the independent and personal process of "faking it till you make it" or "figuring it out" by themselves. While some actively sought extra guidance

and feedback from their professors; others did not and were left feeling lost and confused. In addition, when doctoral students work with multiple professors in graduate courses, it can be unclear whose pedagogical role it is to induct students into the discipline's writing practices. Certainly, the ideal is that all faculty share this responsibility jointly, but the danger is that no one actually assumes this role and responsibility but expect that students have been taught and are able to perform. Past research (e.g., Cotterall, 2011; Inouye & McAlpine, 2017; Odena & Burgess, 2017) suggested the quality of the supervisory relationship and the practices in which the supervisor and student are engaged in are critical factors contributing to effective doctoral learning. As such, doctoral programs whose curriculum structure do not offer mentorship experience should consider how to build in the mentorship piece especially in the entry stage of the program, so the first-year students can have clarity as to who they can reach out to for help and receive consistent individualized attention as they enculturate into the program.

Furthermore, pedagogy is not the only dimension deserving review and attention in improving doctoral education. To support doctoral students' growth as academic writers, institutional support services should be provided starting from the student's admission and extend throughout the different stages of doctoral study. In the present study, the doctoral writers had access to many helpful university-level support services particularly relating to academic writing such as writing centers, library services, and graduate workshops, which they made use of to varying extent. They were also given financial support through graduate teaching assistantships (though one participant did not work as graduate teaching assistant as she received funding from her home country's government). However, more program-level effort can be put forth as well. For instance, the study found that prior research writing experience is a big factor

in shaping the participants' text production and composing process. The participant who did not have research reading or writing experience prior to the doctoral program went through a steeper learner curve as compared to others. Doctoral programs thus need to consider if prior research experience should be required as an admission criterion. If the doctoral program does not require research experience upon admission, then plans should be made to provide additional support to students without it. Surveying students' writing history and difficulties within the program may be a helpful first step. Other program-wide activities such as organizing writer retreats can also be implemented to immersing students in the writing process in a supportive environment, boosting students' writing productivity, peer collaboration, and motivation.

In summary, novice doctoral students' academic writing expertise will develop as they "observe experts writing and produce their own texts, supported by advice and feedback" (Cotterall, 2011, p 141). It is therefore critical that faculty acknowledges the responsibility to provide students with access to such opportunities in the coursework stage of doctoral education. In addition to faculty guidance and mentorship, writing expertise also depends on understanding the perspectives, discourse, and resources of the institution and the discipline at large. It matters how doctoral researchers are encouraged to gain such understanding. The first year in a doctoral program is when students form their new identity of doctoral writers, as they familiarize themselves with institutional and disciplinary writing conventions, develop an appropriate voice, and learn to adopt a critical and authoritative stance in their writing. Whether with or without prior research/writing experience, students require assistance if they are to become competent and confident scholarly writers.

Implications for Research

Theoretical Implications

By gathering data from the participants longitudinally and systematically, the present study presented a comprehensive picture of L1 and L2 doctoral writing in a particular doctoral program in an applied social science field. The study thus enriched the existing academic writing literature by providing detailed and rich accounts of writer development at the doctoral level and exploring the relationships among doctoral students' text features, composition process and writing contexts.

This study demonstrated that only by examining academic text in relation to the context will the researcher's eyes be opened to the wide range of factors that play into the writer' writing process and product. It is thus one-sided and problematic to examine the text without the context and vice versa. It is also vital to "avoid causative or deterministic views of context, assuming that every text in the same social and cultural situation will be the same" (Paltridge, Starfield, & Tardy, 2016, p. 23). As found in this study, even though there were similarities in each of the texts and indeed the contexts within each participant, their text production and composing processes still varied to a lesser or greater degree for each assignment based on the motivation level and the goal setting. Thus, the interaction between context and text should be viewed and interpreted in a bi-directional, mutually constitutive way (Gallagher, 2014; Hasan, 1999).

Moreover, an academic writer's text production and composing process must be examined in a timeline in order to capture which composing behavior is consistent and therefore forms patterns that are representative of the writer's habits and growth, and which composing

behavior is an incidence of tension that leads the writer to deviate from the preferred practices.

Perhaps the most important theoretical implication is that the study contributed to a more complex understanding of how different populations of doctoral writers both resemble and diverge from one another. It has been identified that the biggest gap in the existing academic writing literature is the paradox that the studies focusing on the doctoral population do not address the specificity of L2 writing, and yet, L2 writing studies give little analytical attention to the doctoral population and treat L2 writers separately without referencing and comparing with their L1 counterparts. The separation of the two populations in the literature caused a potential danger that one might think that the research findings are exclusive to one population and do not apply to other. This study is one example that showed this is not true. L1 and L2 students at the doctoral level may have more similarities than differences especially when the program requires L2 newcomers to have high English proficiency and writing background. Also, differences within the L2 population and the similarities among L1 and L2 writers deserve as much scrutiny as the L1/L2 differences. Empirical, evidence-based understanding of the two populations in comparison is still much needed in the body of knowledge in the field of academic writing. Methodological Implications

The Longitudinal Lens in Doctoral-Level Academic Writing Research

Few studies in the field of academic writing were conducted with a longitudinal lens (Paltridge, Starfield, & Tardy, 2016). This study added to the pool of longitudinal academic writing research as it conceptualized every academic writing activity at a specific time and in a specific setting as part of a long process of writer development in which the writer's text production, composing process and strategy use change based on social situations as well as over time.

The longitudinal lens is particularly needed in academic writing research. Especially considering that both writing, language, and writer identity development happens gradually, over a long period of time, longitudinal qualitative studies of writing complete the body of knowledge in academic writing research in ways not easily captured by short-term or laboratory-style studies (Casanave, 2018).

When the object of inquiry is academic writing produced at the doctoral level, which is neither short-term nor laboratory-style, this longitudinal ethnographic study may be particularly useful to trace patterns in writing and academic identity development over time, revealing how thinking evolves during various stages of the doctoral program in response to milestones, different types of feedback, and growing knowledge and confidence over an extended period of time (Inouye & McAlpine, 2019).

However, conducting a study longitudinally can be challenging and this may in part be the reason why more longitudinal studies have not been conducted. One key aspect to consider is whether it is realistic for the researcher and the participants to stay committed to the prolonged engagement and complete the required research activities. To the researcher's end, perhaps the involvement of faculty is needed, as they are better positioned to carry out and coordinate longitudinal research projects. In the same light, participant attrition is another major drawback that needs to be considered for longitudinal studies. In the present study, I am grateful that as a doctoral candidate, I was able to commit to a year-long data collection process and that none of my participants chose to withdraw from the study. Another challenge in conducting qualitative

data longitudinally is that the researcher must be skillful in handling, tracking, and making sense of the large amount of qualitative data. The data management principles mentioned in Chapter Three helped me tremendously in this study.

Audio Diary as a Method of Data Collection

Audio diary remains a relatively under-utilized method in qualitative data collection (Williamson et. al., 2015). In the present study, audio data was used to understand the writer's composing process in addition to the observational approach. Specifically, participants were asked to record an audio diary using their personal smartphones each time they worked on the assignment from the beginning to the completion of a task. They had the option to follow an audio diary guide provided by the researcher as they record themselves talking about the composing process, work progress, and strategy use for each writing session.

The audio diaries collected in the study proved to be particularly necessary and fruitful in answering the research questions. First, audio diary was built into the study design due to the nature of the subject matter being investigated - doctoral-level academic writing. To scrutinize how a doctoral student composes one assignment, the researcher often needs to track a long process, ranging from hours to possibly months, which typically includes multiple writing sessions that could take place anywhere and anytime based on the participant's choice. As discussed in Chapter Three, simultaneously observing the participants working at their individual timeline at different physical locations was not only rather implausible, but also limited in the capacity to capture realistic composing processes that doctoral students go through in a naturalistic setting. However, with the design of using observation in combination with the audio diary, I as the researcher was able to capture and provide thick descriptions on the nuances and

details in the participant's dynamic writing process, which without the audio diary data, would not have been possible.

Another benefit of using the audio diary method is that it captures participants' thoughts, emotions, and actions "live" in the moment. Such data was high quality and valuable, which cannot be easily achieved through other data collection methods such as think-aloud or retrospective interview. Because the recording took place in a private setting without the researcher's presence, the participants seemed more comfortable sharing their true thoughts and feelings as they go through the continuous, recursive, yet very personal and emotional process of writing. Thus, the audio dairy method provided an entry into capturing practices and perspectives that might have been challenging for participants to articulate or intimidating to discuss in a faceto-face context. Retrospective interview, in comparison, can be fruitful in understanding participants' general experiences, views, and feelings over a period of time, but may not be able to capture the same level of detail and dynamic in the participants' experiences as did the audio diaries. Another alternative method, think-aloud, can help a researcher eavesdrop on the participants' thinking in real time. However, as the process of think-aloud uses participants' cognitive capacity, it can negatively impact their ability to perform the task required. For the task of writing a doctoral level assignment, which is highly cognitive-demanding, the think-aloud method may not be a good option, as shown in previous research (e.g. Yang, Hu, & Zhang, 2014). Audio diary offers a balance between the interview and the think-aloud approach; it collects intimate data but is not intrusive in the process of doing so.

Finally, since recording the audio diaries does not require the physical presence of the researcher, the data collection was participant-centered and automatic. Researchers who face

geographical constraints in data collection can take advantage of this method. Especially considering the current time when much research is being impacted by COVID-19, audio diary offers the option of collecting data distantly.

In summary, the use of audio diary, by yielding high-quality data, has been a powerful addition to the multiple data sources used in this study. I therefore highly recommend this method to future studies that need to collect data on participants' behavior, experience, and/or perspectives in naturally occurring settings in a participant-centered manner in real time when facing time and location constrains. Audio diary can also be used in combination with other data collection methods as a supplementary data source. In order to ensure the quality of audio diary data collection, I recommend the following strategies:

- 1. Ensure that all participants have high quality recording devices before data collection starts.
- Provide participants with audio diary recording training session(s) before data collection starts.
- 3. Provide participants with a semi-structured audio diary guide (see Appendix B as an example). Be sure to pilot the guide with the participants before data collection starts.
- 4. Provide ongoing feedback on the quality of data provided by the participants during data collection.
- Regular reminders may be necessary to encourage participants to record and/or send back audio diaries during data collection.
- 6. Always protect the participants' privacy and data security during the process of data recording, transferring, and storage process. Comply with the IRB protocol.

Recommendation for Future Research

There are multiple areas that future research should investigate further.

First, this study primarily presented the first-year doctoral students' writing experience and development from the participants' point of view. By drawing on multiple data sources, the participants' "reality" was triangulated. However, to deepen the understanding of the dynamic and tension in the same research context and provide more complex analysis of the nature of academic learning in doctoral programs, future studies should consider collecting data from other persons that the doctoral writers interact with such as faculty members, program administrators, writing center coaches, or librarians, so that multiple perspectives within the culture-sharing group can be generated and compared.

Second, the first year in a doctoral program was found to be a main period of growth for doctoral students. This study was able to capture important changes and growth within each writer as they entered a new academic community and culture. However, just as my participants continued to develop as academic writers, it is important to investigate other stages of doctoral writer development. Doctoral writers may face new challenges in academic writing as their membership in the community became more established. For instance, in their second year, my participants began to learn how to write for publications which entails a very different process, relationships, challenges and growth from writing for doctoral assignments. How do they cope with the new stage of learning and challenges in academic writing? Do they transfer the skills, strategies and experiences gained in the first year? Which sociocultural factors changed and became more or less impactful as the students became more senior members in the doctoral program? Similar methodology could be adopted by future studies to assess doctoral writers'

continuing growth.

Third, in this study, the L1/L2 writer differences as first-year doctoral writers were investigated in a TESOL doctoral program context. Future studies should examine L1 and L2 doctoral writer pairs in other fields and disciplines, such as the field of science, which could yield very different results. The participants in this study have years of either educational or professional background in TESOL. The L2 participants both have a high command of English as a foreign language and prior educational experience in English speaking countries upon entry to the doctoral program. These characteristics inevitably play into the participants' experiences. Given how closely related the two fields of TESOL and academic writing are, the participants may have had much better command of English and understanding of academic writing as compared to students in other disciplines. On the other hand, the discipline also places high importance on writing, as assessments were most commonly done in the form of writing in this discipline as a field of social science. Therefore, it is not surprising to find that that participants text production workload was the highest for the TESOL specialization courses. As such, disciplinary differences deserve further investigation.

Fourth, although differed in their academic writing experiences, the three participants were successful in meeting the program's academic writing requirements as first-year doctoral students. To add complexity to the understanding of the issue at hand, future research should consider examining those who were less or not successful in their first year in a doctoral program.

Finally, drawing on the findings of the study, the Cultural-History Activity Theory (Engeström, 1987) may be particularly instrumental as an analytical framework for further

research that aims at examining doctoral-level academic writing as a collective learning activity focusing on the sociocultural perspective, as illustrated in details earlier in this chapter (see Discussion of the Findings).

Conclusion

The conclusion of this study is that academic writing, especially during the first year of a doctoral program, is a complex human activity in which doctoral writers' writing products, composing processes, and writer developmental trajectories are mediated by how they devote labor, follow rules, develop tools, interact with communities, and adjust to new cultures and surroundings in order to achieve their desired objectives/outcomes in and through academic writing (Foot, 2014; Beauchamp, Jazvac-Martek, & McAlpine, 2009). As doctoral students enter a doctoral program, they need and deserve to be supported regardless of their native- or nonnative status because the first-year academic writing experience is critical and central to doctoral and writer growth.

Academic writing is the main tool doctoral programs and faculty members use to evaluate students' effort and engagement as well as academic competence and maturity. This largely reflects a writing-as-product perspective in the doctoral writing pedagogy. However, as the three participants' cases remind us, as newcomers, the doctoral students' starting line may indeed be drastically different and yet they are running the same race of academic and research writing. To arrive at the writing product, doctoral students go through varying developmental paths. Their composing processes are directly impacted by not only their writing and/or academic background and difficulties, but also heavily influenced by sociocultural factors within and outside of the doctoral program. Thus, as informed by research, pedagogically, doctoral

programs should reflect on how they can adopt a writing-as-process view to better understand students' writing processes, so as to offer instruction, intervention, structure, and support accordingly. In seeking effective ways to provide pedagogical and institutional support, it is also vital to consider writing as more than a product and a process, but a fluid, socially-structured activity, and thus the way to support students' writing should not be limited to writing skills building, but extended to social, emotional, and financial aspects that students can access at different points as needed.

To the academic writing research community, this study is confirmation that academic writing at the doctoral level should be treated as a separate entity, and a reminder that only by examining academic text in relation to the context will the researcher be able to observe a fuller range of factors that play into the writer's writing process and product, and a message to L1 and L2 writing researchers who are interested in the doctoral population that they should consider breaking the barriers in the two worlds of research by incorporating and addressing both L1 and L2 populations in the same research projects. Empirical, evidence-based understanding of the two populations is still much needed in the body of knowledge in the field of academic writing.

As a final remark, for doctoral students, academic writing is at the core of achieving high academic goals, entering the world of academia, and participating in discipline-specific communities. Becoming a doctoral writer, however, is a transition, a juggling game, and a balancing act. The participating doctoral writers portrayed as individuals engaged in multiple writing practices in one doctoral setting may not be representative of all doctoral writers, but the documentation of locally situated academic writing practices is an invitation for the readers to ask questions about themselves and the doctoral writers around them.

APPENDIX A: STANDARD OBSERVATIONAL PROTOCOL

Meta-Data	
Observation Session: Date: Purpose: Participant: Length of Observation: Location: Layout of the site:	
Descriptive Notes	Reflective Notes

APPENDIX B: AUDIO DIARY GUIDE

Audio Diary Guide

When you talk about your current writing session, you can make your recording whatever length you choose (the longer the better!). Imagine you are talking to a close friend about the writing session you have just completed or are still completing. You may talk about anything relating to your composing process, work progress, the feelings and emotions you experienced,

and more. Please be sure to start with the following four questions.

- 1. What is the assignment you are working on?
- 2. How long did you work during this session?
- 3. What was your writing process during this time?
- 4. How do you feel about this writing session overall?

Now, please share with me what you feel is important during your current writing session.

You may use the following questions as a guide if you wish:

- Talk about your work progress (Did you set a goal for this writing session before you started? Did you complete the goal? What percentage of the assignment have you completed? Are you happy with the work progress so far? When do you plan to start your next writing session? How much more time (how many more writing sessions) do you need to complete this assignment?)
- Specify your composing process (Tell me about your writing process in more details. Handwritten or typewritten? Drafting new text, copyediting text, or both? What materials did you reference while writing? How did you use them? For bilingual writers, were you thinking and/or writing in your L1 or L2?)
- Share more about your writing experience (What did you find particularly difficult during this session? What are some happy moments you had during this session? Anything else you feel is important to share?)

APPENDIX C: SEMI-STRUCTURED INTERVIEW PROTOCOL (INITIAL INTERVIEW)

Semi-structured interview protocol (Initial Interview)

Purpose: to understand each doctoral writer's personal background, past/current academic writing practices, and perception of doctoral-level academic writing at the beginning of the first semester of doctoral studies.

Data	Question	Prompts & Elicitations
To break the ice and provide some background.	Small-talk Introduce myself and state the purpose of the interview.	Thank you Purpose Ethics: Confidentiality/freedom to answer or not answer/ notes/audio- recording Any questions before we start?
Demographic data	Tell me about yourself.	Tell me about your basic information (e.g. nationality, age, sex, education background, professional background, income level, family composition)
Academic writing history	Tell me about your academic writing experiences (in English) prior to the doctoral program.	When and where did you start to write academically in English? Past training in academic writing What types of academic writing have you done so far? Highest level of writing done prior to doctoral program
Current writing practices	Tell me about any academic writing experiences you are currently engaged in.	Are you doing any kind of academic writing at the moment? If yes, how often do you write? What type? How do you feel about them? If not, what was the last time that you had to write academically? Do you engage yourself in any other forms of writing practices?
Perception of doctoral- level academic writing	Tell me how you feel about doctoral level academic writing.	 What do you feel about doctoral level academic writing? What expectations do you have? How confident are you in facing doctoral level academic writing tasks? How prepared are you for facing doctoral level academic writing tasks? What are your strengths and weaknesses as a writer? What are your advantages and disadvantages as a writer?

Generally useful prompts and elicitations:

Silence: Pauses suggest to the interviewee that you want them to continue talking.
Seeking elaboration: 'What did you mean...?' or 'Can you give more detail...?'
Probing for details: 'Do you have any examples?' or 'Could you say more about...?'
Specifying questions: 'What happened when you said that?' or 'What did he say next?'
Reflecting meaning: 'Do you mean that...?' or 'Is it correct that...?
Reflecting emotion: 'You sound [emotion] when you say that?' or 'Is it correct that you feel [emotion]...?

APPENDIX D: SEMI-STRUCTURED INTERVIEW PROTOCOL (END-OF-THE-SEMESTER INTERVIEW)

Semi-structured interview protocol (End-of-the-Semester Interview)

Purpose: to understand the participants' writing experience and development by the end of their first semester in relation to social, cultural and contextual factors.

Data	Question	Prompts & Elicitations
To break the ice and provide some background. Academic writing experiences in the current semester	Small-talk Introduce myself and state the purpose of the interview. Tell me about your academic writing experiences this semester	Thank you Purpose Ethics: Confidentiality/notes/audio-recording Any questions before we start? What academic writing tasks have you completed this semester? Overall experience Tell me about the most difficult writing assignment you have completed Tell me about the easiest writing assignment you have completed What are some constant difficulties or challenges you have encountered? Any help and support? Any strategies you employed?
Current versus previous academic writing experiences	How does your current academic writing experience compare with your previous experiences?	How are your previous academic writing experiences similar to now? How are your previous academic writing experiences different from now? Did you improve? In which aspects? (e.g., Linguistic development/ Composing process/ Strategy use)
Future writing development	What do you want to improve in terms of your academic writing?	Are you happy with your academic writing abilities now? What would you like to improve next?
Social factors in influencing academic writing and writing development	What social factors have influenced your academic writing?	What social factors have influenced your academic writing process in completing the focal assignment? Positively and negatively What social factors have influenced your academic writing process in general? Positively and negatively What social factors have influenced you in further developing your academic writing? Positively and negatively

Cultural factors in influencing academic writing and writing development	What cultural factors have influenced your academic writing?	What cultural factors have influenced your academic writing process in completing the focal assignment? Positively and negatively What cultural factors have influenced your academic writing process in general? Positively and negatively What cultural factors have influenced you in further developing your academic writing? Positively and negatively
Contextual factors in influencing academic writing and writing development	What contextual factors have influenced your academic writing?	What contextual factors have influenced your academic writing process in completing the focal assignment? Positively and negatively What contextual factors have influenced your academic writing process in general? Positively and negatively What contextual factors have influenced you in further developing your academic writing? Positively and negatively
Member checking	Paraphrase what I heard about the main data	

Generally useful prompts and elicitations:

Silence: Pauses suggest to the interviewee that you want them to continue talking. Seeking elaboration: 'What did you mean...?' or 'Can you give more detail...?' Probing for details: 'Do you have any examples?' or 'Could you say more about...?' Specifying questions: 'What happened when you said that?' or 'What did he say next?' Reflecting meaning: 'Do you mean that...?' or 'Is it correct that...? Reflecting emotion: 'You sound [emotion] when you say that?' or 'Is it correct that you feel [emotion]...?

APPENDIX E: PARTICIPANTS' WRITING SAMPLES

Kelly's Writing Sample – A Discussion Post

These readings are really interesting in discussing both critical and sensitive periods of different learning environments, while at the same time raising questions to elicit the multifaceted nature of SLA.

In the article entitled 'The Critical Period Hypothesis: L2 Related Evidence', Singleton and Ryan discuss the availability of critical period from several critical perspectives: The 'Younger = Better' Position, The 'Older = Better' Position, The 'Younger = Better in Some Respects' Position, The 'Younger = Better in the Long Run' Position, and The Qualitative Change Position. Although these positions may contradict one another (The 'Younger = Better' and The 'Older = Better'), they overall imply that there is an age, after which SLA is not possible. My overall understanding of this chapter leads me to acknowledge that 'age' variable contribute to SLA process. Having examined findings of different reported studies, it is interesting to know that phonological, morphological and syntactic domains tend to show stronger correlation with age (Age of Arrival), even though, other aspects such as semantics, discourse, and pragmatics seem to be put aside.

The reading also informs that adults are faster than children at earlier stages of morphological and syntactic development (holding time and exposure constant), and that attainment of native-like fluency across all domains is only possible if the language is started prior to six years of age (Oyama 1976). Thus, learners starting not much later than age 6 can become fluent but will have an accent in phonology, and those starting after 15 years of age will have 'accents' in all domains. While these premises add better explanation for the role of age on SLA, the terminus for critical period itself remains debatable. Based on my experience as an L2 learner in a foreign language context, with unnatural learning process and lesser exposure to the target language, I must say that it takes more than a critical period to be a successful L2 language learner. In this learning situation, adults learners attending L2 classroom may have more and better input than children and ultimately may achieve better comprehension. Thus, other factors such as language instruction, motivation, and learning strategies can be more influential. (word count: 358)

To complete discussion on 'age' factor, Herschenson adds explanation on sensitive period position from various different perspectives (Universal Grammar, Age of Arrival, and learners' cognitive abilities), and they imply that there is a particular period when (second) language acquisition is optimized. My understanding about the reading is that sensitive period is likely to be homogeneous across individual cognitive abilities, and that environmental variations such as social class and child-rearing patterns seem to have little effect on L2 acquisition. Also, the development of identity makes adult learners more self-conscious, and that ego permeability and cultural identification can cause difficulty for adults to learn another language. If sensitive period is an ideal condition for L2 acquisition, I think L2 learners passing the sensitive time constraint will experience more complex learning process, and unlikely to achieve native-like competence. Therefore, 'The Younger = The Better' position will be undoubted, and it becomes imperative for L2 learners to start L2 learning during childhood, especially when it comes to developing L2 language grammar.

However, reflecting on what adults learners are better of doing as opposed to children (The Older = The Better position), and what adults L2 starters are possible to achieve (native-like

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end state), I found the effect of sensitive period less convincing. The reading highlighted several conditions that may contribute to this disagreement. It can be inferred from the reading that input, cognitive development, and social/affective factors are likely to cause differences on learners' language learning experiences. In this case, there is a probability for learners' cognitive system to override the process of natural language learning. So, despite the possibility of 'age' factor to contribute to SLA process, other confounding factors may come up with better results. (word count:282)

Alex's Writing Sample – A Discussion Post

The article Processing Instruction presents the case for PI (processing instruction). a supplemental didactic approach to well established comprehension-based language instructional methods such as Total Physical Response or the Natural Approach. PI is "based on psycholinguistic processes occurring during learner comprehension of second language (L2) input considering the nature of real-time input processing and the ways in which learners make formmeaning connections during comprehension." (p 267). The objective of PI is to analyze and understand intake, the mechanism though which learners sift through input information and collects the data that will be stored in the memory to be additionally refined. Worthy of mentioning is that in this model, intake is not to be confused with the acquired linguistic form. The two principles of second language PI. The Primacy of Meaning Principle and The First Noun Principle offered me a wealth of knowledge to analyze and itemize according to previously acquired information. (VanPatten. 1996. 2004b).

Particularly, I dissected the second principle through the lens of a language not following SOV format. such as German language, which does not necessarily rely on word order to indicate certain grammatical function, rather depend upon inflections to endorse function. Clauses formation in German language rely heavily on genders, endings in nominative. accusative, dative and genitive. displaying a complex array of sentence structure. Starting from the predicative or declarative sentence (der Aussagesatz), elements such as finite verb. the verb complements made with other part of the speech, adjectives in nominative or dative, placement of dative or accusative objects or of nominative subject, contribute in constructing sentences of great intricacy. For example, the sentence: Obwohl du ihn erst heute kennen gelernt host scheinst du alles Ober ihn ZU wissen may be encoded as: although, you him first today to know learned had seem you all about him at to know, when in facts it means: although you meet him today for the first time today. it seemed that you know a lot about him. To conclude, both Van Patten (2002) and LoCoco (1987) agree that processing information employing the The First Noun Principle may result in loss of meaning altogether. (Word count 349)

The article Explicitness in Pedagogical Interventions: Input. Practice. and Feedback offers an insightful presentation of the nuances of explicitness in the input, from the problematic area of measurement and control of the implicit and explicit knowledge refined and retained through the comprehension process.

The introductory part was relevant to me, a language practitioner concerned with acquiring most avant-garde didactic methods to implement in my instruction. For example, 8 years ago when I started teaching in a bilingual setting. I had no knowledge of Total Physical Response method, yet I employed in in my instruction because "it made sense", was a natural way of using target language while conferring meaning thought gestures and mimics. Now. I am extremely eager to learn about the evidence brought into light in regard to importance of certain mechanisms correlated to language acquisition in adult learners such as explicit input: guiding principle (rule) of the specific concept presented. practice within a task-based activity and explicit feedback. In the core of the article it is examined the topic of explicit and implicit learning in cognitive psychology in terms of effectiveness. On one hand, under the cognitive psychology umbrella the notion the artificial grammar learning (AGL) was introduced and measured on grammatically judgement assessment. The findings unveiled that the participants in

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the explicit learning condition. who were provided with instruction of how the language functions, under-performed the participants in implicit condition (Reber, 1961 1976). In comparison, in SLA research, seem to be exist disagreement between proponents for and against of explicitly presenting the rule prior to input. Yet. processing instruction (PI) assets implementing structured input activities (VanPatten and Oikkenon (1996) which may be "the most explicit form of input, as it includes four level s of manipulation: (a) only on form is presented at a time: (b) the key form appears at the beginning of the sentence, increasing its saliency:(c) the frequency of the form is increased: and (d) the input is presented through task-essential activities"(p. 236).

Furthermore. a number or research on the effects of explicit feedback presents various studies reporting positive and neutral effects. Concluding that "explicit information is beneficial when practice is not task-essential.' (p. 245). In terms of measuring effects of both explicit rule presentation and explicit feedback, further interrelationship between other participating elements such as rule complexity. task typology, input and practice may be considered prior to formulating a conclusion in respect to best strategy of offering feedback. (Word count 383)

Chris's Writing Sample – A Discussion Post

Van Patten discusses the increasing interest in processing instruction (PI). The pedagogical intervention focuses on psycholinguistic processes, which occur during learner comprehension of L2 input. As it is important to understand L2 input in second language acquisition, PI considers how learners make form meaning connections during comprehension. Research specifies that PI is different from other types of instruction, and causes failure in interpretation at the beginning stages of activities, so that the processors can begin to readjust. Rather than PI manipulating the processors, it manipulates the input data so that the processors can do whatever it is they do to change. In regards to the general nature of understanding input processing, the concern is with how learners derive intake from input, regardless of the language and context being learned, whether instructed or non-instructed.

I really appreciated learning about the characteristics of PI. The examples/activities in the article deepened my understanding in many ways. After studying the referential and affective structured activities, I see how they can be useful in targeting grammatical forms to get meaning, and also influence response and engagement to process information about the real world. Unlike comprehension based approaches, I was able to gain insight about PI as a useful technique for enhancing grammatical intake. While focusing on PI as a form of explicit instruction, I think the authors did a good job providing details and insight, while establishing the major differences of its unique characteristics from all other input-based approaches to form-focused instruction. Although the reading expressed some criticisms of input processing and PI, it clearly referenced the considerable amount of research and positive effects of PI as opposed to other traditional approaches to grammar instruction. I will continue to study this topic in order to gain

more knowledge about the principles, prevalent issues, and viable processing mechanisms in relation to second language acquisition. Overall, the reading was very informative. (315)

Sanz and Morgan Short addressed pertinent questions in reference to language acquisition. The information presented in the article differentiated between input, processing, and knowledge, which all work in conjunction with one another. Because of various influences and views regarding implicit and explicit instruction, the field has developed in different directions. Therefore, researchers have utilized pedagogical interventions that attempt to investigate differing positions. It was explained in the article that pedagogical interventions result when one or more of the following are provided with practice: explicit rule presentation, manipulated input, and feedback. These variables can range from more explicit to more implicit. The more metalinguistic the learning condition, the more explicit, and the more naturalistic the learning condition, the more implicit it is considered to be. The goal of manipulated input to make the target forms more salient is also considered, and can be classified based on the degree to which it is adjusted for language use in instruction. Based on the review of literature, exposure to explicit evidence seems to speed up the process of language acquisition, and to further the level of ultimate attainment.

I enjoyed reading and gaining information from this article. Regarding effectiveness, the topic of both implicit and explicit instruction seems to be a large debate in research. Although this is so, research on pedagogical interventions do show the positive effects for explicit L2 teaching. Because of the information discussed in the article, and also the assigned class reading by Van Patten, which discussed PI, I was able to understand how manipulated input can be structured and related to PI. Consisting of four levels of manipulation, structured input is an

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explicit form of input; the more the L2 input is manipulated, the more explicit it is considered to be. I gained new knowledge from the article that I can apply and consider when looking at different aspects of language acquisition. I also appreciate the thorough explanation and presentation of the research, which allowed me to make connections about pertinent processes and issues in SLA. I think all of the readings have provided us with valuable information. (341)

APPENDIX F: INSTITUTIONAL REVIEW BROAD APPROVAL LETTER



University of Central Florida Institutional Review Board Office of Research & Commercialization 12201 Research Parkway, Suite 501 Orlando, Florida 32826-3246 Telephone: 407-823-2901 or 407-882-2276 www.research.ucf.edu/compliance/irb.html

Approval of Human Research

From: UCF Institutional Review Board #1 FWA00000351, IRB00001138

To: Ying Xiong

Date: September 20, 2018

Dear Researcher:

On 09/20/2018 the IRB approved the following human participant research until 09/19/2019 inclusive:

Type of Review:	UCF Initial Review Submission Form
	Expedited Review
Project Title:	Native- and Nonnative-Speaking First-Year Doctoral Students
	Academic Writing Development
Investigator:	Ying Xiong
IRB Number:	SBE-18-14342
Funding Agency:	
Grant Title:	
Research ID:	N/A

The scientific merit of the research was considered during the IRB review. The Continuing Review Application must be submitted 30days prior to the expiration date for studies that were previously expedited, and 60 days prior to the expiration date for research that was previously reviewed at a convened meeting. Do not make changes to the study (i.e., protocol, methodology, consent form, personnel, site, etc.) before obtaining IRB approval. A Modification Form **cannot** be used to extend the approval period of a study. All forms may be completed and submitted online at https://iris.research.ucf.edu.

If continuing review approval is not granted before the expiration date of 09/19/2019, approval of this research expires on that date. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

Use of the approved, stamped consent document(s) is required. The new form supersedes all previous versions, which are now invalid for further use. Only approved investigators (or other approved key study personnel) may solicit consent for research participation. Participants or their representatives must receive a copy of the consent form(s).

All data, including signed consent forms if applicable, must be retained and secured per protocol for a minimum of five years (six if HIPAA applies) past the completion of this research. Any links to the identification of participants should be maintained and secured per protocol. Additional requirements may be imposed by your funding agency, your department, or other entities. Access to data is limited to authorized individuals listed as key study personnel.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

This letter is signed by:

Page 1 of 2

Allint

Signature applied by Gillian Morien on 09/20/2018 03:10:54 PM EDT

Designated Reviewer

Page 2 of 2

APPENDIX G: INSTITUTIONAL REVIEW BROAD MODIFICATION AND CONTINUING REVIEW APPROVAL LETTER



Institutional Review Board FWA00000351 IRB00001138Office of Research 12201 Research Parkway Orlando, FL 32826-3246

UNIVERSITY OF CENTRAL FLORIDA

APPROVAL

September 16, 2019

Dear Ying Xiong:

On 9/16/2019, the IRB reviewed the following submission:

Type of Review:	Modification and Continuing Review	
Title:	Native- and Nonnative-Speaking First-Year Doctoral Students' Academic Writing Development	
Investigator:	estigator: Ying Xiong	
IRB ID:	: MODCR00000233	
Funding:	None	
Grant ID:	None	
IND, IDE, or HDE:	None	
Documents Reviewed:	 HRP-251 - FORM - Boote review.pdf, Category: Faculty Research Approval; irb_HRP-503 - TEMPLATE PROTOCOL (Ying Xiong_ Dissertation_One-year data collection plan_Approved).docx, Category: IRB Protocol; 	

The IRB approved the protocol from 9/16/2019 to 9/15/2020.

In conducting this protocol, you are required to follow the requirements listed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within the IRB system.

If you have any questions, please contact the UCF IRB at 407-823-2901 or irb@ucf.edu. Please include your project title and IRB number in all correspondence with this office.

Sincerely,

Gillian Bernal Designated Reviewer

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