A MICROGENETIC ANALYSIS OF THE DEVELOPMENT OF THEMATIC

COHERENCE BETWEEN THE TOPIC SENTENCE AND SUPPORTING IDEAS IN

THE ENGLISH ACADEMIC PARAGRAPH: A CASE STUDY OF A SAUDI

FEMALE WRITER

Grady Kepler

Accepted by the Graduate Faculty of Indiana University, in partial
fulfillment of the requirements for the degree of Master of Arts.

Master's Thesis Committee

_____
Julie A. Belz, Ph.D., Chair

_____
Frederick J. DiCamilla, Ph.D.

_____
André Buchenot, Ph.D.

ACKNOWLEDGEMENTS

Grady Kepler

A MICROGENETIC ANALYSIS OF THE DEVELOPMENT OF THEMATIC

COHERENCE BETWEEN THE TOPIC SENTENCE AND SUPPORTING IDEAS IN

THE ENGLISH ACADEMIC PARAGRAPH: A CASE STUDY OF A SAUDI

FEMALE WRITER

This thesis explores the developmental pathway of thematic coherence among one Saudi female student in a foundational second language (L2) writing composition course, contributing to the field of L2 academic writing by offering a rich description of writing development. Despite a rapid increase in enrollment in the past 10 years, students from the Kingdom of Saudi Arabia (KSA) remain an understudied L2 learner population. In addition, although a number of studies have explored coherence among L2 learners of English, such research focuses either on the linguistic features utilized by learners to ensure cohesion or on the contrast between L2 learners' cohesive devices and that of professional standards. To date, no studies offer insight into learners' developmental trajectory toward greater competency in producing coherent academic paragraphs. The present study proposes an alternative approach by analyzing academic paragraphs in light of the definition of thematic coherence as a general-to-particular structure of ideas, i.e., a flow of information to form a superordinate-subordinate structure in which subordinate ideas support the abstract, overarching assertion. Further, the study uses the methodology of a microgenetic analysis to facilitate the tracing of the history of mediation and micro-changes in the focal learner's written production over time as it relates to the proposed definition of thematic coherence. Each of the written drafts of paragraphs produced by the focal student is analyzed in sequence. An analysis of qualitative data is presented to

contextualize and describe the focal learner's experience in the instructional context and how this is interconnected to the development of her written paragraphs. The results showed an increase in the student's ability to produce academic paragraphs with a general-to-particular structure, particularly during mediation that was rich with metalinguistic terminology that also created opportunities to collaboratively construct meanings of such terms. A main contribution to L2 academic writing this study offers is a rich description of a student's developing skills in producing academic paragraphs. An implication is that to nurture academic writing skills, such as thematic coherence among students from KSA, instruction must be attentive to the developmental stages this student population progresses through.

<div align="right">Julie A. Belz, Ph.D., Chair</div>

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF IMAGES

LIST OF ABBREVIATIONS

L1 .... First Language
L2 .... Second (or additional) Language
EAP .... English for Academic Purposes
CBI .... Concept-Based Instruction
SCOBA .... Schema for Orienting Basis of Action
KSA .... The Kingdom of Saudi Arabia
TS .... Topic Sentence
NT .... Narrow Topic
CI .... Controlling Idea
SI .... Supporting Idea
SED .... Supporting Example or Detail
CS .... Concluding Sentence
OWC .... Online Writing Conference
UWC .... University Writing Center

<center>**Chapter One:**</center>

<center>**Introduction**</center>

1.1 Statement of Purpose

This thesis provides a microgenetic analysis of the developmental pathway of thematic coherence in the writing of academic paragraphs for one Saudi female student in a beginning, credit-bearing college-level English for Academic Purposes (EAP) instructional setting. EAP instruction is defined as the teaching of English for the purposes of research or study (Flowerdew & Peacock, 2001) based on the assumption that proficiency in academic discourses integrally affords individuals the opportunity to participate in academic spheres that are heavily dominated by the conventions of critical reading and writing. To engage in such literacy practices, writers must learn to produce paragraphs that are thematically coherent, which refers to the flow of information within a written unit that establishes a general-to-particular structure (Martin & Rose, 2007; McCarthy & Carter, 1994). It stands to reason that second language (L2) learners in college EAP contexts are afforded opportunities for tutored acquisition of writing concepts, such as thematic coherence. Much research has sought to describe L2 writing as well as efficacious pedagogy for L2 writing (Ferris & Hedgcock, 2014; Silva & Leki, 2004). Nevertheless, a microgenetic analysis, i.e., the observation of the history of changes in L2 learner language and the mediation leading to such changes (Belz & Kinginger, 2003), is needed to understand the development of the concept of thematic coherence. Furthermore, students from the Kingdom of Saudi Arabia (KSA) remain an understudied L2 learner population. In particular, a rich description of Saudi interlanguage use in acquiring written modes of academic writing in English, which is

<center>1</center>

necessary to develop instructional programs that foster academic literacy among this student population, is missing from the academic literature.

In this thesis, I report on the investigation of the writing of one Saudi learner of English that was produced in a beginning-level, undergraduate EAP composition course. In this chapter, I begin by describing the teaching context in which the data were collected where instruction was predicated on principles of genre theory (Hyland, 2004) and Concept-Based Instruction (CBI; Gal'perin, 1989, 1992). The overall instruction was grounded in Vygotskyan (1986) sociocultural theory (SCT) as a means to develop instructional tools and activities to teach several basic academic genres. I then detail the phenomenon under investigation, namely, thematic coherence. The particularities of how thematic coherence is defined for this thesis will be discussed in light of Halliday's (1989) description of theme and McCarthy and Carter's (1994) explication of the embedded structure found in an academic paragraph. Chapter 1 concludes with a rationale for studying the development of thematic coherence as well as a student from KSA and an overview of the educational history of Saudi students. Subsequent chapters provide a qualitative analysis and discussion of the microgenesis of the focal student's production of thematic coherence over an academic semester. Specifically, I seek to answer the following research questions:

- What is the developmental pathway of thematic coherence for one Saudi female learner of English, as evidenced by her production of academic paragraphs over one semester?

- Specifically, what changes occur over time vis-à-vis the controlling idea and supporting ideas, and the relationship between these two parts, in academic paragraphs?

The reasoning for using a microgenetic analysis of the thematic coherence among the different parts of the paragraph is based on the premise that to understand the development of a skill, one must observe the transformations it has undergone in the process of acquisition (Belz & Kinginger 2002, 2003; Belz & Vyatkina, 2005, 2008; Wertsch, 1985). This analysis was conducted using a Hallidayian approach to the linguistic investigation of theme (Halliday, 1989) to offer insight into the developmental trajectory observed in the focal student. The thesis ends with a discussion of the implications of the study for English L2 instruction and research.

1.2 Instructional Context

1.2.1 Genre-Based Pedagogy for L2 Learners

The instructional context of this thesis is a 15-week fundamental EAP writing course, henceforth called "EAP 101." EAP 101 was a multi-section course with a common syllabus determined by a faculty course coordinator; the instructor designed the course in accordance with principles of genre theory (Hyland, 2004). The premise of genre theory is to lead students to a language awareness in which they can make informed and intentional decisions about how to vary their language for specific communicative tasks. These communicative tasks, what Martin (2001) describes as a genre, are defined as a "staged, goal-oriented, purposeful activity" such as, "making a dental appointment, buying vegetables…writing a letter to the editor, [and] inviting someone to dinner" (p. 155). Genre theory makes clear that such activities employ

particular linguistic features that are contingent upon the social context in which they occur. Genre-based pedagogy consequently expands an individual's meaning-making potential (Halliday, 1993), that is, their ability to use socially contingent language to accomplish things. In the case of the instructional context of this thesis, intervention is aimed at developing meaning-making capabilities through academic discourse, and in particular, academic writing. Investigating the most significant features of academic language, Schleppegrell (2006) notes that academic writing "displays knowledge authoritatively, structured in well-organized text" (p. 137), pointing to the use of lexical items to introduce and construct abstract ideas. In line with Halliday (1989), such qualities of authority and organization convey formality and explicitness; however, a linguistic repertoire to express relationships among terms (e.g., to classify, compare, or evaluate) a requisite.

During instruction, prototypical features of academic texts are emphasized and made salient for learners. Hyland (2004) explains that the high formality of academic writing is "achieved through specialist vocabulary, impersonal voice, and the ways ideas get 'packed into' relatively few words" (p. 142). Increasing formality through impersonal constructions often means avoiding personal pronouns (e.g., "I," "you," or "we") and expressions of personal feelings or anecdotes. Packing ideas into few words means an increased lexical density by constructing texts with a greater proportion of content words in relation to words associated with grammar and function (e.g., articles, prepositions, pronouns). To illustrate, the following example from Halliday (1989, p. 61) compares (a), a written sentence, with its conversational version, (b).

Example 1.1
(a) Investment **in a** rail facility implies **a** long-term commitment.
(b) **If you** invest **in a** rail facility **this** implies **that you are going to be** committed **for a** long term.

Comparing just the bolded grammar words, sentence (a) stands out as being more lexically dense with just three grammar words as opposed to 13 in sentence (b). An important aspect of lexical density, and illustrated in the sentences above is increased nominalization. The higher nominalization in (a) affords the topicalization of the process of investing in order to present a complex phenomenon as a single element in a clause in contrast to the use of many verbs in (b). Lexical density additionally refers to a greater use of attributive adjectives and more passive constructions. Other linguistic features of written academic texts include the use of temporally distant language, definite deixis, and more complex syntax, such as increased hypotaxis (Halliday, 1989; Hyland, 2004; McCarthy & Carter, 1994). One reason for the emphasis on genre theory in EAP 101 is to draw learners' attention to the patterning of basic lexico-grammatical features across selected genres and exemplars of these genres as a method to develop learners' abilities to manage their own written discourse.

A writer's increased ability to manage their discourse will enhance their meaning-making potential. Discourse management involves writers' decisions regarding "how entities may be made prominent or left as background, how discourses will be segmented and how parts of the discourse may be weighted against one another in terms of importance and textual hierarchy" (McCarthy & Carter, 1994, p. 90). In other words, knowledge of how lexico-grammatical features pattern across particular genres is a valuable resource for the "conscious manipulation of language" (Knapp & Watkins, 1994, p. 8) to signal a writer's purposes and attitudes. A writer's stance toward her

message, such as expressions of commitment, detachment, certainty, or doubt can be artfully conveyed through linguistic choices (e.g., forms of certain, possible, or probable). By the same token, linguistic choices can mark the internal structure of a text to express chronological organization, (e.g., first, second, next), or to relate ideas through continuity (e.g., similarly), conditionality (e.g., if), or consequence (e.g., accordingly) (McCarthy & Carter, 1994). Application of these linguistic resources increases students' language awareness for a "purposeful, interactive, and sequential" (Hyland, 2004, p. 25) approach to achieving a particular communicative goal in academic contexts. Facilitating the development of such literate language use involves the abstraction of concepts of genre for the purpose of providing practical intervention. The application of sociocultural theory and concept-based instruction establishes appropriate procedures for learners to appropriate these concepts for their own purposes.

1.2.2 Sociocultural Theory and Concept-Based Instruction

EAP 101 was designed and instructed in accordance with principles of Sociocultural Theory (SCT), a general theory of learning grounded on the claim that the acquisition of a skill begins in the social and physical world and is transformed into an internal, psychological process. The transformation from a social process to an internal ability necessitates mediation, or the regulation of human behavior with the use of material artifacts (e.g., computers, pencils) and symbolic tools (e.g., language, numeracy, concepts) (Wertsch, 1985). In effect, the internalization of a skill occurs when individuals gain the capacity to perform and control behaviors on their own upon appropriating the material and symbolic tools that were initially used to regulate the behavior. Internalization occurs along a developmental trajectory in which the locus of control

6

shifts from *object-regulation* to *other-regulation* and eventually to *self-regulation*. *Object-regulation* is the use of a concrete artifact (e.g., PowerPoint, charts) to produce the skill, whereas *other-regulation* is the use of other people or guidance from an expert (e.g. explicit or implicit feedback, corrective comments on assignments). *Self-regulation* is the ability to execute or complete a task by having internalized the forms of mediation needed to perform the skill (Lantolf, Thorne, & Poehner, 2015).

Lantolf and Poehner's (2014) example of an individual wishing to rearrange furniture (p. 62) offers an illustrative example of how actions may progress through varying levels of support. In their example, deciding on a new arrangement may begin with the use of objects involving physically moving the furniture with the use of a model (e.g., toy furniture or a virtual model on the computer). Verbalizing possible arrangement through externalized private speech or communicating with a friend would serve as other-regulation, and manipulating the furniture in one's mind's eye would be a form of self-regulation. The end result of rearranging furniture was thus mediated through varying regulatory means, beginning with a physical materialization of the act and progressing to symbolic representations through language. The eventual internalization of how to perform the action was completed by gaining the capacity to act on one's own without manipulating physical objects or verbalizing the process. The ability to internalize the process of deciding how to rearrange furniture may represent a simple behavior; however, it is used as an example to exemplify the mediation of cognition.

The premise that cognition is mediated, in that a skill begins in the social and material world and is eventually internalized, means that SCT-informed pedagogy entails an intentionally organized educational environment using didactic materials, tasks, and

activities designed to result in the self-regulation of a skill (Lantolf & Poehner, 2014; Lantolf, Thorne, & Poehner, 2015; Lantolf & Thorne, 2006). Concept-Based Instruction (CBI) is the concrete application of SCT-informed pedagogy (Gal'perin, 1989, 1992). For instruction of an L2, CBI presents linguistic concepts that "represent the generalizations of the experiences of humankind that is fixed in science" (Karpov, 2003, p. 66). Karpov refers to these generalizations as scientific concepts, the value of which is that control over them enables leaners to operate independently and to transfer the concepts to relevant, yet differing, contexts when needed (Negueruela & Lantolf, 2006). In relation to genre-based writing instruction, the systematic patterning of linguistic features across text types form part of the scientific concepts presented to learners. When made aware of differing linguistic features needed for achieving various writerly purposes and meeting readers' expectations, for example, learners can use such features to engage in academic written discourse.

CBI begins by orienting learners towards the scientific concepts with the use of a materialized, comprehensive, and concise representation, known as a SCOBA (schema for orienting basis of action; Gal'perin, 1989). The SCOBA takes the form of a didactic model (e.g., chart, diagram, picture, model) that represents the structural, procedural, functional, and content properties of the targeted concept or skill. This initial phase of CBI aims to provide a high-quality materialization of the scientific concept that is then used as a tool for object-regulation in subsequent classroom activities. CBI makes clear that learners are not provided with prescriptive categories of forms, but rather with an abstract representation of the concept or skill at hand that can be manipulated and eventually appropriated for personal use and meaning making in future contexts.

Verbalization is the secondary phase of CBI, intended to facilitate the transition away from reliance on the SCOBA when performing the skill. Verbalization takes spoken and written forms which guide learners to explicitly reflect on their understandings of the scientific concepts (Lantolf & Thorne, 2006). Gal'perin (1989) recommends two sub-phases of verbalization, referred to as "communicated thinking" and "dialogic thinking" (Haenen, 2001, p. 163). The former is when learners explain the use of the concepts and their thinking to someone else, and the latter is characterized by explanations to themselves in the form of self-talk. In conjunction with verbalization tasks, other communicative tasks and activities engage learners in the construction of meaning of the target concepts by performing the skill in a variety of contexts. Such activities may include tactile and kinesthetic manipulation of concepts, analyzing conceptual features in different contexts, rewriting a text in different genres, or drawing the concepts, to name a few. CBI as a whole encompasses a recursive dimension in which learners' actions are guided by the SCOBA during verbalization and performance tasks, but over time mediation is intended to wean learners' away from object- and other-regulation so as to internalize the concept and self-regulate.

A growing trend in the published research investigating and describing the implementation of CBI, however, has occurred primarily in foreign language (FL) instructional contexts, with a focus largely at a grammatical level. The current study offers new insight into a context employing CBI by describing how learners develop trans-phrasal meaning-making in academic paragraphs, unlike other CBI studies that target L2 performance observed in utterances as small as one word (e.g., Lantolf & Poehner, 2014; Lantolf, Poehner, & Swain, 2018; cf. Belz, 2018). Further, with many

CBI studies implemented in FL classrooms, didactic materials and explanations have

often been presented to learners in their L1 with verbalization tasks occurring in their L1

as well (see Lantolf, Poehner, & Swain, 2018; Lapkin, Swain, & Knouzi, 2008;

Negueruela, 2008; Swain et al., 2009). For EAP classrooms in U.S. contexts that serve

learners with a range of L1 backgrounds, instruction may not be able to utilize learners'

L1 for intervention or verbalization tasks, and instead rely on the L2 for all stages of CBI.

Few studies to date have implemented CBI in L2 English contexts (e.g., Gánem-

Gutiérrez & Harun, 2011; Kim & Lantolf, 2018; Poehner & Infante, 2017; Thorne,

Reinhardt, & Golombek, 2008; White, 2012), where Belz (2018) is the only study to

examine L2 academic writing among Saudi learners of English. The following section

details the concept of thematic coherence in academic paragraphs, which will include a

brief description of how CBI was employed to instruct it in EAP 101.

1.3 Thematic Coherence in Academic Paragraphs

1.3.1 A General-Particular Structure

Defined in its most basic form, a paragraph is a segmented written unit confined

to a particular theme (McCarthy & Carter, 1994), and it is this ability to confine a

paragraph to a unified theme with which thematic coherence is concerned. In an

academic paragraph, thematic coherence involves the formation of an overarching theme

and appropriate support for that theme. In regards to the linguistic features that form and

support the theme, a salient characteristic is an embedded structure that establishes

periodicity, a form of textual organization which involves the presentation of meanings in

waves of information, hierarchically staged to give "readers some idea about what to

expect, fulfilling those expectations, and then reviewing them" (Martin & Rose, 2003, p.

175). That is, the academic paragraph manages the flow of information to ensure a progression from more general to more particular ideas (Hoey, 1983; Winter, 1977, 1978). The ideas are organized so that an overarching theme is followed by subordinated ideas, establishing continuity of information through a progression of information toward greater particularity, and overall support for the overarching theme.

Establishing periodicity helps to ensure thematic coherence, but to explicate this concept more fully, a writer must first thematize the paragraph, which often occurs in the initial or topic sentence. Thematization is the production of an overarching assertion that is predictive of what is to follow; the assertion foregrounds information, signaling the framework in which subsequent sentences are to be understood (Brown & Yule, 1983; Fowler, 1986; Martin & Rose, 2007; McCarthy & Carter, 1994). Table 1.1 below provides a brief summary of some of the relevant components of the academic paragraph implicated in the performance of thematic coherence, which, in turn, comprises one of various structural and rhetorical constructs taught in EAP 101. First, the Topic Sentence (TS) thematizes the paragraph by presenting a Narrowed Topic (NT) and a Controlling Idea (CI). The NT is the general topic and subject matter of the paragraph, while the CI serves as the overarching theme of the paragraph. Specifically, the CI is the assertion the writer is making about the NT, predicting what will follow; in relation to the general-to-particular structure, it serves as the general idea to which all other parts are subordinate in a relationship of evidentiary support.

Table 1.1

Partial description of structural features implicated in thematic coherence of the

academic paragraph

Topic sentence (TS), contains a *narrowed topic (NT)* and *controlling idea (CI)*. The *NT* is the general topic and subject matter. The *CI* represents the theme of the paragraph, signaling the subsequent embedded structure.
Supporting idea (SI), specific information providing detail in support of the controlling idea.
Supporting example or detail (SED), more specified information providing detail in support of the supporting ideas.
Concluding sentence (CS), non-obligatory component which recaps the theme when present.

(Belz, personal communication, August 2017)

For each part of the academic paragraph following the TS, lexico-grammatical features are employed to manage the flow of information. This is done, in part, by establishing (a) continuity through cohesion and coherence and (b) support through greater particularity of ideas that represent subordinate pieces of support for the CI. At the textual level, continuity is established through cohesion, described as the connection among clauses with the use of linguistic cues. Such cohesion from one clause to another is developed with lexico-grammatical features that mark organization (e.g., first, second), reference (e.g., pronouns, articles), repetition (e.g., synonyms), explicit connectives (e.g., conjunctions like because or therefore), or other relationships, like overlapping concepts in some manner (e.g., meronyms, antonyms) (Halliday, 1994; Halliday & Hasan, 1976). In communicating an entire message, continuity is also established through coherence, that is, ensuring the overall understanding a reader derives from the paragraph is what the writer intends. While coherence often cannot be separated from cohesion, it refers to the evidence that is provided to logically support the assertion (McNamara, Kintsch, Songer, & Kintsch, 1996; O'Reilly & McNamara, 2007). Importantly, this support requires the

general-to-particular structure. The CI takes the role of a superordinate assertion, and the subsequent sentences form subordinate ideas that act as support for the CI. Support can come in various forms (e.g., facts, statistics, quotes, evaluations, elaborations, explanations, interpretation, study findings) to provide evidence for the more general overarching theme. As noted in Table 1.1, sentences identified as Supporting Ideas (SIs) are those that provide specific information or detail about the CI and the Supporting Examples or Details (SEDs) provide more specific information about the SIs.

Thematic progression ensures reference to the same theme while also subordinating the ideas in respective parts of the academic paragraph to form periodicity, all while ensuring logical evidence of the CI is provided. Each part of the academic paragraph must establish a logical relationship with the other parts, with the CI presenting an assertion of what will follow, the SI representing more specific pieces of evidence for this assertion, and the SEDs providing subordinate evidence for corresponding SIs. Even the non-obligatory Concluding Sentence (CS), which provides a recap of the paragraph, relates to the CI by distilling the evidence that was provided in the SIs and SEDs. Overall, the academic paragraph contains thematic coherence when ideas in each part of the paragraph establish a logical relationship through a progression of the theme with subordinate ideas. The lexico-grammatical features manage a general-to-particular structure that mutually establishes continuity and support of the assertion.

To illustrate thematic coherence, or lack thereof, examples 1.2 and 1.3 below display the first few sentences of two distinct paragraphs, representing a stark contrast. Example 1.2 is taken from a paragraph written by a Saudi learner of English in EAP 101 near the beginning of the semester, assigned the task of producing a cause and effect

13

paragraph about the effects of technology on the quality of student life. Example 1.3 is

used by Martin and Rose (2007) to explicate periodicity in academic texts.

Example 1.2
(1) There is no doubt that technology affects all aspects of life, and when
the technology is involved in the education and life of the student, it has a
great impact on all aspects of education which is represented by the
student, which represents the most important aspects. (2) The use of
technology in education affects students in many positive aspects, such as
education democracy, in the sense that the student has an area of freedom
in order to be able to choose the appropriate specialization in an electronic
manner, thus achieving an independent and more sense of self. (3) The use
of technology in education increases the interaction of students in general,
and hopes for positive thinking, and the student can easily access all the
different information and then understand and absorb…

Example 1.3
(1) The Second World War further **encouraged the restructuring of the
Australian economy towards a manufacturing basis**. (2) Between 1937
and 1945 the value of industrial production almost doubled. This increase
was faster than otherwise would have occurred. (3) The momentum was
maintained in the post-war years and by 1954-5 the value of
manufacturing output was three times that of 1944-5. (4) The enlargement
of Australia's steel-making capacity, and of chemicals, rubber, metal
goods and motor vehicles all owed something to the demands of war…
                    (Martin & Rose, 2007, p. 196; emphasis in original)

Example 1.2 is characterized by having no unifying idea, with each sentence presenting

ambiguous ideas altogether, ranging from the undefined ideas of technology to

educational democracy to interaction. In relation to the assigned task, Sentence (1)

provides some acknowledgement that technology influences students' lives but does not

offer a CI, meaning that Sentences (2) and (3) have no overarching theme to support in

general and accordingly do not establish subordinated ideas. Additionally, there is no

narrowing of technology or student life, thus the theme in Sentence (1) is very broad for

the limited space of the paragraph. Example 1.3 on the other hand is unified by the

bolded assertion in Sentence (1), to which the clause-initial positions of Sentences (2) and

(4) refer, each respectively establishing subordinated topics in support of the assertion. Overall, the flow of information in Example 1.3 is unified by contextualizing the content within the topic of "The Second World War." Based on the assumption that Example 1.2 was produced by a student learning L2 English, it stands in contrast with the written production of a more proficient piece of writing, demonstrating a varying level of English proficiency.

The two above examples do well to illustrate the need to understand what occurs during the development of thematic coherence from a proficiency level such as that illustrated in Example 1.2 to that of Example 1.3. This development involves learning to narrow the topic and CI while also including specific examples in the SIs that represent subordinate and supporting aspects of the CI. However, which of these abilities emerges first and how it emerges are unknown. Namely, a close documentation of the precise ways in which participation in a variety of interactive practices is needed to understand how learners' use and awareness of the concept of thematic coherence is enhanced. Such documentation may reveal potential points of increased ability to produce thematically coherent paragraphs, as well as the nature of the mediation that leads to such changes in L2 use.

1.3.2 Brief Description of Concept-Based Instruction of Thematic Coherence in EAP 101

In response to increased enrollments of students from Gulf Cooperation Council (GCC) countries in EAP 101, Belz developed an array of multi-modal SCOBAs from 2009 - 2019 for the teaching of domains of genre knowledge associated with introductory academic writing such as communicative purposes, register, argumentation from sources,

and structural and organizational text conventions including structural components contributing to thematic coherence. Image 1.1 reproduces part of an introductory SCOBA excerpted from Belz (2018, p. 15) which capitalizes on chromaticity to make the periodicity of a sample basic academic paragraph salient to nascent academic writers (in both L1 and L2).

(1) ==The commercialization of traditional holidays helps the US economy.== (2) ==First,== ==toy stores and gift shops benefit when people buy presents for their family and friends.== (3) *Toy Village*, ==for instance,== ==posted record profits in December when some people give gifts…==
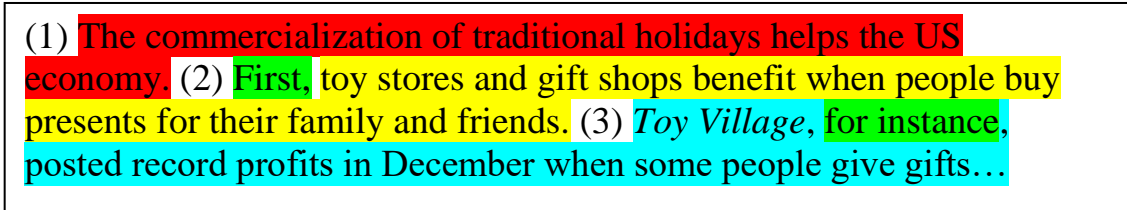
Image 1.1. SCOBA 1 (from Belz, 2018, p. 15)

To illustrate, the TS containing the theme is highlighted in red, thematically subordinate SIs are highlighted yellow, while SEDs which are thematically subordinate to immediately preceding SIs are highlighted blue. An additional feature of SCOBA 1 shown in Image 1.1 is that lexical devices expressing varying types of thematic cohesion are highlighted in green. SCOBA 1 is introduced at the outset of EAP 101 as a holistic representation of scientific knowledge regarding the structural and organizational features of the academic paragraph as well as the relationships among them which give rise, in part, to thematic coherence. Another example of a multi-modal SCOBA employed by Belz (2018) during writing instruction in EAP 101 is an image of Russian nesting dolls where these same abstract structural parts and the thematic relationships among them are represented pictorially by differently sized dolls. The larger, outer doll represents the CI, the doll one size smaller represents an SI, and the next smaller doll represents one or more SEDs supporting the preceding SI. Thus, SCOBA 2 illustrates pictorially the

16

subordination of ideas, in which smaller components fit, or "nest," inside the corresponding larger unit.

Instead of memorizing facts about writing as might be done in more conventional forms of language instruction, learners in concept-based language courses use SCOBAs as tools to grasp concepts holistically and eventually regulate their performance of them in new and increasingly more complex contexts for their own purposes (Lantolf & Poehner, 2014). In one type of object-regulation during classroom activities in EAP 101, learners use colored highlighters corresponding to the colored components of SCOBA 1 to identity (or not identify) periodicity in their own emerging writing over the course of the semester (Belz, personal communication, 2017). Such activities prompt verbalization tasks in which learners engaged in "communicated thinking" by discussing how their own writing or that of a peer did or did not correspond with the structural and organizational text conventions represented in the SCOBAs. Importantly, these in-class verbalization tasks encouraged learners to regulate their writing with the aid of others. Often the activities progressed to elicitations of "dialogic thinking," in which learners were prompted to reflect on new understandings of the concepts of thematic coherence after instruction and class activities.

1.4 Justification for the Study

1.4.1 Limited Research and Instruction of Thematic Coherence for L2 English

Unlike previous studies of theme, this thesis investigates the scientific concept of thematic coherence as the general-to-particular or superordinate-subordinate structure of an academic paragraph. Much research of theme in written texts limits investigation to

the frequency and types of cohesive devises that manage the progression of new information in texts (see, *inter alia*, Alyousef, 2016; Bello, 2016; Corvalan Reyes, 2004; Francis, 1989; Fries, 2002; Martin & Rose, 2007; Shi, 2013; Simpson, 2000; Wikberg, 1990). These studies implement a Hallidayian-inspired linguistic analysis of theme in written texts by using Halliday and Hasan's (1976) five types of cohesive resources (e.g., reference, substitution, ellipsis, conjunction, lexical cohesion) to characterize L1 English use in particular genres of professional and academic discourses. While this research may be conducive to describing cohesive features of particular genres, it does not detail thematic coherence as a holistic concept.

An incomplete focus on thematic coherence by investigating only cohesive devises is additionally noted in trends common to L2 writing pedagogy and EAP (Bitchener, Storch, & Wette, 2017; Bruce, 2008; Ferris & Hedgcock, 2014; Hinkel, 2019; Leki, 1992; Ravelli & Ellis, 2005). These teaching approaches offer little or no support in teaching students how to produce thematically coherent academic paragraphs. If coherence is introduced in textbooks, it is often ambiguously presented as a general unifying idea with examples of transitional expressions (e.g., in addition, however) that students can use to create cohesion between sentences (e.g., Brandt, 2009; Engelhardt, 2013; Gardner, 2005; Hamp-Lyons & Heasley, 2006; Howard, 2018; Jones & Lock, 2011; Nation, 2009; Peregoy & Boyle, 2000; Singleton, 2005; Smalley, Ruetten, & Kozyrev, 2011; Swick, 2009). Overall, few L2 English and EAP textbooks offer instruction for the academic paragraph. Hall and Wallace (2018) serve as a representative example. First, they describe the paragraph as a unit that begins with "a general statement of a subject… then discuss[es] specific examples" (p. 73). The strategy they present for

accomplishing the movement from general to specific information is use of transitions. In sum, their presentation lacks a holistic orientation toward thematic coherence, especially as a scientific concept grounded in rigorous investigation.

1.4.2 The Need for a Developmental Trajectory of Thematic Coherence

By providing a microgenetic analysis of thematic coherence, this thesis offers a developmental study that stands in contrast to previous studies investigating L2 use and theme. Belz and Kinginger (2003) define microgenetic analysis as "the observation of skill acquisition during a learning event" (p. 594) including the examination of "the precise, concrete social practices leading to change in learner language over time" (p. 601). Implementing a microgenetic analysis allows for a close documentation of the history of the mediation of thematic coherence. To date, research of L2 students' ability to thematize and establish coherence in written texts documents L2 learners' thematic choices that lead to successful or infelicitous writing, such as the repetition of earlier themes to improve cohesion (Arunsirot, 2013; Berry, 1995; Bloor & Bloor, 1992; Jalilifar, 2010; North, 2005; Wang, 2007). These studies, however, are non-developmental, limited in scope by neither eliciting data over multiple points in time nor documenting the ways in which behavior is related to and shaped by a myriad of factors.

Jalilifar (2010) offers an illustrative case of one such non-developmental study with a comparative analysis of L2 learners' thematic choices and cohesion across three proficiency levels. Jalilifar's study included the analysis of one writing sample from 30 sophomores, 27 juniors, and 23 seniors at a university studying English as a Foreign Language (EFL). Sophomores were noted to have passed two English grammar courses, juniors to have passed an additional course in basic English writing, and seniors to have

passed another course in advanced writing. During a single 30-minute period, students were asked to narrate three pictorial stories. The narratives were first analyzed using Halliday's (1994) explanation of simple and multiple themes. A simple theme is characterized by the clause-initial position taking a single item, such as presenting a nominal group (e.g., results) while a sentence with multiple themes is characterized by a clause-initial position expressing numerous combinations of vocatives, modals, elements marking mood, and nominal groups. Example 1.4 offers an example of both from Jalilifar's (2010) data.

> Example 1.4
> (a) <u>Their examination results</u> were not good.
> (b) <u>On the other hand</u>, <u>may be</u>, <u>in weekday, it</u> would be less crowded.
> <div align="right">(Jalilifar, 2010, p. 34)</div>

While students of all three grade levels produced text with both simple and multiple themes, it was observed that as students progressed to higher grades (e.g., junior and senior), the number of simple themes decreased and number of multiple topical themes increased.

A second analysis of students' writing looked at strategies students used to ensure thematic progression. Jalilifar first suggests that lower proficiency students utilized the strategy of split theme thematic progression when producing cohesive ties (see Example 1.5).

> Example 1.5
> <u>The mother and the child</u> made a plan. <u>The mom</u> first found the wolf […], and <u>the child</u> brought some stones…
> <div align="right">(Jalilifar, 2010, p. 35)</div>

This type of thematic progression is characterized by writing in which two items are placed in the first clause to introduce two themes (e.g., "The mother" & "the child");

these two themes are then split to form single item themes in subsequent clauses (Danes, 1974). More proficient learners, however, utilized the strategy of linear thematic progression, where the item in the clause-secondary position of the first clause is repeated in the clause-initial position of the following clauses (Danes, 1974), as illustrated in Example 1.6.

> Example 1.6
> The other day, the mouse went to the shoemaker. The shoemaker accepted… from the carpet maker. The carpet maker listened to the mouse's story…
>
> (Jalilifar, 2010, p. 34)

Despite this strategy of thematic progression being relatively rudimentary, Jalilifar concludes that more proficient students utilized this strategy because they realized that readers could easily follow the ideas from points of departure to new ideas.

A final cohesive strategy, constant thematic progression (see Example 1.7), is documented by Jalilifar to be used at a similar frequency regardless of learners' proficiency level. This type of thematic progression is characterized by an item in the clause-initial position of the first clause is repeated in the clause-initial position of the subsequent clause, although possibly worded differently (Danes, 1974).

> Example 1.7
> The children saw the black feet of the wolf and feared, and they did not open the door. They told the wolf…
>
> (Jalilifar, 2010, p. 35)

Studies like Jalilifar (2010) offer important insights into L2 learner language use, suggesting that receiving instruction on cohesive devises has a positive impact on learners' development. Like previously stated though, due to the fact that such studies are non-developmental, they lack a dynamic and integrative approach to understanding thematic coherence. By implementing a microgenetic analysis of a learner's thematic

coherence, this thesis is better able to trace the developmental trajectory in the focal

student's ability to make meaning with linguistic resources and her actual use of

meaning-making resources in varied contexts. In particular, tracking the development of

thematic coherence between the TS and SI, rather than an analysis of other parts, e.g., the

SEDs, this thesis can maintain a narrow focus. Refining the focus to these two parts of

the paragraphs ensures that this thesis can better address particularities of developing

these two parts of the paragraph. Addressing the relationship of the other components of

the paragraph is surely an area of future research. In general, offering a rich description

of such a trajectory lends new insight into what L2 language use and development looks

like, providing the field of L2 acquisition with a better understanding of how this concept

emerges within social practices and how to ensure appropriate sequencing of instruction.

1.4.3 Saudi Learners of English: An Understudied Student Population

Studying a female learner of English from KSA ensures a broader representation

of learner-type in L2 development research. Despite L2 English learners from KSA

rapidly increasing from 3,000 in 2005 to over 61,000 in 2016 (Open Doors Report, 2005,

2017), a dearth of research on Saudi learners persists. Few studies have investigated

Saudi learners of English in U.S. contexts (Al-Gahtani & Roever, 2012; Al Murshidi,

2014a, 2014b; Al-Qahtani, 2015; Belz, 2018, 2019a & b; Giroir, 2014; Razek, 2014;

Razek & Coyner, 2013; Safi, 1992; Shaw, 2012; Unruh & Obeidat, 2015a, 2015b) and

even fewer document Saudi learners' L2 English writing development in instructional

contexts (Belz, 2018). Altogether, little is known about this L2 learner population beyond

aggregated test results or circumstantial accounts of classroom histories. For example,

Table 1.2 displays scores from the TOEFL iBT (internet based test) assessment,

indicating a relatively low proficiency level of students from KSA entering U.S.-based

instructional programs. The TOEFL iBT is designed to test individuals' ability to use and

understand English at the university level with each section having a maximum score of

30 points and a total maximum score of 120 (ETS, 2016, 2017).

Table 1.2

Summary of Saudi TOEFL iBT scores and percentile ranks across comparable groups

		KSA		UNDERGRAD		ENG PROG		TOTAL GRP	
Section		2016	2017	2016	2017	2016	2017	2016	2017
READING	Mean	14	15	19.4	19.4	20.0	20.1	20.5	20.7
	Percentile	16	24	42*	41*	43*	42*	39*	39*
LISTENING	Mean	16	18	19.4	19.6	19.4	19.6	20.2	20.3
	Percentile	24	26	41*	45*	42*	45*	42*	41
SPEAKING	Mean	18	20	20.2	20.3	19.7	19.7	20.4	20.4
	Percentile	22	45	44*	42*	48*	48*	42*	42*
WRITING	Mean	15	17	20.5	20.5	20.0	19.9	20.9	20.8
	Percentile	10	22	44*	44*	39*	40*	40*	33*
TOTAL	Mean	64	69	80	80	79	79	82	82
	Percentile	18	28	46	45	46**	46**	41**	40

(Educational Testing Services [ETS], 2016, 2017)
*Represents section scores rounded to the nearest whole number
**Percentile ranks for a total scale score are not published; the percentile rank represents a total scale score rounded to nearest whole number

Table 1.2 displays Saudi learners' lower scores, on average, than groups with

which they are affiliated, such as incoming undergraduate students (e.g.,

"UNDERGRAD") and students enrolling in programs dedicated to providing L2 English

instruction only (e.g., "ENG PROG"). Saudi leaners' performance just above a 50%

accuracy rate in all sections ranks this student population with a "limited" (ETS, 2014, p.

6) L2 English. Accordingly, this thesis ensures the close examination of the beginning

stages of development for thematic coherence in L2 English. Nevertheless, these scores

attempt to place learners on a scale with no particularization among the diversity of KSA

learners, nor any descriptions of what development looks like prior to, or following, the assessment.

Insight into what occurs prior to Saudi students' arrival in U.S. contexts, and likely prior to the TOEFL scores presented, is found in descriptive accounts of L2 English instruction within KSA. Such accounts highlight poignant tendencies in KSA: pedagogical practices utilizing rote memorization with little to no reading and writing instruction (Al-Hazmi, 2003; Al-Seghayer, 2014, 2015; Elyas & Picard, 2010; Hamdan, 2014; Syed, 2003); Saudi students entering university courses with low entry-level L1 proficiency (Phan & Barnawi, 2015); and institutions employing underprepared instructors and implementing poorly planned curricula (Al-Seghayer, 2014; Elyas, 2013). Additional accounts of strict censorship and little job security have been noted to dissuade instructors from making pedagogical adjustments, even when they possess the pedagogical training to alter this instructional context (Elyas, 2013; Hudson, 2012; Mercer, 2007; Picard, 2006). On an international level, KSA has been criticized for such teaching methods and the general curriculum (see Elyas & Picard, 2010), with critics often citing the lack of higher-order cognitive skills, including problem solving, application of theory, flexibility, and judgement needed by workers (Cassidy & Miller, 2002; World Bank, 2002).

While the abovementioned educational circumstances are important to consider, fundamental components specific to the Saudi context delineate factors impacting the acquisition of L2 English skills, especially in U.S.-based academic contexts. Consistent with sociocultural theory, the "intimate connection between the…environment that human beings inhabit and the fundamental, distinguishing qualities of human minds"

24

(Cole, 1996, p. 59) is particularly significant for Saudi learners of English. Students from

KSA studying English at the tertiary-school level, especially those students in U.S.

academic contexts, are engaged in mediational means that have not been accessible to the

majority Saudi population in the past. Table 1.3, for example, illustrates a brief history of

schooling in KSA, with the advent of formal, public schooling not accessible to the entire

population until the 1960s.

Table 1.3

Background to education in KSA, 1925-2005

Year	Event
1925	First government school is established for males
	General Directorate of Education for males is created
1954	The Ministry of Education is established
1956	King Saud University is created as the first non-religious institution of higher education for males
1960	The General Presidency of Girls' Education (GPGE) is established to oversee public formal education for women
1970	The first institution of higher education for women is created
2005	The King Abdullah Scholarship Program (KASP) is initiated to send students abroad for higher education

(timeline compiled from Al Rawaf & Simmons, 1991; Mahboob & Elyas, 2014; Rugh,
2002; Yizraeli, 2012; Zuhur, 2011)

Prior to 1925, formal schooling existed in the form of *kuttubs*, which were

religious in nature and run by an Imam, or religious leader. The significance of the events

beginning in 1925 is a shift in the religious schooling toward the establishment of

formalized, public education that standardized the curriculum to prepare students for

economic stability after adolescence. While the public schooling established in 1925

began to standardize academic subjects, much of the curriculum retained similar methods

of instruction, such as rote memorization with few opportunities for reading and writing

development, which as previously stated has been noted to persist (Federal Research

Division, Library of Congress, 1992; Saudi Arabian Cultural Mission, 1995; Tibi, 1998).

It is important to note that even with established formal, public education, few citizens from KSA had access to it. Figure 1.1 and Figure 1.2 highlight the recent growth in regular school attendance since 1970.
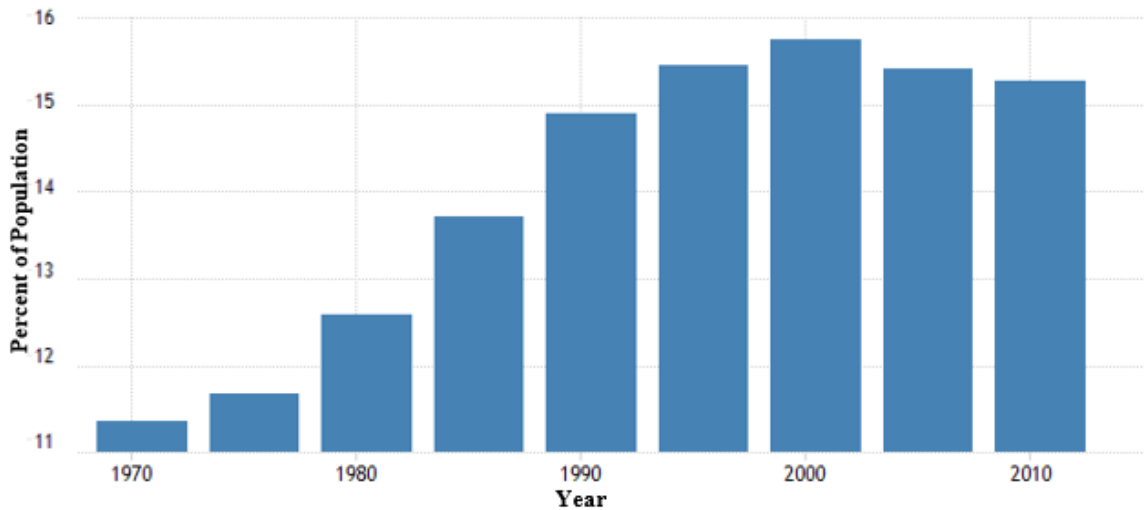

Figure 1.1. Percent of KSA Population with Completed Primary Education, age 25+
(Barro & Lee, 2018, n. pag.)
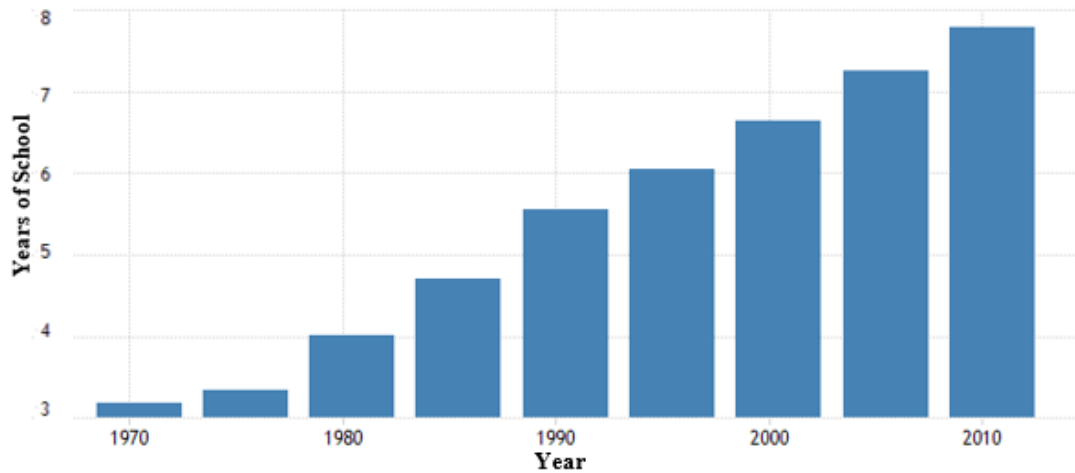
Figure 1.2. Average Years of Schooling for Individuals from KSA, age 25+ (Barro & Lee, 2018, n. pag.)

To put these data in perspective, for Saudi students born in the mid-1990s, as was the focal student for this study, between 13% and 15% of their parents' generation would

have completed primary school, with an average of four and six years of schooling. Saudi learners of English currently enrolled in U.S. educational contexts are now being exposed to mediational contexts, including literacy practices that in general the preceding generation did not experience. In her investigation of the emergence of literacy skills, Watson (2010) describes the distance between the "lifeworlds of orality and literacy as a semiotic abyss" (p. iv) that is difficult to traverse, yet imperative for one to acquire literacy skills. Ultimately, though, virtually no studies have documented L2 English performance or the developmental trajectory amidst this generational shift toward formalized schooling and literacy practices. Further, most studies in L2 acquisition have relied on educated adult participants with native language literacy (Bigelow & Watson, 2012) and relying solely on these studies may result in a misapplication of findings when teaching Saudi learners of English.

1.5 Summary

A powerful component of CBI for L2 learning is that targeted concepts are motivated by meaning making—that is, instructed concepts are not merely memorized, but also become a tool that students can actively reconstruct and apply to new contexts in order to achieve their own communicative goals. This aspect is introduced early in EAP 101 by presenting SCOBAs for the structural organization and thematic relationships of the academic paragraph in English (see section 1.3.3; Belz, 2018). The SCOBAs provide learners with choices and procedures for converting concepts, such as genre, "into personally relevant meaning" (Lantolf & Poehner, 2014, p. 72). By becoming aware of the linguistic features necessary to perform a writing task in academic settings, learners can learn to vary lexico-grammatical features for their desired or needed purposes.

One such feature that is prevalent in academic paragraphs is thematic coherence, which when constructed according the writer's purposes, can convey their intended meanings. As discussed above, this thesis defines thematic coherence as the flow of information to form a general-to-particular (i.e., superordinate-subordinate) structure of ideas that logically support the overarching assertion (e.g., the CI). What is missing from the academic literature though, is an understanding of how thematic coherence is developed, especially as it relates to the social practices in which it occurs. This thesis begins to fill in this gap by providing a microgenetic analysis of a single student. Studying a student from KSA additionally offers a nuanced documentation of the development of thematic coherence, which in large part, an entire generation is now undergoing. To do this, I transition to microgenesis, the selected method of analysis to capture the focal student's development in flight.

Chapter Two:

Methods

2.1 Introduction

Documenting the potentially complex developmental trajectory of writing

thematically coherent paragraphs of one L2 learner of English requires a rich description

of learner language use in relation to the social practices that occur. How learners become

aware of and use linguistic cues that mark the flow of information through cohesive ties,

the subordination of ideas, and the support of an assertion (see section 1.3.1), is important

for developing articulate L2 English instruction in EAP settings. The particularization of

how thematic coherence is learned must identify and trace any micro-changes in

performance and potential awareness of linguistic features over time. To this end,

Chapter 2 details the methodology to do so. I begin with a discussion of the use of a

microgenetic analysis, a case study design, and participant observation (2.2), followed by

an overview of the schedule of data elicitation (2.3). I will then present the data types and

their sources (2.4) followed by the procedures for analysis (2.5), concluding with an

introduction of the focal learner (2.6).

2.2 Research Methodology and Design

2.2.1 Microgenetic Analysis

Understanding L2 development according to principles of SCT requires the

documentation of social practices that guide the acquisition of skills, including the

intentional organization of instruction to mediate the development of L2 linguistic

features and concepts, classroom activities, and verbalization tasks (Lantolf & Poehner,

2014; Negueruela & Lantolf, 2006; Negueruela, 2008). Accordingly, this thesis adopts an

analytical approach that integrates the learner's L2 use and (instructional) experience to interpret the development of thematic coherence. As defined earlier, a microgenetic analysis is the observation of skill formation inclusive of the tracing of the history of the mediation leading to such change (Belz & Kinginger, 2003). This type of analysis builds from the methodological foundation of SCT that emphasizes the genesis (i.e., history) of human behavior to understand the source and acquisition of a skill. A genetic analysis "returns to the source and reconstructs all the points in the development of a given structure" (Vygotsky, 1978, p. 65); thus, the transformations one undergoes in the process of acquiring a skill are crucial components to understanding the mental functions used and (potentially) internalized by an individual (Wertsch, 1985). A microgenetic analysis was chosen because it has the ability to capture the acquisition of thematic coherence "in flight" (Vygotsky, 1978, p. 68) by examining micro-changes over time. Illuminating such L2 use over time can reveal development that arises, account for any contributing factors of change, and provide recommendations for L2 pedagogy.

This thesis contributes to the study of the development of thematic coherence among L2 learners of English by analyzing development over time and situating this development in the social practices that occur. As was explained in Chapter 1 (see 1.4.1), a microgenetic analysis captures micro-gains in development (Belz & Kinginger, 2003; Wertsch, 1985) and "closely examines the particular features of interactive settings as development takes place" (Kinginger & Belz, 2005, p. 3). In particular, this form of analysis affords observations of how "participants in social interactions are co-constructing meanings on a moment-to-moment basis" (Ishida, 2006, p. 59). Yet, as Belz and Kinginger (2003) make clear, rather than defining the microgenetic approach by a

particular time span, it is instead a "close developmental examination of a particular phenomenon within a given task" (p. 615). To this end, observing the focal student's production of academic paragraphs involves the tracing of the micro-changes contextualized by in-class activities, instruction they receive, experiences in class, and the role of task assignments, among other factors. Each of these will be explicated more fully below.

An early example of the application of microgenetic analysis to classroom-based L2 research and development is a series of work by Belz and colleagues (Belz & Kinginger, 2002, 2003; Belz & Vyatkina, 2005, 2008; Kinginger & Belz, 2005) where the researchers suggested developmental pathways by exhaustively tracking changes in learners' L2 use during electronic interactions with native-speaking keypals. In particular, these studies have furthered developmental understandings of the emergence of L2 pragmatic competencies, such as pronoun use for expressing solidarity among student peers (Belz & Kinginger, 2002, 2003; Kinginger & Belz, 2005) and attitudinal particles (Belz & Vyatkina, 2005, 2008; Vyatkina, 2007). More recent microgenetic analyses have contributed to the research of L2 development as well, with new insight into learning potential among students, such as mediated interactions and the effects on diagnosing and promoting listening comprehension (Ableeva & Lantolf, 2011); acquiring vocabulary in tutored dyads (Tocaimaza-Hatch, 2016); the role of collaborative activity on in computer assisted L2 acquisition (Gánem-Gutiérrez, 2008); acquiring second-person pronouns and verb negation accuracy in an L2 (van Compernolle & Williams, 2012); the internalization of the grammatical concept of aspect (García, 2017); and the use of computer delivered dynamic assessment on increasing listening and reading comprehension (Poehner &

Lantolf, 2013). The present study builds on this work by providing a close examination of micro-changes in L2 English use as it relates to thematic coherence over 15 weeks of instruction in EAP 101.

The microgenetic analysis that is described here provides a richly annotated description of Student A's development of thematic coherence, especially as it relates to specific learning events in EAP 101. In conjunction with the student's written production, the analysis of assignment guidelines, in-class activities, and the use of didactic materials, among others, allows for these micro-changes to be situated in the social activity in which it occurred. The overall goal is to offer new insight into L2 learner language use to understand "how the human mind functions as a consequence of its formation in cultural activity" (Lantolf & Thorne, 2006, p. 57).

2.2.2 Case Study Design

A case study design for a single focal student ensures a dynamic means to observe, trace, and analyze development of the focal student in EAP 101. A case study is defined as a method of research that investigates a single phenomenon (George & Bennet, 2005), for example, development of thematic coherence, as it occurs naturally, i.e., "set within a real-world context" (Yin, 2009, p. 10). A case study design appropriately supplements a microgenetic analysis by employing a triangulation of data, i.e., observing a phenomenon through multiple data sources as evidence (Denzin, 1978, 2012). In doing so, it is able to capture potential contributing factors to micro-changes, including those in the present and those that previously affected the development. Accordingly, a case study design is a beneficial means to particularize the processes and

experiences that occur during L2 use that may evidence the nature of L2 linguistic growth of thematic coherence (Johnson, 1992).

2.2.3 Participant Observation

Participant observation was chosen to ensure greater insight into the context of the development of thematic coherence. Participant observation is defined by Schensul, Schensul, and LeCompte (1999) as "the process of learning through exposure to or involvement in the day-to-day or routine activities of participants in the researcher setting" (p. 91). In general, systematic observation affords researchers with insight into events, behaviors, and artifacts that are present during a particular situation (Marshall & Rossman, 1989), ensuring the phenomenon is contextualized (DeWalt & DeWalt, 2002). By additionally participating in a situation with the focal subjects, researchers can gain perspective into potential sources of influence not otherwise available.

For the current study, I was able to spend an extensive amount of time inside learner groups, taking field notes and providing occasional consultations on writing produced by the learners in such groups. Thus, learners became accustomed to my presence, ensuring they participated more naturally than if a stranger was observing them and decreasing the chance of learners putting on frontstage behavior, i.e., what people allow an observer to see (Goffman, 1959). These observations occurred over the course of the 15-week semester of EAP 101, in which I participated in thirty 75-minute class sessions, as well as five to six informal observations of 30 to 45-minute one-on-one tutoring sessions with Student A. The observations resulted in nearly 130 pages of field notes.

For each observation, field notes involved documenting: (a) the didactic materials used and whether they were introduced for the first time or reviewed from previous sessions; (b) the sequence in which instructional content and activities were presented, including the time spent for each; (c) a description of the content that the instructor presented; (d) a description of each whole class activity, including instructions provided by the instructor, what the activity involved, and how students acted; and (e) a description of group work, again including instructions provided by the instructor, what the activity involved, and how students acted in the group I was observing. The observations made special note of each student who spoke and contributed to class discussion, especially when sharing a written production presented on an overhead projector for whole group activities.

In brief, interpreting the field notes involved a tabulation of when and how Student A participated in class or tutoring sessions, what activities were used to introduce or review components of thematic coherence, and tracking the ways the instructor introduced, referenced, and provided feedback on writing assignments. These tabulations and descriptions were then analyzed in sequence, compared alongside Student A's written production, which will be discussed below.

The participant observation afforded greater insight into both the instructional activities that occurred and student's interactions with them. My field notes shed light specifically on the use of classroom resources, including (among others) use of the instructor or peers to answer questions or sharing their written productions in front of the class to receive feedback. Overall, the descriptive insight into the instructional events with the field notes complements the methodology of a microgenetic analysis by

providing a means to contextualize Student A's experience in EAP 101, while accessing the naturally occurring data for the case study.

2.3 Schedule of Data Elicitation

Data were elicited from regularly scheduled class assignments that were part of EAP 101, an on-going multi-section course. The instructor's general theory of learning was based on SCT and, as part of her on-going research agenda, she designed concept-based instructional tools to deliver the common course content determined by the course coordinator; the instructor also designed course assignments, assessments, and classroom activities in accordance with principles of SCT broadly, CBI, and genre theory. Throughout the semester and for her own research projects, the instructor engaged in intensive data collection which included student writing (i.e., responses to course assignments). Furthermore, she designed elicitation instruments to collect data on learners' previous learning experiences, biographical information, and pre- and post-semester proficiency. She also designed tools for on-going dynamic assessment (e.g. Exit Tickets, Online Writing Conferences) of learners' responses to on-going CBI. She shared all these types of collected data with me, and I augmented what she collected with my own field notes on the unfolding CBI.

The general schedule of EAP 101 is depicted in Figure 2.1. Prior to and following all instruction, students completed a pre- and post-semester writing sample. The semester was comprised of three writing projects (e.g., WP1, WP2, & WP3) that were scheduled as part of the common course content, with the specific requirements designed by the course instructor.
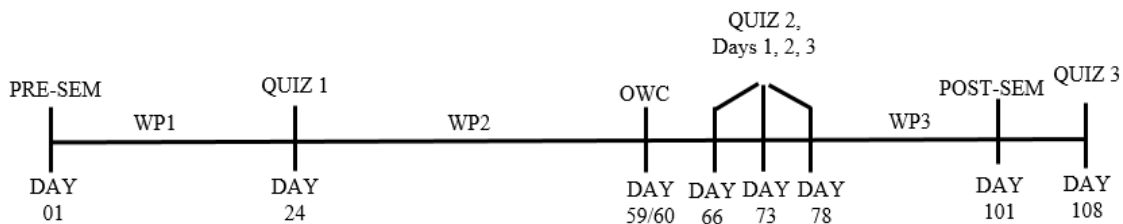
Figure 2.1. Instructional Stages and Dates of Data Elicitation

For WP1 students had to write three different types of paragraphs: a
Compare/Contrast, a Process, and a Cause/Effect. WP1 was one calendar month long and
it consisted of three drafts, each a single paragraph representing one of the paragraph
types noted. After receiving in-class, and online, written feedback for each draft, students
revised and resubmitted each of the three drafts together as a completed WP1 on day 23.
WP1 began with a holistic introduction of the basic academic paragraph in the form of
multiple SCOBAs, parts of which are displayed in Table 1.1 and Image 1.1. Following
the introduction of the basic academic paragraph, students engaged in a variety of
verbalization tasks, such as describing what parts of the basic academic paragraph their
drafts do or do not contain and how they would revise each draft based on this
knowledge. Students also participated in many classroom activities, such as comparing
basic academic paragraph models with more advanced academic paragraph models to
identify the use of different linguistic features (e.g., increased attributed adjectives and
different types of SEDs). To conclude WP1, students were assigned Quiz 1, a timed, in-
class written assessment that was designed by the instructor, during which students were
asked to write a single Compare/Contrast paragraph.

In WP2, students had to write six paragraphs: two Cause/Effect, two Summary,
and two Response. In order to write these six paragraphs, students had to read and
understand academic articles, use a library database to find relevant research for topics,

36

perform a keyword search, and adopt rhetorical positions. Students had a total of 38 days

for WP2, during which they submitted six drafts. For Draft 1, students had to revise the

Cause/Effect paragraph from WP1 and research relevant information to include research-

based examples in their paragraph. For Draft 2, students had to read and understand two

academic articles, then write a Summary paragraph for each. In Draft 3, students wrote a

new Cause/Effect paragraph in which they were asked to research an assigned topic.

Drafts 4 and 5 were each a single Response paragraph in which students adopted a

rhetorical position to respond to a main point from an assigned article. Draft 6 was a

revision of all six paragraphs; and the Online Criting Conference (OWC) served to

provide integral feedback for revisions for Draft 6. WP2 concluded with the timed, in-

class writing exam, Quiz 2 that consisted of days 1, 2, and 3, in which the instructor

guided learners in the writing and revising of an Expository paragraph. For this

paragraph, students were asked to explain how they used different SCOBAs to write and

revise the paragraphs submitted in WP2.

For WP3, students had to write a persuasive essay which consisted of five

different types of paragraphs: a Summary, two Pro-arguments, a Counterargument, a

Rebuttal, and a Conclusion. To accomplish this task, students had to answer a focusing

question, conduct research, develop a thesis statement, provide evidence, quote, and

research and develop a counter argument and rebuttal. Students had 32 days to complete

WP3 and it consisted of five separate drafts. WP3 was not included in the analysis

because of its focus on the production of an essay while the research questions focus

primarily on the thematic coherence of stand-alone paragraphs. At the end of WP3, the

course instructor again designed Quiz 3, a timed, in-class writing, which consisted of a repeat of Quiz 1.

2.4 Data Types

2.4.1 Process Data

Process data are defined here as students' written productions of topic sentences and/or supporting ideas. There are three sources: (a) course assignments, (b) in-class Exit Tickets, and (d) the Online Writing Conference (OWC) for WP2. There are 24 pieces of data for course assignments, seven timed and seventeen untimed; six pieces of data for the Exit Tickets; and one piece of data from the OWC. Process data from course assignments are summarized in Table 2.1.

These data are inclusive of all written paragraphs collected for analysis between days 1 and 108. The collection of data over many intervals as well as varying conditions (e.g., differing paragraph types and prompts in timed and untimed conditions) allows for an analysis of Student A's choices in writing, including the linguistic features used, the content in the paragraph and its relevance to the prompt, as well as the relationship among the parts of the paragraph.

For the pre-semester writing sample, the Compare/Contrast in WP1, and the post-semester writing sample, students were asked to write a Compare/Contrast paragraph in which they were asked to respond to one of two questions: (a) "How does university life at University A differ from university life at another university you know well?" or (b) "How is life in City A similar to or different from life in another place where you have lived?" For the Process paragraph in WP1, students were asked to write a paragraph describing "how to cook an egg." For Cause/Effect A in WP1 and WP2, students were

asked to write a paragraph in which they wrote about "the effect of technology on the

quality of student life."

Table 2.1

Chronology of course assignments and associated prompts

Assignment	Paragraph Type	Prompt	Day	Original (O) / Revised (R)
Pre-sem	Compare/Contrast	Life at 2 universities / in 2 cities	1	O
WP1	Process	Cook an egg	10	O
WP1	Compare/Contrast	Life at 2 universities / in 2 cities	15	R1
WP1	Cause/Effect A	Technology and student life	17	O
WP1	Process	Cook an egg	23	R1
WP1	Compare/Contrast	Life at 2 universities / in 2 cities	23	R2
WP1	Cause/Effect A	Technology and student life	23	R1
Quiz 1	Compare/Contrast	Contrast 2 texts	24	O
WP2	Cause/Effect A	Technology and student life	36	R2
WP2	Summary A	Literature and empathy	43	O
WP2	Summary B	Adapt to climate change	43	O
WP2	Cause/Effect B	Reading and development	45	O
WP2	Response A	Reading fiction	50	O
WP2	Response B	Climate	52	O
WP2	Cause/Effect A	Technology and student life	59	R3
WP2	Cause/Effect B	Reading and development	59	R1
WP2	Summary A	Literature and empathy	59	R1
WP2	Summary B	Adapt to climate change	59	R1
WP2	Response A	Reading fiction	59	R1
WP2	Response B	Climate	59	R1
Quiz 2	Expository	SCOBAs to Revise WP2	66	O
WP2	Cause/Effect A	Technology and student life	67	R4
WP2	Cause/Effect B	Reading and development	67	R2
WP2	Summary A	Literature and empathy	67	R2
WP2	Summary B	Adapt to climate change	67	R2
WP2	Response A	Reading fiction	67	R2
WP2	Response B	Climate	67	R2
Quiz 2	Expository	SCOBAs to Revise WP2	73	R1
Quiz 2	Expository	SCOBAs to Revise WP2	78	R2
Post-sem	Compare/Contrast	Life at 2 universities / in 2 cities	101	R3
Quiz 3	Compare/Contrast	Contrast 2 texts	108	R1

In WP2, for Summary A, students wrote a Summary paragraph for an article titled

"Reading Literature Makes People Smarter and Nicer: 'Deep Reading' is a vigorous

exercise for the brain and increases humans' real-life capacity for empathy" (Paul, 2013).

For Summary B, students wrote a second Summary paragraph for an article titled "On the

Front Lines of Climate Change" (Hertsgaard, 2007). Both articles that were read for the two Summary paragraphs were between eight hundred and one thousand words in length. For the Response paragraphs, students adopted one of several rhetorical positions that were presented in class on day 36, and responded to a main point from Paul (2013) for Response A and Hertsgaard (2007) for Response B. For Quiz 2, students were provided with a copy of 8 SCOBAs they had been introduced to, analyzed, and discussed throughout the previous 59 days of instruction. They were then asked to write a paragraph explaining which of these SCOBAs they used to write and revise the paragraphs written for WP2. As a form of dynamic assessment, on days 2 and 3 of Quiz 2, the instructor led students through guided feedback and revision of Quiz 1 day 1. Finally, for Quiz 1 and Quiz 3, students were asked to write a Compare/Contrast paragraph. To complete this paragraph, they were first asked to read two short texts in which Text A did not contain features of academic writing and Text B contained features of an academic paragraph (see Table 1.1). Students then had to write a Compare/Contrast paragraph in which they compared Texts A and B in relation to their respective use of features consistent with academic paragraphs.

The second source of process data came from the Exit Tickets. Exit Tickets are defined as student reflections, often submitted at the end of a class session, that provide students with an opportunity "to think about what they learned, how they learned it, what they need to learn next, and how they will use what they learned" (Amaro-Jiménez, Hungerford-Kresser, & Pole, 2016, p. 306). Exit Tickets for EAP 101 were designed by the instructor to aid learners in debriefing instructional content (Nelson, 2007), while also providing insight into whether or not students actually learned what was intended. In this

sense, Exit Tickets are a type of dynamic assessment that help to inform instructional

practice by revealing learners' misunderstandings and what should be taught next

(Popham, 2008). On six occasions, Exit Tickets provided learners with an opportunity to

change a component of a written assignment based on what they learned during the

corresponding class session. Because the research questions focus on the relationship

between the TS and the SIs, Exit Tickets assigning the production of a TS, SI, or both

were collected for analysis. Image 2.1 provides an example of an Exit Ticket eliciting

process data.
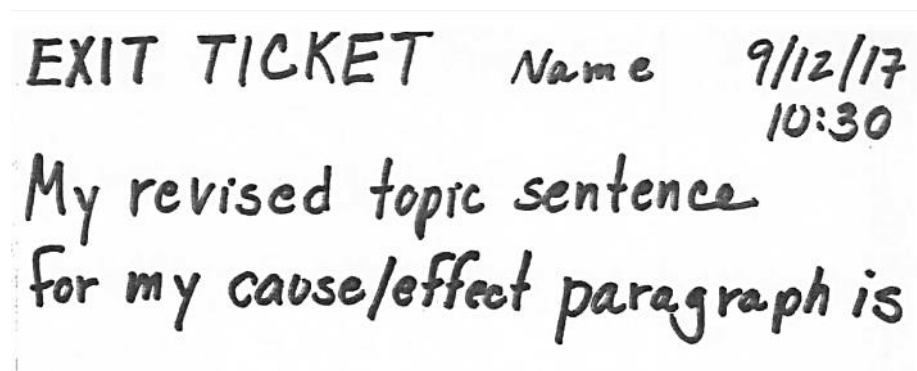
Image 2.1. Process Data Exit Ticket Example

Image 2.1 was displayed in front of the class for learners to copy on an index card and

then write their revised TS below the statement. An Exit Ticket such as Image 2.1 allows

for the collection of written production immediately following instruction, offering

process data at an interval between the submissions of other writing assignments, such as

those displayed in Tables 2.1. In general, Exit Tickets increase the density of the

microgenetic analysis vis-à-vis a very particular social activity, namely a very well-

defined bit of instruction.

A final source that offered the collection of process data was the OWC on days 59

and 60, consisting of a 30 to 45 minute online, synchronous chat. The instructor for EAP

101 conducted the OWC, during which I participated as an additional tutor. The OWC

had an objective of providing mediation to the revision of the paragraphs written for WP2, thus it is a site for dynamic assessment. During the OWC, students were expected to "ask specific question about draft 6" of WP2, and were advised to "write down…questions ahead of time and copy and paste them one at a time into the chat program." Any turn in the chat at which Student A revised components of her recently submitted paragraphs are considered as process data, documenting another interval in her development of thematic coherence.

2.4.2 Awareness Data

Awareness data are defined here as students' reflection of their process data, providing insight into what they were thinking as they produced the writing or what they were planning to change. There are four sources for awareness data: (a) in-class reflection of timed course assignments, (b) in-class Exit Tickets, (c) university writing center (UWC) self-assessment forms, and (d) the OWC. The in-class reflections of timed course assignments consist of nine data pieces; the in-class Exit Tickets for awareness data consist of seven times; the UWC self-assessments forms provide 10 pieces of awareness data; and the OWC allowed for the opportunity to analyze in-the-moment student reflection during this site of dynamic assessment.

For the in-class reflection of timed course assignments, awareness data is taken from Student A's pre-writing drafting (or lack thereof) for each of the seven timed assignments (see Table 2.1). The content of these drafts was analyzed to identify what Student A was using to regulate the planning of the process data that immediately followed. Similarly, immediately following the pre-semester writing sample, Quiz 2 day 3, and the post-semester writing sample, students were asked to write what they were

thinking as they produced these timed exams, potentially revealing if they were using concepts that were instructed (Belz, 2018). As a note for the post-semester writing sample, because it was a repeat of the pre-semester writing sample, the awareness data collected consisted of two parts: first, a reflection of what students were thinking as they produced the post-semester writing sample, and second, a reflection of how their own post-semester writing sample contrasted with their production of the pre-semester writing sample.

The second source for awareness data was in-class Exit Tickets, maintaining the same function of providing learners with an opportunity to reflect on their learning or verbalizing what they had been instructed during the corresponding class session (Nelson, 2007). The seven Exit Tickets designed by the instructor to elicit awareness data targeted learners' thoughts as they related to the instruction. An example of one such Exit Ticket is displayed in Image 2.2, focused primarily on learners' verbalizations.
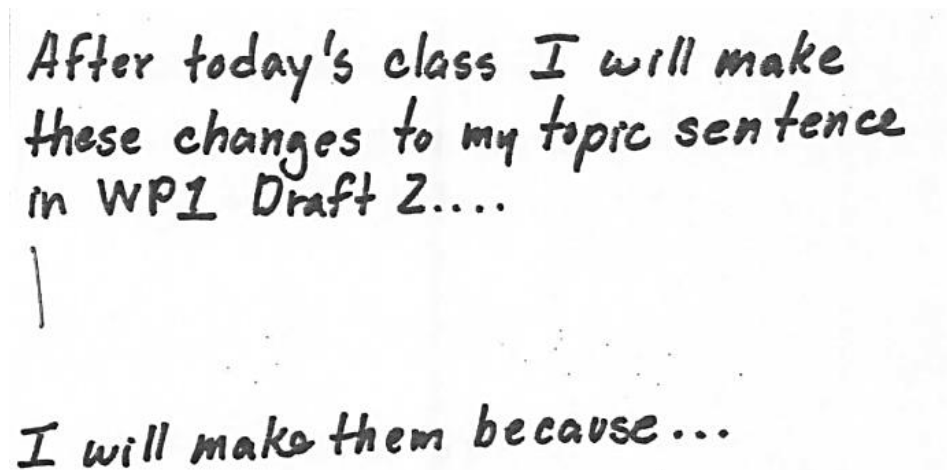
Image 2.2. Awareness Data Exit Ticket Example

Image 2.2 prompts learners to reflect on changes they plan to make and to provide a rationale. When produced after a class session, the details of a student's reflections

display their awareness of how the instruction potentially influenced their decision(s) to make changes.

The third source to elicit awareness data was students' university writing center (UWC) self-assessment forms submitted after a consultation at the UWC. Visits to the UWC were assigned by the instructor to supplement class sessions with tutored assistance for specific revisions of writing projects. Students were assigned tasks to complete at the UWC that related to what they were learning and focused on material presented in the SCOBAs (see Belz, 2019b).

While writing centers vary across institutions and are shaped by individual contexts, they maintain similar philosophies. First, writing centers offer free, collaborative advice by preserving the principle that both writers and readers mutually benefit from engaging in discussion with one another (Brooks, 1991; Harris & Silva, 1993; Kail & Trimbur, 1987; Lunsford, 1991). Second, collaborative advice from consultants maintains the goal "to produce better writers, not better writing" (p. 38). By emphasizing students' ownership of their texts, conveyed by not fixing students texts and rather teaching students how to fix their own texts, consultants assist in developing better writers (Brooks, 1991; Gillespie & Learner, 2000). Finally, consultants at UWCs focus on higher order skills (e.g., development of arguments, organization), and attune to form only at the end of a drafting process (Bell & Elledge, 2008; Gillespie & Lerner, 2000). To garner insight into how this practically played out for Student A, she was required to self-assess each visit she had at the UWC. These self-assessment forms surveyed learners by prompting them to indicate from a list of behaviors how they actively participated and then answer two open-ended prompts: (a) what was most useful about the visit and (b)

describe their revising/writing plans after the session. The visits to the UWC afford insight into learners' intentionality in seeking advice on writing assignments as a potential source of influence on their development.

The OWC, as introduced in the prior section, serves as a final source for awareness data. As noted above, prior to the OWC, students were expected to have prepared specific questions about revising their paragraph for WP2. Any comments indicating why Student A produced what she did or what she planned to do after the conference were included in this data.

2.4.3 Ethnographic Metadata

A pre-course biographical survey designed by the course instructor was the primary source for eliciting background participant information. This survey contained approximately 25 closed and open-ended questions related to learners' residence in the U.S. and abroad, language learning history including writing practices in their L1 and L2, and course expectations. The background participant information was augmented by information disclosed in classroom discussion and face-to-face interactions retrieved from participant observation. The ethnographic metadata were important to contextualize learners' accounts of their past educational experience with the instructional expectations for the course in which the study took place.

Other metadata include the sequencing of events, course assignments, and the students' use of the online course management system. A sequential presentation of data allows for a chronological unfolding L2 use, appropriate for tracing the history of thematic coherence (Vygotsky, 1978). Additional details of tasks, activities, and assignments, including the genre, paragraph type, or particular prompt, allow for the

examination of L2 use in relation to the particular learning event, social activity, or linguistic context (Belz & Kinginger, 2003). Such learning events or activities are crucial for an interpretation of the student's production in relation to the context of their L2 use.

2.5 Data Analysis and Procedures

The procedures for data analysis followed a Hallidayian-inspired approach to linguistic investigation of the flow of information in the learners' written productions (Halliday, 1989; Hyland, 2004; Martin & Rose, 2007). In general, the analysis identified the assertion of learners' paragraphs and their subsequent capabilities in establishing flow of information, or lack thereof. This involved first identifying how learners thematized their paragraphs, or just the TS in the case of Exit Tickets that required the revision of only this part of the paragraph, for example. Second, the periodicity of Student A's process data were identified, particularly the ability to establish a general-to-particular structure between the TS and the SIs. Finally, based on the analysis of sequentially produced writing over time, the general developmental trajectory of Student A was highlighted. These three procedures are summarized in Table 2.2.

Procedure 1 importantly identified the assertion being made to identify the relation it has with the text that followed. As Martin and Rose (2007) explicate, this assertion in the TS acts at a "higher level" (p. 194), orienting the reader to a frame of reference and establishing expectations of what will follow. The particular frame of reference and expectation act to thematize the paragraph, with which the analysis is concerned.

Table 2.2

Procedures for analysis

Procedure	Summary of Analysis	Purpose
Procedure 1: Identify how the paragraph was thematized	Identify the CI (if any) and its appropriateness in predicting subsequent sentences as well as its appropriateness vis-à-vis the task	To determine to what extent the assertion follows prototypical traits of academic written texts (e.g., objectivity, research-based, narrowing of the topic).
Procedure 2: Interpret the flow of information	Examine the ideas and linguistic resources comprising the SIs to determine their relationship to the CI.	To characterize the degree to which the SIs support the CI and the extent to which they are subordinate to it.
Procedure 3: Categorize the general trajectory	Classify any salient trends and qualitative changes observed over time.	To highlight the pathway(s) of development through the micro-changes in thematic coherence.

The analysis of the thematization first looked to identify to what extent learners' paragraphs addressed the assigned tasks. Each paragraph was written in response to a particular prompt, oftentimes already specifying a topic. Whether or not Student A's paragraph even addressed the topic altogether is examined, or if, and how, the learner was able to specify the topic by establishing a more exacting topic and assertion. Procedure 1 then analyzed what Student A's assertion was in her paragraph and examined its degree of specificity in relation to the writing prompt. The degree of specificity was important to predict what followed the assertion in the learner's TS; clarity through specificity predicted the ideas of subsequent sentences, whereas vagueness or ambiguity inhibited such predictability.

Procedure 2 utilized McCarthy & Carter's (1994) distillation of the understanding of the general-to-particular structure of the academic paragraph and Martin & Rose's (2007) explication of periodicity. This procedure characterized the flow of information in the learners' writing by analyzing the ideas presented in the SIs to establish the type of evidence they provided (if any) for the assertion and the degree of subordination they established. At the same time, analysis for Procedure 2 identified any linguistic features that were utilized to establish relationship with the TS, specifically how the SIs related to the NT or the CI. That is, referencing only the NT detracted from the assertion and did not provide appropriate support for the assertion. Similarly, only referencing or repeating the CI, but not providing a more specific aspect, inhibited the general-to-particular structure. Importantly, Procedure 2 identified the degree of general-to-particular structure and support via lexico-grammatical features such as reference (e.g., pronouns, articles), repetition (e.g., synonyms, subordinate items), or other signal words (e.g., meronyms, antonyms) directing the readers' attention back to the theme (Halliday & Hasan, 1976).

Procedure 3 relied on Wertsch's (1985) rationale that the transformations a skill undergoes in the process of an individual acquiring that skill is crucial to understanding the mental functions and awareness the individual has. Tracking the transformation in learner language use over time ensures a close examination of the history of the acquisition of thematic coherence. Following the analytical procedures of prior microgenetic analyses (see Belz & Vyatkina, 2005, 2008), the process data were sequentially tracked to identify changes in learners' performance, as it related to thematic coherence analyzed in Procedures 1 and 2, beginning at day 1 and progressing through day 108. Beyond ascertaining particularization of development over time, Procedure 3

48

also identified contextual dimensions related to the observed shifts in performance (see Belz & Kinginger, 2002, 2003; Kinginger & Belz, 2005) in order to examine how a particular experience shaped learners' development of thematic coherence. Such contextual elements included learners' behaviors and interactions in class, what they were thinking, and observations of changes in learners' awareness (e.g., understanding) in relation to linguistic features being instructed. Procedure 3 was crucial for characterizing and particularizing the focal learners' development *en route* to the production of academic paragraphs with thematic coherence.

2.6 The Focal Student

Student A was selected for analysis because she exhibited the fewest features of thematic coherence among her cohort in EAP 101 prior to instruction, as ascertained in the pre-semester writing samples. The characteristic of this pre-semester writing sample production will be thoroughly described as the first data point in Chapters 3. What is important to note from the pre-semester writing sample is that Student A did not produce a paragraph with a single theme and thus provided no evidence of a general-to-particular structure; rather, her production was a series of sentences containing disparate ideas. In contradistinction, the other Saudi students contained at least one pair of sentences with subordinate relationships. Selecting only one focal student was a deliberate means to ensure in-depth microgenetic analysis providing a comprehensive triangulation of the data for an accurate representation of the micro-changes the learners experienced throughout the course. Student A's biographical data will be presented in chapter 3.

Chapter Three:

Case Study of Student A

3.1 Introduction

This chapter presents a microgenetic analysis of the developmental pathway of thematic coherence between the topic sentence and supporting ideas in academic paragraphs produced by Student A over 15 weeks in the context of an introductory EAP writing course in an EAP program at a U.S. university. Because Student A's developmental path is influenced by various factors, her production, awareness data, in-class observations (of instruction, class activities, her general experiences, *inter alia*), and ethnographic metadata (e.g., biographical survey, course assignments, sequencing of events, Student A's use of the online course management system) are considered in their entirety. In the sections that follow, I will first present an overview of Student A's biographical metadata in Section 3.2. This biographical data is intended to contextualize Student A's prior learning history, especially as it relates to L2 English and L2 English composition, during EAP 101. Section 3.3 presents the microgenesis of thematic coherence for Student A. To do this, I will analyze the production data in sequence, interpreting the thematic coherence (or lack thereof) in its immediate linguistic context as well as in relation to its relevant social context, such as the metadata (e.g., paragraph type/genre, task assignment and prompt, day of production). All examples are illustrative of Student A's production for a particular assignment, meaning that sentences are often elided from written paragraphs to ensure an analytical focus on the thematic relationship between the CI and SI(s) in a paragraph, and to include the SI(s) that best display the features of thematic coherence in each assignment or task. Important for the

microgenesis, Student A's production is interpreted in relation to the ongoing instruction, taking into consideration specific details of pedagogy and in-class activities, feedback on written production, and Student A's experience in EAP 101 as documented by particular in-class observations. Student A's awareness of her use of the components of the academic paragraph as it relates to thematic coherence is also interpreted alongside the production data and instruction when applicable. Chapter 3 will conclude with an overview of the main findings of the analysis in section 3.4.

3.2 Student A's Background

Student A, a 21-year-old female freshman studying respiratory therapy, grew up in the Eastern Province of KSA where she completed the entirety of her primary, intermediate, and secondary education. She began primary school at the age of six with grade one, then transitioned to intermediate school for grades seven through nine and secondary school for grades 10 through 12; overall, her primary-secondary education background is consistent with general education trends in KSA (Barnawi & Al-Hawsawi, 2017). During an extemporaneous conversation during an observation, Student A provided commentary on her previous educational experiences concerning L1 and L2 reading and writing instruction. To begin, instruction in L1 Arabic reading involved the reading of an assigned excerpt of a text followed by memorizing answers to comprehension questions that her instructor provided. For L1 Arabic writing, she stated that instruction often consisted of memorizing one or two paragraphs provided by instructors from a textbook, which students would then rewrite for an assessment. For L2 English, Student A noted that English instruction began around grade four and lasted through grade 12, averaging three to four hours of instruction per week. Educational

reviews of KSA also document the instruction of L2 English consisting of four, 45-minute sessions per week (Barnawi & Al-Hawsawi, 2017). After Student A graduated from secondary school in KSA, she enrolled in a public university in KSA. After only two months, she was informed of her acceptance into the King Abdullah Scholarship Program (KASP) and chose to come to the U.S. to complete an undergraduate degree. Student A stated that her decision to come to the U.S. was to increase her opportunities to learn English while also gaining other experience living abroad.

Student A moved from KSA to Midwestern City A with a male relative where she attended two separate Intensive English Programs (IEPs). She spent one year at IEP 1 and six months at IEP 2, both in Midwestern City A. Student A then moved to Midwestern City B where she currently resides and attends a local university. Table 3.1 contains information on the focal student.

Table 3.1

Summary of Student A's education

Pseudonym	L1	L2	Age of arrival in the US	Age during current study	Previous tertiary education	Context of English studies in the U.S. prior to current study
Student A	Arabic	English	19	21	2 months in KSA	Public university IEP for 1 year & Proprietary IEP for 6 months

At IEP 1, seven of the 11 instructors have earned a Ph.D. related to English language instruction or applied linguistics/L2 acquisition. For the first year, Student A attended IEP 1 which is associated with a local public university and offers 15-week long sessions. L2 English instruction consists of 18 hours of instruction per week with a

sequence of six levels: Foundational, Beginning, Intermediate, Advanced, Academic, and Graduate. Writing instruction for the foundational level focuses on sentence and basic paragraph construction related to personal and everyday topics. The writing instruction for the Beginning and Intermediate levels again focuses on writing about personal topics, but the Beginning level focuses primarily on writing and revising paragraphs while the Intermediate level introduces short essay-length writing tasks. At the Advanced through Graduate levels, students learn to compose different genres associated with academic writing with graduated degrees of difficulty (IEP 1 course website). Student A attended the intermediate level.

IEP 2 is a for-profit IEP unaffiliated with a higher education institution, but does offer a pathway to college admission at select partner colleges and universities. This means that at the partner institutions, students may enroll directly in the college or university after completing the highest level of IEP 2's program sequence without further English proficiency testing. IEP 2 offers sessions lasting five weeks with 20 hours of instruction per week; the IEP provides a sequence of five levels: Low-Beginning, Beginning, Intermediate, Advanced-Intermediate, and Advanced. The Low-Beginning and Beginning levels are comprised of two classes, "grammar, speaking and listening" and "reading and writing," with each class offered for 10 hours per week. Writing instruction for these two levels focused on the production of sentences and paragraphs about everyday topics. The Intermediate through Advanced levels consist of four classes: "reading," "writing," "speaking/listening," and "grammar." The grammar class focuses on "grammar to improve all areas of English" which is offered six hours per week and the "writing" class is also six hours per week with instruction of paragraphs at the

Intermediate level and essays at the Advanced-Intermediate and Advanced levels (IEP 2 course website). As noted on Student A's biographical data sheet, her hope for EAP 101 is to "learn how to move from point to point, and write a strong thesis statement with a strong support."

3.3 Microgenesis of Student A's Thematic Coherence

To review, thematic coherence is the flow of information within a written unit to form a general-to-particular structure in which each subsequent idea is subordinate to and supportive of the abstract, overarching assertion (Brown & Yule, 1983; Hoey, 1983; Martin & Rose, 2007; McCarthy & Carter, 1994; Winter, 1977, 1978). This concept is concretized in EAP 101 through four structural components in a basic academic paragraph and the relationships between them (see Table 1.1; TS containing the NT and CI, SI, SED, and CS). The CI formalizes an assertion, often in response to a particular task or prompt. For the SIs to establish thematic coherence, they must represent a subordinated topic derived from and in support of the CI. Deriving a SI solely from the NT may generally subordinate the SI to the TS, but this would mean it is not creating a subordinated unit with the CI, and thus not establishing thematic coherence. Further, each SI should establish "a *progressive* sequence of ideas" (italics in the original) that can be interpreted "as logically or chronologically related" (Fowler, 1986, p. 61) to mutually support the CI.

Prior to any instruction, EAP 101 began with a timed, in-class writing sample in which learners were asked to produce a Compare/Contrast paragraph. Students were allotted approximately 25 minutes and were encouraged to use the entire 25 minutes to write. To complete the task, students were first asked to respond to one of two questions:

(1) "How does university life at [Midwestern University] differ from university life at another university you know well?" or (2) "How is life in [Midwestern City] similar to or different from life in another place you have lived?" Student A chose to respond to question 2 with the first three sentences of the paragraph given in Example 3.1.

> Example 3.1
> On my opinion life in [City A] is different from life in [City B] because [City B] is a small city and most of places that I visit takes me short time to go. However, in [City A] takes me longer time comparing with [City B] because it is burger [sic]. [City B] has a lot of Arabic resturents [sic], and I guess [City A] has less resturents than [City B]…
>   (Pre-semester writing sample, Day 1)

Student A produces no features of an academic paragraph, and even displays a lack of knowledge of prototypical objectivity of academic writing (e.g., "my opinion," "me," "I guess"; see section 1.1.1). The first sentence lacks any thematization or CI and instead it repeats the prompt, e.g., "life in [City A] is different," followed by what appears to be an explanation for this difference, e.g., taking a "short time" to get around City B. A more appropriate TS by a more proficient writer could be, "Unlike City B, the high population density of City A means much longer commute times." This example sentence abstracts an idea of "longer commute times" in City A, signaling that the subsequent sentences will contrast the commute times in City B with those in City A. Instead, the last sentence displayed in example 3.1 is illustrative of what Student A does, marking an overall lack of a general-to-particular structure by introducing the disparate idea of "a lot of Arabic resturents [sic]." The remaining five sentences in the paragraph mimic the third sentence's introduction of a new theme.

Based on field notes from day 1, Student A did not spend any time drafting her paragraph and instead, upon receiving directions for the prompt, immediately began

writing; she did, however, write for the entire 25 minutes. Immediately after producing

the pre-semester writing sample, students were asked to write what they were thinking

while they produced the paragraph to elicit any awareness of features of academic

paragraphs and/or writing in general. Student A wrote, "I was thinking of City A because

I do not have enough time to see it," suggesting that rather than thinking about any

features of academic writing, she was concerned more with her personal account of the

cities. Overall, in the reflection, Student A restated the disparate topics she introduced in

her paragraph (e.g., "[City B] is a small city," "a lot of Arabic [restaurants]") indicating

that she was not using generic features of academic writing to regulate her response,

likely because she was unaware of such features. In fact, Belz (2018, p. 18) finds that

approximately 20% of the 94 Saudi writers in her study report no metacognition of

academic writing at all on this same task, while an additional 67% report no

metacognition of Hyland's (2004) four domains of genre knowledge, including structural

and organizational text conventions such as the four components of the basic academic

paragraph depicted in SCOBA 1 (see Image 1.1).

On day 3, learners were introduced to the components of the basic academic

paragraph, as displayed in Table 1.1. Students were also provided with a model

paragraph, of which the first three sentences are displayed in section 1.2.1 in Image 1.1.

This model paragraph was initially presented to students as an uncolored version. After

reading this paragraph, students were introduced to SCOBA 1 and instructed to relate

each component of the paragraph to representative colors (i.e., red TS, yellow SIs, blue

SEDs, pink CS, & green transitional words/expressions). In groups of three or four,

students read the model paragraph and highlighted each sentence according to its

function, e.g. the SI supports the CI. Students colored each sentence in the model paragraph in accordance to its function, resembling the tactile process in other CBI studies (e.g., Serrano-Lopez & Poehner, 2008; Zhang & Lantolf, 2015). The pairing of specific colors to a particular component of the paragraph mediated students' awareness of the varying functions of sentences. Once the model paragraph was highlighted, students could compare and contrast this SCOBA containing the example paragraph later in the semester with their own productions (e.g., notice if they have SIs or SEDs, see how many SEDs follow a particular SI, notice what types of SEDs they have and what types are missing). The instructor also pointed out that the model paragraph did not contain "I" or "you," and then provided students with a handout explicating the relationship between these pronouns and objectivity/subjectivity, and suggested that learners should use appropriate pronouns depending on their writerly goals. These types of reader-writer relationships and considerations were also depicted on SCOBAs.

On day 8, students were introduced to the SCOBA 2 containing the image of the nesting dolls (see Belz, 2018) and discussed how the large nesting doll represents the CI and the smaller dolls represent the more particular, subordinated units of the SI and subsequent SEDs. With the image of the nesting dolls, and the chromatic SCOBA learners were introduced to on day 3, the instructor identified subordinating relationships in the model paragraph by drawing an arrow from the SI to the CI and between the SED and SI, explaining that each subsequent idea "fit" inside the idea that came before it.

On day 10, students submitted a Process paragraph prior to attending class. The assignment was to "write a Process paragraph about how to cook an egg." As a homework assignment, students were to read a 2-page excerpt from an EAP textbook that

detailed how to write a Process paragraph; the TS clearly states what process will be explained followed by steps to complete it. An example Process paragraph in the reading had the TS, "To calm [a] child during a tantrum, follow the next steps." Example 3.2 is taken from Student A's Process paragraph.

> Example 3.2
> Some people faced difficulty on making omelet. They follow the recipe, but they did not get the dish of omelet they want. Sometimes it sticks on the pan, and other time it has brown color. However, there is a few steps that one should follow in order to make a perfect omelet which has a yellow color, and not sticking on the pan. First of all, one should crack two to three eggs carefully into a bowl, so one does not have small pieces of eggshell…
>
> (Process Paragraph, Day 10)

In contradistinction to the example provided in the assigned reading, Student A begins the paragraph with three introductory sentences naming a few difficulties to "making [an] omelet." It is not apparent until the fourth sentence that the paragraph is about the process of how to cook an egg, e.g., there are "a few steps" to "to make a perfect omelet." Had Student A not included the three initial sentences and instead began the paragraph with "There [are] a few steps one should follow…," the paragraph would have clearly identified the process and what the purpose of the paragraph, albeit the attempted CI ("a few steps") could be specified more by naming how many are actually needed. Student A does name a type of egg dish (i.e., an omelet), showing greater attention toward establishing a more specified NT, rather than repeating "egg" from the prompt. Additionally, the paragraph lacks use of personal pronouns, making it more objective than the pre-semester writing sample. In general, after the presentation of model paragraphs and multiple SCOBAs, Student A begins to reconceptualize how to write by eliminating personal accounts. However, with the introductory-type sentences presenting

a narrative style of writing (e.g., "Some people faced difficulty…"), she is still writing from a more-anecdote-based subjective perspective.

Following the submission of the Process paragraph on day 10, students came to class and read a student-written Process paragraph characterized by the instructor as "an excellent Process paragraph" that had the following TS: "To make a delicious cup of Bi Luo Chun green tea, follow the next five steps." Much like on day 3, students again worked in groups, with the instructor and graduate student assistants each participating in a different group, to highlight each sentence with the color corresponding to its function in the paragraph as illustrated on SCOBA 1. Furthermore, students completed a chart on a worksheet in which they were asked to fill-in-the-blank for the number of each paragraph component in the student-written Process paragraph. Students were told that each sentence is an example of one of the four components (i.e., it functions as a TS, SI, SED, or CS), which was particularly poignant for Student A whose Process paragraph included the three introductory sentences that did not belong to any of these four categories. On the same worksheet, they were also asked to count the number of transitional expressions (TEs) in the example Process paragraph. Finally, students were asked to examine the TS and particular SIs and SEDs and explain how they exhibit thematic coherence. In the final fourteen minutes of class, the instructor asked students to complete an Exit Ticket on which she elicited students' reflections on what they will change in their own Process paragraph about how to cook an egg. Students were provided with a sentence frame (e.g., "After reading the tea paragraph, I will make these changes to my Process paragraph…"), and Student A wrote that she will "add the heating temperatures," then listed "Tobic [sic] sentence" and "Transition Expression."

Student A's Exit Ticket lacked any explanation as to why the temperature was going to be added and what about the TS and transitional expressions was going to be changed. However, specific temperatures are a feature of some SEDs in the sample Process paragraph which serve to subordinate SEDs to SIs through references to heat-related lexical items in preceding SIs. Student A's listing of "Transitional Expression" indexes the worksheet task where learners counted TEs in the sample paragraph. It might be interpreted that Student A's repetition of the terms is indicative of at least the awareness to include such items. However, at this point, a restatement of the terms is unlike documented cases of repetition in which learners manage the presentation of new information with the repetition of some items (see Gánem-Gutiérrez & Harun, 2011). In Student A's case, she only mimicked what was already said with no provision of how these new pieces of information are to be used in any production. In the final five minutes of class, Student A is one of two students to share in plenary at the document camera what they wrote on their Exit Tickets. Her Exit Ticket was projected on a large screen at the front of the classroom for her peers to see. Student A's Exit Ticket did not contain a revised TS; however, the instructor provided verbal feedback to Student A, stating that her (yet to be written) topic sentence should specify the number of steps in the process. This comment was likely in response to Student A's vague indication that she would change her "tobic [sic] sentence," with no explanation as to what will change.

At the end of class on day 10, students were provided with written, corrective feedback on the pre-semester writing sample (see Example 3.1). The first salient piece of feedback the instructor made on Student A's writing sample was crossing out "on my opinion" and circling subjective phrases (e.g., "I guess") followed with a written

comment that "academic writers don't guess." Secondly, the instructor circled "is different" in the initial sentence and wrote that it is "not a CI." At the end of the paragraph, the instructor wrote: "you have an SI in your topic sentence but no CI," and "use actual facts and evidence to support your CI and SIs." This explicit feedback was rich in metalinguistic terms, especially the focus on the CI. However, in her self-assessment form from a UWC visit on day 11, Student A only uses the metalingual term "topic sentence" when she writes "I should edit my topic sentence, and omit the sentences which I wrote before my topic sentence." She is apparently aware of the importance of a TS, but is not differentiating between the NT and CI.

Before coming to class on day 15, students produced a revision of the pre-semester writing sample by using the same prompt from day 1. Students were again assigned a homework reading from an EAP textbook explaining that a Compare/Contrast paragraph describes similarities and/or differences in two things, followed by five separate example TSs. The first example TS was "Although all dogs make good house pets, large dogs are much more useful than small dogs." The reading noted that the topic is large dogs versus small dogs, with the CI being large dogs being more useful than small dogs. The reading explained that SIs would be examples of the usefulness of large dogs. Example 3.3 is taken from Student A's production of the revised Compare/Contrast paragraph.

> Example 3.3
> [City A] and [City B] both are similar in weather and type of people; however, they differ in size, places and environment, and transportation. The weather in [City A] like the weather in [City B]…In terms of place and environment, [City A] has less Arabic restaurant comparing to [City B].
>
> (Compare/Contrast, Day 15)

Student A is demonstrating progression toward a more objective tone and an awareness of the need for a TS that exhibits an introductory-like function. Regarding the more objective tone, Student A has implemented the instructor's feedback on the need to delete personal deixis and not include personal thoughts as rationales (e.g., "my opinion" in Example 3.1). For the TS, Student A's production is markedly different by announcing each SI that follows in the subsequent sentences (i.e., "weather," "types of people," "size," "place and environment," and "transportation"). While the first iteration of this paragraph on day 1 introduced the idea of "size" in the TS and followed this by sentences each with disparate ideas, Example 3.3 displays a crucial change in Student A's production by attempting to unify all sentences with the TS. The TS in Example 3.3 provides thematic progression with each SI repeating the idea already introduced in the TS. The repetition of an item in the clause-secondary position is similar to Jalilifar's (2010) documentation of linear thematic progress. However, by repeating the CI (e.g., "are similar" and "they differ"), Student A also utilizes a strategy of constant thematic progression, observed by Jalilifar to be present among all proficiency levels. Based on the targeted instruction of the need for the TS to regulate the SIs, Student A is likely repeating the items to ensure a direct line of thought, much like Jalilifar concluded. Nevertheless, the paragraph is missing an abstraction away from the SIs with an assertion that constitutes as the CI. In fact, with the announcement of the five SIs, Student A merely repeats the prompt again, saying how "both [cities] are similar" and that "they differ." Further, by repeating the ideas from the TS as "similar" or "different," the paragraph lacks a subordination of SIs to the CI to form a general-to-particular structure. Importantly, the instructor makes note of Student A's TS in online written feedback,

advising Student A to "get a proper CI in your TS, you have no CI; instead, you have put 5 SIs in your TS." Such explicit use of metalanguage comes directly from the SCOBA as a means to regulate Student A's production with the scientific concepts (Karpov, 2003).

The class session on day 15 was intended to provide targeted instruction on the revision of the Compare/Contrast paragraph which the students submitted immediately prior to coming to class. Instruction involved the discussion of student examples of TSs produced for Compare/Contrast paragraphs with the same prompt. On a PowerPoint slide, the instructor showed five TSs lacking a NT and/or CI and then prompted students to analyze them to identify what was missing. The first example was, "There are many differences between City X and City Y." The instructor pointed out that this sentence did not have a CI because it repeated "differences" from the prompt. Students were shown four more examples like this, with students identifying which component was missing, the NT, CI, or both. The instructor then showed three examples of appropriate TSs containing both a NT and a CI. The first example was: "Public transportation is more diversified and widespread in City W than in City Z" (where actual city names were used in class). The instructor explicitly told students that the topic was City W and City Z, but it was narrowed first to "transportation," then to "public transportation" in the two cities. The instructor also explicitly pointed out that the CI was "more diversified and widespread in City W." Next, students were shown two additional similar examples. Afterwards they were provided 20 minutes to complete an Exit Ticket eliciting a revised TS for the Compare/Contrast paragraph and their verbalization for why they were making the changes that they did.

Student A's revised TS shows the emergence of a basic CI: "The cost of living in [City A] is higher than the cost of living in [City B]." After this one day of instruction, Student A was able to produce a more specified topic, e.g., "cost of living in [City A]," and a more abstract idea for the CI, e.g., "is higher [in City A]." What is particularly important is that Student A is able to explain the change to her TS from the draft shown in Example 3.3. Student A writes, "I am going to change my controling [sic] idea…because I have more than one." In this comment, Student A identifies the focus of the revision using appropriate metalinguistic terms present (e.g., controlling idea). Based on the earlier example of Student A's visit to the UWC on day 11, she is becoming aware of the concept of the CI; however, the rationale for the change is inaccurate, e.g., "more than one" CI. The previous TS contained a list of multiple SIs rather than multiple abstractions of the SIs. In general, as has been documented with how writers thematize their writing (see Berry, 1995; North, 2005), the revision of this TS indicates an increased awareness of the concept of direct presentation of information in academic writing, more appropriately setting Student A up for thematic coherence.

Despite the inaccuracy of Student A's rationale for the change to the TS, the Exit Ticket does display Student A's bourgeoning conceptual development with marked ownership in the explanation. In Gracía's (2017) investigation of learners' verbalization, learners' ownership of their learning can be expressed through linguistic choices, such as Student A's use of the personal determiner (e.g., "my") to note "personal significance" (p. 106) of the CI. However, the verbalization from Student A's UWC self-assessment form just one day later on day 16 shows a backward move vis-à-vis the explicitness of

her application of concepts from class instruction. Student A's verbalization from this UWC visit is given in Example 3.4.

> Example 3.4
> I am planning to focus on the differences between [City A] and [City B]. I am planning to edit some of my ideas, and add more ideas. I am going to delet [sic] some of my ideas because they do not match what I am planning to focus on.
>
> (UWC self-assessment, Day 16)

The use of unspecified "ideas" (e.g., edit, add, and delete "some of my ideas") with an explanation that the changes will occur "because they do not match" is not explicit in differentiating differing components like that of the instruction; although, Student A may be using "ideas" as an abbreviation for SI. Nevertheless, the explicit differentiation between the CI and SI and the multiple SCOBAs instructing learners on the subordination of SIs, not just "matching" ideas, are not expressed in Student A's explanation provided out of class. Using the terminology of the CI immediately following instruction on day 15 but then relying solely on vague terms provides an important observation of Student A's inconsistent use of instruction and teaching tools (e.g. the SCOBAs, metalinguistic terms such as CI and SI) to regulate her production and verbalizations.

Students submitted the third paragraph of WP1 on day 17, this time a Cause/Effect paragraph. Once again, prior to submitting this paragraph, students were assigned a homework reading excerpted from an EAP textbook that explained that the purpose of a Cause/Effect paragraph is to explain why something happened or what the consequences of a particular event are. The reading noted that the TS must indicate if the paragraph focuses on a cause, an effect, or both. For the Cause/Effect paragraph, students were given the prompt: "write a Cause/Effect paragraph about the effect of technology on

the quality of student life." Example 3.5 is taken from Student A's paragraph and displays a strategy of copying the prompt to construct the TS, much like the Compare/Contrast TS on day 15.

> Example 3.5
> Technology makes the quality of a student life valuable. It helps it become valuable by searching. First of all, students could search about majors; therefore, they could know what is the major [sic] about and what does the major lead to… Moreover, it connects them with people who are working on the major; consequently they could know how does it feel [sic] to be in that major, and what it is like in the real life.
>
> (Cause/Effect, Day 17)

The only component of the TS Student A constructs on her own is "makes" and "valuable," which renders the TS as a whole rather vague. Student A did not attempt to create a NT and instead used the broad topic of "technology" already provided. By copying the prompt rather than responding to it, the CI, e.g., "the quality of student life valuable," could refer to any number of subjects (e.g., attendance, grades, test scores, graduation rates) and the TS in particular shows Student A's limited ability to abstract a CI. With no CI, the SIs are unable to create a subordinate relationship with the TS; instead they identify aspects that may be a function of technology only, e.g., "search about major" and "it connects," rather than an effect of technology as the prompt asked students to write about.

In class on day 17, following the submission of the Cause/Effect paragraph, students were introduced to extended SEDs (i.e. more than one SED after an SI). To help draw students' awareness to how this can be used to vary the paragraph, students were asked to contrast the sample paragraph they read and highlighted in class on day 3 with a new, more advanced sample Process paragraph referred to as "advanced model 'coffee' paragraph." This paragraph was about how to make coffee, which they read in class on

day 15 (like the example of the student-produced Process paragraph about how to make tea). They also contrasted these two paragraphs with the three paragraphs they submitted on days 10, 15, and 17. Table 3.2 is taken from the PowerPoint slide used in class.

Table 3.2

Charting SI-SED units

Basic model paragraph	Advanced model 'coffee' paragraph	Your drafts
Topic sentence	Topic sentence	Topic sentence
SI – no SED 1x	SI – no SED 2x	
SI – SED 4x	SI – SED 1x	??
Concluding Sentence	SI – SED – SED 2x	
	SI – SED – SED – SED 1x	??
	Concluding Sentence	
		??

(Class PowerPoint, Day 17)

The model paragraphs charted for students in Table 3.2 show that both have a TS and CS, highlighted red and purple respectively. The "basic model paragraph" is also represented to have one SI followed by no SEDs one time (e.g., SI – no SED 1x) and one SI followed by one SED four times (e.g., SI – SED 4x). Contrasted with "advanced model 'coffee' paragraph," students could see how the number of SIs and SEDs aided the coffee paragraph to be more advanced. Working individually with instructor and tutor assistance when needed, students were provided highlighters to mark their own drafts for SI-SED units. In the final 20 minutes of class, Student A volunteered to share her reflection on the Compare/Contrast paragraph with the entire class. She noted that she did not highlight her TS red because she realized that it was not a TS and did not have a CI and that "the reader won't know the topic." Student A's awareness of when her writing is not adequate is increasing in frequency, and with this example, she is noting the importance of a

67

unifying topic. However, a more accurate explanation of not having a TS, vis-à-vis the

CBI instruction provided thus far, is that without a CI the reader does not understand the

assertion about the topic. In effect, Student A's reasoning continues to display limited

understanding of the function of the CI. Although unable to fully articulate this idea,

Student A did make note of the other sentences in her paragraph, stating that not every

sentence is highlighted because they "do not fit." During instruction, the instructor often

discussed the CI-SI "fit" or the SI-SED "fit" to index the superordinate-subordinate

relationship between the corresponding paragraph parts, as well as indexing the image of

the nesting dolls in SCOBA 2 with her use of the verb "fit." Thus, Student A's

observation of her own sentences not fitting appropriately recognizes the lack of

relationship among the sentences, stemming from the infelicitous TS. Like Wang (2007),

the instruction of thematization that Student A has been receiving is leading to increased

ability.

Following the above activity of contrasting paragraphs, students were introduced

to varying types of SEDs. They were instructed that SEDs can take many forms, such as

one containing concrete examples, statistics and quotes, but also interpretations,

elaborations, and evaluations, among others. Students were then asked to build on the

model paragraph by creating an SI-SED-SED or SI-SED-SED-SED unit out of a SI-SED

or SI-no SED unit.

In the final five minutes of class on day 17, students completed an Exit Ticket that

asked them to complete the sentence frame: "After today's class, I will revise my Drafts

1, 2, & 3 by making these changes…" Student A wrote, "I should change topics [sic]

sentences, and focus on one CI." Again, Student A is aware of the need for a CI, but does

not explicate what specific changes will be made; it is uncertain if she has fully grasped the importance of the CI for her paragraph. This is not surprising, first due to the relative newness of the concepts as EAP 101 is only in day 15 of the 108-day semester, but also because L2 development is an uneven, non-linear progression, well documented in the L2 acquisition research (Aljaafreh & Lantolf, 1994; Ortega, 2009).

On day 22, the instruction followed a similar protocol to that on day 15 in which students discussed a series of example TSs, this time with the emphasis on the Cause/Effect paragraph. Students were presented with three model student-written TSs for a paragraph about the effect of nutrition on health. The first TS was: "Frequent exercise decreases the risk of cardiovascular disease." Students were then presented with four infelicitous examples, the first being, "Technology effects our daily life in many aspects." Students discussed how the excellent examples contain a specific NT, not just "technology," and that the CI presents a clear proposition about that NT. Following this discussion, students spent 20 minutes completing an Exit Ticket that asked them to revise the TS for their Cause/Effect paragraph with Student A's new TS shown in Example 3.6.

Example 3.6
Research tools such as Google ~~makes the equality of a student life valuable enhanced~~ helps student to succeed.

(Exit Ticket, day 22)

Student A narrows the topic from "technology" (day 17) to "Google," and even attempts to produce a more specific CI, e.g., "helps students to succeed." The strikethrough indicates words Student A crossed out while writing the Exit Ticket, displaying again Student A simply copying the prompt, "quality of student life," with only minor additions of her own, e.g., "valuable" and "enhanced." However, while students were completing the Exit Ticket the instructor drew attention to the specific CIs in the exemplar student

69

examples and noting the vagueness of CIs that copying the prompt, and Student A

revised the CI to the current iteration, e.g., "helps student to succeed." While it displays a

positive move toward greater specificity in the CI by not copying the prompt, the new CI

still remains vague as it is unclear what will be successful and how it will be measured

(i.e., success in grades, graduation rates, homework completion). However, Student A's

Process and Compare/Contrast paragraphs submitted for WP1 on Day 23 mark the

emergence of TSs containing CIs with subordinated SIs.

Prior to discussing Student A's production on day 23, it must first be noted that

Student A's use of the online course management system increased dramatically between

the last paragraph on day 17 and the submitted paragraphs on day 23. In these six days,

Student A had 130 page views, suggesting her heavy use of class PowerPoints containing

the sample topic sentences and course materials that the instructor made available for use.

What will be highlighted in the paragraphs produced on day 23 is that while the

SIs do represent subordinate ideas of the CI, they do not support the CI mainly due to

repetition. Example 3.7 is taken from Student A's Process paragraph.

> Example 3.7
> To make a perfect omelet which has a yellow color, and not sticking on
> the pan, follow the following steps. First, one should crack two to three
> small eggs carefully into a deep bowl, so on does not have small pieces of
> eggshell… The second thing is to add black pepper and salt as preferred to
> the egg and mix them until it is totally blended…
> (Process, Day 23)

Student A revised her Process paragraph by producing a TS containing a NT, e.g., "To

make a perfect omelet," and a CI, e.g., "follow the following steps." While the NT could

be more precise (e.g., the type of omelet), Student A provides a different means of

narrowing the topic by modifying it as "perfect" and describing the characteristics of it as

"yellow" and "not sticking"; additionally, the CI could be clearer with a specific number of steps. What is important though is that Student A clearly identifies the steps needed to make the omelet, e.g., "First…crack two to three small eggs," "second…add black pepper and salt," create a superordinate-subordinate structure in her paragraph. The use of a different verbs for each SI allowed for a linear thematic progression, noted by Jalilifar (2010) as a strategy for ensuring explicit continuation of a topic, similar to what was done by Student A in Example 3.3 on day 15.

Example 3.8 is taken from the Compare/Contrast paragraph and displays the second complete revision of this paragraph. This iteration also illustrates the presence of a NT and CI in the TS.

> Example 3.8
> The cost of living in [City A] is higher than the cost of living in [City B].
> In terms of transportation, the higher rate of transportation is in [City A]…
> The cost of health in [City A] is higher compared with [City B], "health
> related expenses are 12.6% more in [City A]," as it is posted in the
> bestplace.net website…
>
> (Cause/Effect, Day 23)

Student A uses the same TS produced in the Exit Ticket on day 15, producing the NT "cost of living" in City A and City B, and the CI "is higher" in [City A]. While the CI is not exact, it shows a progression; rather than repeating the prompt, this CI offers an evaluation of the NT, i.e., the cost of living being higher. A significant feature of this paragraph is the presence of SIs that each identify an aspect of "cost of living" (e.g., "transportation," "health") allowing a better general-to-particular structure to be established. With the NT creating a sort of hypernym for the following SIs, Student A provides more particular ideas, which coincides with a strategy of lexical cohesion for producing cohesive texts (see Halliday & Hasan, 1976). However, the SIs do not provide

71

strong support because they merely repeat the CI's claim, e.g., "the *higher* rate of

transportation"; "cost of health… is *higher*" (emphasis added). Student A's ability to

develop points of an argument relies on repeating the CI, similar to Jalilifar's (2010)

analysis of lower proficiency students' use of constant thematic progression (i.e.,

repeating the overall them in subsequent clauses/sentences).

Example 3.9 is from Student A's Cause/Effect paragraph, the final paragraph in

WP1.

Example 3.9
Research tools such as Google helps students to succeed. First of all,
students are able to search major [sic], so they could know what is the
major about [sic] and what does the major lead to. Students who are
thinking about becoming respiratory therapist could use Google searching
as a tool to know more about respiratory therapy… Moreover, a research
tool connects students with people who are working on the major which
students are thinking about. Consequently, they could know how it feels to
be in that major, and what it is like in real life…

(Cause/Effect, Day 23)

This Cause/Effect paragraph uses the same TS produced by Student A on day 22 in the

Exit Ticket. The SIs unsurprisingly have an ambiguous relationship with the TS because

of the vagueness of "success" in the CI (i.e. the uncertainty of whether success refers to

GPA, finding a job), as noted with the production of the Exit Ticket. Because Student A

is not clear about what is meant by success, the SIs, e.g., "to search major" and "research

tool connects students with people" cannot fully be interpreted as subordinate aspect of,

nor support for the CI. To illustrate with the first SI, researching a particular major may

only anecdotally lead to "success." Much like is noted by Berry (1995) and North (2005),

this infelicitous attempt to thematize the paragraph resulted in inadequately related SIs;

ultimately, this TS displays Student A's lack of awareness of the need for an objective

and specific abstraction for the CI. Interestingly though, the sentence immediately

following this first SI does offer a particular example of the SI, e.g., "use Google…to know more about respiratory therapy." This production of an SI-SED unit establishes a particularization of ideas important for thematic coherence in the paragraph, but with this feature not occurring between the CI and SIs, the paragraph as a whole does not establish thematic coherence. Being able to produce relatively better coherence between the SI and SED (two subordinated units to the TS), but not between the CI and SI due to the infelicitous CI, suggests the overall difficulty in producing a CI in general.

It is likely that because Student A received additional time and instruction between the initial drafts of the Compare/Contrast and Process paragraphs, in contradistinction with the Cause/Effect, Student A was afforded a greater opportunity to revise and produce features of thematic coherence. This is particularly noted for the Compare/Contrast paragraph, produced first on day 1, revised on day 15 prior to instruction, the TS again revised on day 15 post instruction, discussed at the UWC on day 16, then discussed in front of the entire class on day 17 after contrasting it with the model paragraphs. Such affordances (van Lier, 2000) ensured ample opportunity for Student A to take agency over the revision of the Compare/Contrast paragraph; but, also, these data strongly support the idea that social activity is crucial for development (Lantolf, 2000a), namely because Student A's own development, albeit incomplete at this point, occurred with rich and ongoing contact with others.

On day 24, students completed Quiz 1, a timed, in-class, writing exam in which students wrote a Compare/Contrast paragraph. To complete Quiz 1, students were first asked to read two short texts in which Text A contained no features of an academic paragraph and Text B exhibited features of an a more advanced Process paragraph much

like the coffee paragraph introduced on day 17. Students were then provided with the task

of contrasting the two texts with respect to how well they exhibited features of an

academic paragraph. Students were also provided with a grading rubric by which their

written response would be assessed, in which a line item on the rubric was designated for

each component of the paragraph, e.g., "Student's Compare/Contrast paragraph contains

an appropriate and adequate narrowed topic." This rubric could have served as a

regulatory tool to use when analyzing and contrasting the two paragraphs and

subsequently producing their own Compare/Contrast paragraph in response to the

assigned task.

     Prior to beginning, Student A was observed to take minimal time to plan for her

writing; the only drafting she did was to circle the personal pronouns and one vague word

in Text A, e.g., "stuff." Student A did spend the entirety of the allotted 60 minutes to

write her paragraph, from which Example 3.10 is taken.

> Example 3.10
> The use of the model paragraph structure in Process Paragraph B is better
> than the use of the modle [sic] paragraphs structure in Process Paragraph
> A. In paragraph B, it is clear that the writer has ability [sic] on writing
> topic sentence that has a narrow topic and a controling [sic] idea which is
> part of the mode [sic] paragraph structure… However, in paragraph A, the
> writer do [sic] not have a clear topic sentence because he or she started
> with a general fact…Paragraph B, the writer is able to use translation
> [sic] word such as first, for example, next finally, and second. In the other
> hand, paragraph A do not have a transition words…
>
>   (Quiz 1, Day 24)

By naming the aspect to be contrasted as the NT, e.g., "use of the model paragraph

structure," and the CI expressed with an adjective, e.g., "is better," Quiz 1 resembles the

TS in Student A's Compare/Contrast paragraph produced on day 23 in which the cost of

living was identified as "higher" in one of two cities. This CI could be improved with

greater specificity at the onset, such as indicating Paragraph B's increased use of

structural components of an academic paragraph, which would signal the discussion of

the structural components in the SIs. Instead, Student A identifies various components of

the paragraph as SIs, e.g., "writing topic sentence that has a narrow topic and controling

[sic] idea" and "use translation [sic] word." Like the Compare/Contrast paragraph from

day 23, the SIs here establish some particularity, i.e., each SI is a component of the model

paragraph (e.g., the NT). An important distinction from day 23, however, is that the SIs

do not repeat the CI. Instead, each SI in Quiz 1 names a feature that is found in Text B

but not in Text A, suggesting that what is meant by "better" is the presence of different

paragraph components. In general, this production indicates Student A's overall

awareness of the parts of an academic paragraph, or at least the ability to use instructional

materials to identify parts of the paragraph. That is, with the grading rubric naming each

part of the paragraph, Student A could have used it to regulate her production. The use of

didactic materials is documented to assist in the process of developing conceptual

understanding and control of particular language skills (Gánem-Gutiérrez and Harun,

2011), which is a crucial step in CBI in general (Gal'perin, 1989).

On day 29, the instructor provided standardized feedback for Quiz 1 to every

student in the form of a written handout, with salient points shown in Example 3.11. Each

student also received individualized feedback on their particular responses to the exam

task.

> Example 3.11
> …you were asked to write about ***the organization of the paragraphs*** in A
> and B…Your controlling idea in your topic sentence should contain some
> statement about the fact that [Text] A does not follow the [model
> paragraph]. Then, your supporting ideas (yellow sentences) in the rest of
> your Compare/Contrast paragraph should each be about one way in which

B follows the [model paragraph], while A doesn't…a very logical way to write [the] Compare/Contrast paragraph would be to have four supporting ideas (yellow sentences) and each one of them discusses one of the four parts…

(Feedback from Quiz 1, Day 29; emphasis in the original)

Further feedback indicated that a more advanced response to the exam task might include information about the thematic coherence or variations on the model paragraph, such as SI units with one or more SEDs, changing the number of total SIs, or reordering the SIs based on the writer's purpose. The consistent use of the metalanguage is provided to orient learners toward the scientific concepts, as has been stressed for CBI. The intentional use of metalinguistic terminology was additionally used in individual, written feedback to Student A; however, because Student A's paragraph did exhibit the characteristics recommended by the feedback shown in Example 3.11, the instructor provided explicit advice to increase the advancedness of the exam paragraph, such as "include SIs that discuss aspects of advanced paragraphs, e.g., types of SI-SED units," in addition to suggesting that Student A write a draft of her paragraph prior to completing the assigned task.

Between days 29 and 36, students completed one important homework assignment designed to guide them in researching academic articles related to a topic prior to beginning to write. They were first introduced to doing a keyword search in the university library research database by watching an instructional video. They were instructed in finding articles related to the Cause/Effect paragraph due on day 36. Student A was assigned to revise the Cause/Effect paragraph from WP1, with the prompt of writing about "the effects of technology on student life." Student A did not submit this paragraph on the assigned date, however.

At this juncture, students are also assigned two articles to read, both between eight hundred and one thousand words long. The first article is titled "Reading Literature Makes Us Smarter and Nicer: 'Deep reading' is vigorous exercise from the brain and increases our real-life capacity for empathy" (Paul, 2013) and is about how extensively immersing oneself in literary fiction leads to an increased awareness of other people's emotions. The second article, titled "On the Front Lines of Climate Change" (Hertsgaard, 2007), and argues that coastal cities in the U.S. should learn to adapt to climate change from the example of other countries' initiatives. The topics of the assigned paragraphs in WP2 were closely linked to these articles to reduce the cognitive load for learners in processing new information and ideas from different texts. Students first read the articles and produced a Summary paragraph for each, and then they wrote one Cause/Effect paragraph related to the topic of the first article (Paul, 2013), and then they wrote two Response paragraphs, each paragraph responding to a single point from each article, respectively. Reading other research articles is required for the Response paragraphs and more minimally for the Cause/Effect.

Prior to the writing the Summary paragraphs, students were introduced to the summary as a paragraph type that provides an academic reader with "the main points of a full article." During an in-class activity, in groups of three or four, students read the first article and identified main points using a handout that detailed locational clues (e.g., titles and subtitles, section headings, topic sentences) and verbal clues (e.g., important/importantly, crucial/crucially, clearly, one finding/the main finding, findings point toward) that assist readers in finding main points. Students were also provided with

templates to use for the TS for their Summary paragraphs. The Summary TS template

students were provided is shown below.

> Example 3.12
> In their [sic] article, "Reading Literatures Makes People Smarter and
> Nicer", Paul (2013) reports / asserts / claims … [insert formulation of the
> main, overarching idea of the article].
>
> (Class assignment, Day 31)

Examples 3.13 is taken from Student A's Summary paragraph of Paul (2013)

produced on day 43. A major observation in this paragraph is high use of repetition of the

CI to produce the SIs.

> Example 3.13
> According to Paul (2013), in their article "Reading Literature Makes
> People Smarter and Nicer" asserts that reading literature enhances the
> capacity of mind for empathy. Paul suggests that there is proof that
> reading literature enhances people's mind for empathy. She supports that
> by adding a research which indicated that people who frequently read
> fiction seems to have more ability to understand people's intentions, share
> their feelings as if they were have been in the same situation. In making
> this comment, Paul discloses that the more literature they read, the better
> they socialized. Paul states that deep reading is a threatened practice that a
> teacher should protect it [sic] and she points out the historic building as an
> example of a valuable thing that a person protects…
>
> (Summary A, Day 43)

In analyzing this paragraph, Student A does not appropriately use the template provided.

It is possible that Student A may have been trying to use her own agency to construct the

sentence, but in doing so she produced a sentence that is not grammatically correct (e.g.,

"in their article 'Reading Literatures…' asserts). What is important for this paragraph is

Student A's use of an appropriate CI, "literature enhances the capacity of mind for

empathy"; however, this CI is the same idea expressed in the subtitle of the assigned

article. Student A was able to appropriately use textual clues, but it is not evident that

Student A understands the assertion. It seems that overall, Student A is having difficulty

identifying the CI of the article, and instead just chooses a point from the subtitle. This is especially evident in the repetition of the CI in the first SI, e.g., "literatures enhances people's mind for empathy." In the following sentence, Student A seemingly attempts to provide more particularity by introducing research (e.g., "by adding a research which indicated…"). Again though, she provides a reworded and lengthier repetition of the CI (i.e., "people who frequently read fiction" having a greater "ability to understand people's intentions").

Student A is likely experiencing difficulty fully understanding the article, partly observed with the repetition of the CI, both in the SI and in the presentation of the research. Additionally, Student A attempts to present details, but instead introduces vague topics that are seemingly unrelated to the CI, such as being "better…socialized," the "threatened practice" of "deep reading," and a comparison with "historic buildings." In general, Student A selects points from the article and inserts them into her paragraph but is unable to logically relate them to the CI. The problem Student A has is deriving more specific and subordinated ideas to support the CI, which in many respects contrasts to earlier paragraphs in which Student A had difficulty abstracting a single assertion that constitutes as a CI.

Also taken from Student A's submission on day 43, Example 3.14 displays the first draft of Summary B written for Hertsgaard (2007).

> Example 3.14
> According to Hertsgaard (2007) in his article "On the Front Lines of Climate Change" discusses that United States lack of action to protect its country from global warming and should consider what other countries have done as examples to prepare for climate change… He emphasizes that Americans will have more difficulty dealing with global warming if they do not act. The author advises them to study other countries' methods of preparing for climate change. He points out three countries as an

example of a way of adapting that U.S could benefit. The first country is
The Netherlands because of its best records of adaption global warming
[sic] in the world…

<div align="right">(Summary B, Day 43)</div>

This paragraph again relies on repetition of the CI to produce the SIs; however, Example 3.14 displays SIs written later in the paragraph that do provide minimally subordinate examples of the CI. Like Summary A, Example 3.16 includes a CI, e.g., the U.S. "should consider what other countries have done as examples to prepare for climate change," taken directly from the article, this time from a concluding sentence of a paragraph. The initial SIs in Summary B repeat the CI rather than derive examples of it, but are elided from Example 3.14 because they are much like the SIs in Summary A. What is new to Student A's writing and makes Summary B stand out is that beginning in later sentences (at "He emphasizes that Americans…"), Student A is able to produce respectively better subordination of ideas, as opposed to a simple repetition of the CI. Fourteen sentences into the paragraph, Student A writes "the article advises…to study other countries' methods" and then begins to introduce three countries. The particularization of naming precise countries allows for a subordination, but rather than naming particular methods, Student A again refers to a previous idea, e.g., "records of adaption [to] global warming." The Netherlands is identified as having the "best records" but what those records are and how adaption is actualized is not detailed, thus, suggesting that deriving particular pieces of evidence remains a challenge for Student A. Additionally, Example 3.14 is again similar to Jalilifar's (2010) observation of a constant thematic progression, in which the theme in an initial clause is repeated in later clauses.

For both Summary paragraphs, Student A received online, written feedback. The feedback first instructed the student to use the TS template provided in class to avoid

grammatical mistakes. Student A was also advised to identify which sentences were the SIs by inserting transitional expressions to indicate an organizational structure. The final piece of feedback pointed out that the SIs are incorrect because they "do not fit" into the CI, thus they are not subordinated to the assertion nor do they support the claim.

The second Cause/Effect paragraph, Cause/Effect B, for WP2 was assigned for day 45. Because Student A did not submit Cause/Effect A on day 36, this paragraph is the first of this paragraph type during WP2. The prompt for Cause/Effect B was to write a paragraph about the "effects of reading literature on human cognition and development" with the assignment guidelines stating that the NT is "reading literature" and that the task is to "figure out a SPECIFIC effect of this NT on human cognition and/or development." The topic of this Cause/Effect paragraph is explicitly linked to the topic of Paul (2013), which the students had already summarized for Summary A. Example 3.15 illustrates Cause/Effect B.

> Example 3.15
> Assignments of reading literatures have negative impacts on the development of young people. Young people do not understand correctly what they are assigned to read. When a student is required to read pages of a literature book, he or she did not decide to read it, so they do not involve in what they are reading. According to Farrall, "The statistics from 2007 are grim: most individual ages 15 to 24 are spending 7 to 10 minutes per day reading voluntarily. This does not mean, however, that these readers are focused and engaged in what they are doing…" The author's point is that a student should be involved with what he or she is reading to approach the goal of reading such as comprehension…
> (Cause/Effect B, Day 45)

The CI in Example 3.15 presents a vague, undefined assertion, e.g., "negative impacts on the development of young people," which largely repeats the prompt. This resembles the undefined "success" in the CI used for Student A's previous Cause/Effect paragraph from WP1 on day 23. In Example 3.15, Student A thematizes the paragraph to suggest that

what will be provided is evidence of negative developmental impacts of reading. The following sentences do not provide any such examples and instead, the SI claims "Young people do not understand" when reading is "assigned" rather than occurring "voluntarily." Overall, Student A is unclear as to what any effects of reading actually are and accordingly, she cannot derive specific SIs. In contradistinction to Summaries A and B, Student A has much difficulty abstracting CIs. As noted in the examples of the Summary paragraphs, the specific CIs were likely a product of didactic materials explicating how to find main ideas, and class sessions dedicated to reading and understanding the assigned articles. When presented with the task of responding to a prompt for the Cause/Effect paragraph however, Student A has the greater burden of identifying an overarching assertion on her own.

The final paragraph type analyzed in this thesis was the Response paragraph, produced on day 50. Response A was a paragraph written in response to a main point in Paul (2013) and Response B was written in response to a main point in Hertsgaard (2007). For each paragraph, students selected a point and adapted a rhetorical position to formulate an argument for their paragraphs.

Instruction of the Response paragraph type occurred over two days. On the first day, the Response paragraph was explained to students as an "educated commentary on a point in another writer's article." To instruct learners in how to produce this paragraph type, the instructor provided learners with an example statements about climate change followed by various responses, highlighting different rhetorical positions for each response (e.g., agree with topic but suggest different solutions; agree and elaborate). These rhetorical positions could then be adapted by students in their own paragraphs. On

the second day of instruction of the Response paragraph, students had the opportunity to produce TSs for the Response A. Students were provided a list of TS templates typical to Response paragraphs, e.g., "While it is true that …, it does not necessarily follow that …" (Graff & Birkenstein, 2016).

Student A submitted Response A on day 50, responding to a point she selected from Paul (2013). Example 3.16 is taken from Student A's Response A.

> Example 3.16
> Paul is surely right about that, reading fiction often leads to greater understanding and empathy of other people because research has shown that there is a connection between the ability of understanding other and reading literary fiction. Firstly, clearer understanding of another person's attitude is critical to make a long-term relationship. Begley, an author, states "BEING ABLE TO UNDERSTAND what other people are feeling is critical for building relationships." (Begley, Read a Novel, 2016)… Secondly, literature reader judge other accurately because they understand other people's behavior and why they make that action…
>
> (Response A, Day 50)

The CI, e.g., "connection between the ability of understanding other and reading literary fiction," is very similar to the main idea that was summarized in Summary A on day 43 (see Example 3.13). This may have occurred because Student A was already familiar with this CI. At the onset of WP2, Student A began reporting that her visits to the UWC focused heavily, if not exclusively, on reading and understanding the assigned articles, and two full class sessions were committed to reading and digesting Paul (2013). Considering the amount of time Student A already spent focusing on Summary A, it is not surprising that she chose the CI from her Summary A for the CI in Response A.

Regarding the SIs that begin at "Firstly" and "Secondly," respectively, the ideas selected by Student A do not provide evidence for the CI. The first SI, e.g., "clearer understanding of another person's attitude is critical to make a long-term relationship,"

83

introduces the somewhat unrelated idea of developing relationships. In fact, this first SI is a rewording of the quote in the following sentence, making it likely that Student A chose the quote and attempted to incorporate it with the SI, but in doing so, took the idea out of context. In the second SI, e.g., "literature reader judg[ing] other[s] accurately," Student A essentially restates the CI, a strategy used for creating SIs already noted in previous paragraphs. Had Student A provided actual examples of a "connection between… understanding… and reading," the CI and SI would have established the superordinate-subordinate relationship. Instead, she uses a strategy of constant thematic progression rather than adding new information (see Jalilifar, 2010).

On day 50, students also completed a homework assignment asking them to identify a research article that they found on their own using keyword searches in the university library databases. They were also prompted to write relevant details from the research article they believed would support the rhetorical position they adopted in their Response paragraph. Student A volunteered to share her response to the assigned homework. An interesting observation is that Student A stated that the article she used to write her Response A named book titles that have influenced people's capacity for empathy; however, she did not include this in Response A itself. The instructor asked her in what part of the paragraph she might include these book titles, to which Student A responded that they would go in the "blue sentence" (e.g., SEDs). This is important because, with the support of the instructor, Student A was able to identify specific ideas that support her CI as well as identify in which part of the paragraph these pieces of evidence may be included; however, in the written product, she was unable to do the same.

The above interaction was followed with the instructor providing her own

example of a TS and SIs for a Response paragraph to Paul (2013), shown in Example

3.17. The CI was bolded and the SIs numbered 1 through 3 in the class PowerPoint.

Example 3.17
Paul (2013) is surely right that reading fiction leads to greater
understanding of other people because recent research shows that **reading
literary fiction introduces readers to human experiences that they
may never have the chance to see in real life**.
1. "Huckleberry Finn" by Mark Twain; character Jim shows the cruelty
   of slavery;
2. "Inside Out and Back Again" by Vietnamese writer Thanhha Lai;
   problems faced by refugees;
3. "Girls of Riyadh" by Rajaa Alsanea; insight into the lives of Saudi
   women through 4 female characters.

(Class PowerPoints, Day 50)

Example 3.17 is especially poignant for Student A because she had mentioned finding

titles of books herself, but had not been able to explicate that the book titles would be

strong pieces of evidence for the argument. The instructor led the class in a discussion of

the CI and how the SIs all provide precise examples of books in which readers are

introduced to experiences they may have in real life. For example, the instructor

explained that she herself will never be a slave, but she may grow to understand the

perspective of a slave by reading Twain's Huckleberry Finn. She also explained that she

will never be a Saudi woman in real life, but she may develop empathy for the

experiences of Saudi women by reading about them in Alsanea's novel. After seeing the

instructor's example, students completed an Exit Ticket in which students were asked to

identify what changes they will make to the CI and/or SIs in their Response paragraphs

and why they are making those changes. Example 3.18 is taken from Student A's Exit

Ticket.

Example 3.18
I can add an example of a fiction book that helps people in social life and
how it helps to have a strong suppurting [sic] ideas. I am going to make
these changes because I think adding them will vary my SI-SEDs units,
and make my parraghraph [sic] more strong [sic] with evidences. I also
think adding these changes will makes my paraghraph advance [sic].

<div align="right">(Exit Ticket, Day 50)</div>

Example 3.18 displays Student A's intent to make changes as a means to ensure her

paragraphs are "strong with evidence." What is notable in this example though is that

Student A relies on repetition, this time of the instructor's examples of book titles, e.g.,

"add an example of a fiction book." Concurrently, because of the instructor's

demarcation of literary titles explicitly as SIs, Student A incorporates the repeated ideas

into a more complete explanation than when sharing in plenary, e.g., "it helps to have a

strong suppurting [sic] ideas… because I think adding them will vary my SI-SEDs…" In

fact, Gánem-Gutiérrez and Harun (2011) find that greater understanding of L2 concepts

is gained for learners who incorporate immediately instructed information into their own

explanations. This is a significant observation for Student A's developmental path

because it shows the extent of mediation that was involved prior to Student A verbalizing

a specific example, e.g. "fiction book," that that would establishes thematic coherence

with the CI in her Response A.

On day 52, students submitted Response B, a Response paragraph for a main

point in Hertsgaard (2007). Students were again instructed to use one of the templates

introduced on day 45 to construct the TS; what is different from Response A is that this

paragraph was not read in class as Paul (2013) was. Example 3.19, excerpted from

Student A's Response B, illustrates the thematic coherence at day 52.

Example 3.19
In his suggestion that the United States should study other countries'
preparation for climate change, Hertsgaard has failed to take into
consideration how people organized their life on earth. One of the patterns
that humans follow is that consuming meats [sic] for their survival, which
affects vegetation in two ways. One way is that eating meats as a source of
protein… The researchers point is that both people who consume meat,
and who grazed their livestock are sharing on cause global warming…
Moreover, grazing animals need more space, so human are cutting plants
to graze their animals… They cut plants in forests, so they can use the
large space for grazing animals which have a second effect on vegetation.
The more space they make to grazed [sic] animals, the more money they
gain. Humans and most of governments do not care about climate change,
and they are focusing on economic growth…

(Response B, Day 52)

The CI in Example 3.19, e.g., "failed to take into consideration how people organized

their life on earth," is the first CI that is written entirely by Student A, i.e., not repeating

the prompt, using a single adjective, or taken directly from the article. Additionally, the

SIs (e.g., "consuming meats" and "grazing animals") do not repeat the CI, and instead

Student A seemingly attempts to ensure a progression of ideas by identifying ways

"people are organized." Nevertheless, the CI still remains vague and the relationship the

SIs have with it is not unique to Student A's writing. The SIs in this example, for

instance, "consuming meats for their survival, which affects vegetation" and "grazing

animals which have a second effect," might be inferred as organizational patterns if the

reader generously made that connection. However, considering that both SIs relate to

animal agriculture, it would have been more appropriate to abstract a CI indicating this

related idea as a cause. The written feedback from the instructor states this, suggesting

that the "CI has to be more explicitly related to animal agriculture / meat consumption."

The instructor then suggested a new CI, writing "I would probably use: [Hertsgaard] has

failed to take into consideration that animal agriculture is the major cause of climate

change in the world today." The instructor suggested that this change to the CI would mean the content of the SIs would not necessarily need to change, but the grammar would need to be revised to ensure a logical relationship to the new CI.

The first two SIs in Example 3.19 offer important insight into Student A's development of thematic coherence as it relates to the relationship between the SIs. Whereas many former paragraphs contained SIs that repeated the CI or were vague and did not provide any type of evidence, the SIs in Example 3.19 mutually, and logically, relate to a similar idea. To illustrate, "consuming meats [sic]" affects vegetation because it leads to "cut[ting] plants" so that people can have "more space…to [graze] animals." These SIs logically connect and even build from each other, albeit they are lacking appropriate lexicon to ensure cohesion from sentence to sentence to thoroughly communicate the relationship. For example, in the second sentence of Student A's paragraph, "one of the patterns" of humans that is introduced is eating meat, affecting vegetation "in two ways," but then in the sentence immediately following, the first "way" (of affecting vegetation) identifies meat consumption again. The problem of cohesion though could largely be fixed through a more specific CI, as suggested in the instructor's feedback above, allowing for the first point of animal agriculture to be something about the high demand of for meat consumption, followed by a second point about the demand leading to increased grazing and deforestation.

It is important to note though, that the final SI in Example 3.19, e.g., "governments…are focusing on economic growth," is not logically related like the first two SIs. The notion of more grazing equates to more money, shifts to a financial consequence of animal agriculture, shifting the focus from the previous SIs' logic to the

harm to vegetation as a consequence. The location of the final SI is telling though. Introducing a financial consequence immediately after commenting on financial gains, e.g., "the more space they make… the more money they gain," demonstrates Student A's attempt to ensure a continuation of the theme of the previous sentence, much as Jalilifar (2010) found to be the case for students repeating themes in an attempt to increase cohesion. This could be an instance of Student A focused on trying to provide a more particular example from one sentence to the next, but overall, she likely lost sight of the logic as the paragraph progressed.

A final point about Response B comes from a written comment Student A made online in response to the instructor's electronic feedback to change the CI, as noted above. Student A's comment is shown in the example below.

> Example 3.20
> I wounder [sic] if it is possible to focus on how people live their life on the earth and keep all of my SI's. Here is the controlling idea that I am thinking about: Hertsgaard has failed to take into consideration how people live there life on the earth.
> (Online comment to instructor, Day 53)

This comment was made after the instructor's very explicit suggestion for revising the CI. It completely overlooks the instructor's suggestion altogether by suggesting her own CI, which only changes "organization" (in Example 3.19) to "life." This could be an instance of Student A rejecting the instructor's mediation, which Poehner (2008) has documented as an action L2 learners take in an attempt to gain more autonomy in regulating their behavior. If this is the case, this move would not be advantageous to Student A because it does not increase the overall thematic coherence of the paragraph. Alternatively, Student A could be demonstrating the difficulty in abstracting a CI and just not understanding why the instructor has made such comments, which remain true, regardless of the

particular reason for overlooking the instructor's feedback. Overall, Example 3.20

documents Students A's continued trouble understanding how to ensure thematic

coherence, largely through the infelicitous ability to thematize the paragraph.

Day 59 marks the penultimate revisions of WP2. During this submission, Student

A produced Cause/Effect A for the first time in WP2, because she did not submit it on the

original due date of day 36. Cause/Effect A had the same prompt as the Cause/Effect

paragraph in WP2, "write about the effects of technology on student life." Example 3.21

is taken from Student A's new revision.

> Example 3.21
> The internet is a useful tool that helps college students to enhance their
> quality of life. First, the Google search tool saves student's [sic] time and
> effort to finding answers to questions rather than wasting time searching
> too many pages. According to the article GOOGLE IT! (2015), a student
> said, "automatically get so many answers." (p219) [sic] The student's
> point is that, the internet is faster and easier than looking in a book to find
> an answer to particular question… The internet is a beneficial world-wide
> web that allows students to socialize and communicate with a new world
> and environment…
>
> (Cause/Effect A, Day 59)

As noted in WP1, the vagueness of the CI, e.g., "to enhance their quality of life," is

largely due to the fact that Student A is repeating the task prompt rather than narrowing

it. The instructor's online written feedback noted this difficulty, explicitly informing

Student A that the "CI is still vague" and is basically "repeating the question…stated in

the task." As has been commonly noted, a vague CI means the ensuing ideas often

establish little thematic coherence, consistent with previous studies of theme and

cohesion (see Berry, 1995; Fries, 2002; North, 2005). For Example 3.21, it is uncertain

whether the SIs actually ensure success; the first SI does relate to the task assignment

discussing an aspect of student life, e.g., "Google…saves student's [sic] time and effort,"

90

but it cannot be assumed to effect success because the act saving time could just as easily be interpreted as causing one to illegitimately understand what they are learning. The second SI, on the other hand, e.g., the internet is "beneficial" and "allows students to socialize," is only slightly related to academic life with a mention of "students" (and "the major" in a subsequent sentence not displayed). In her online feedback, the instructor noted that the last SI is "related to [the] general quality of life rather than the quality of student life," which could be avoided by producing "a clear CI that conveys an aspect of student life." The instructor's rich use of metalanguage is closely related to the SCOBAs, as a means of consistently orienting Student A back to the scientific concepts targeted in instruction. This orientation to the SCOBA and ultimately thematic coherence is especially important because it foregrounds meaning making above simply ensuring each sentence fits the structure of the paragraph. That is, the focus of the feedback is on the student developing a greater understanding of the superordinate-subordinate relationship between the CI and SI and the choice of SIs to present the best support rather than memorizing paragraph parts. Such knowledge ensures greater flexibility for the learner to generalize the concept of thematic coherence to other contexts (see Yanez-Prieto, 2014).

A final note must be made about the SEDs following the first SI in Example 3.21. Although the SEDs are not part of the research questions, it is worth noting that despite the lack of thematic coherence between the CI and SI, the SEDs are beginning to display thematic coherence with their corresponding SIs. In the sentences following the first SI unit, Student A is able to provide a relatively concrete example by adding a quote (albeit ungrammatically) about "automatically" getting answers to which the evaluation is added that the point is "the internet is faster…than looking in a book."

Cause/Effect B below was also submitted on day 59. Example 3.22 illustrates a revision of this paragraph from day 43.

> Example 3.22
> Assignments of reading literatures have negative impacts on the development of young people. The first negative effect is, reading literature for school assignments leads to poor understanding of texts. Young people do not understand correctly what they are assigned to read. When a student is required to read pages of a literature book, he or she did not decide to read it, so they do not involve what they are reading. Farrall (2012) points out that the limit which young people spend reading is between 7 and 10 minutes each day… Another negative impact of literatures reading assignments is that, student misunderstand the main idea of the passages. Students read words that do not have meaning to them. They read words to do their assignment without giving attention to the meaning…
>
> (Cause/Effect B, Day 59)

The only change Student A made between days 45 and 59 with Cause/Effect B was the addition of the second sentence that claims, "reading literature for school assignments leads to poor understanding of texts." The CI again repeats the prompt with only a slight modification with the inclusion of the word "negative," e.g., "have negative impact on the development of young people." Because the CI is so vague, the SI cannot explicitly be subordinate examples. What is different from Cause/Effect A in Example 3.21, however, is that the sentences following the SIs offer examples that contradict the SI altogether. For example, by referencing a study that claims young people only read "between 7 and 10 minutes each day," Student A is suggesting that people need to read more, not less. The instructor writes that the SIs "seem untrue," and points out the examples that "prove the opposite" of Student A's point, like the reference of little reading. While the instructor's feedback is explicitly about the content, it also implicitly draws the student's attention to the lack of thematic coherence due to conflicting ideas. The feedback does not explicitly state what should be added or deleted per say, but rather

it explicitly draws attention to ideas that detract from thematic coherence. Such feedback is significant due to the infelicitous TS. As has been noted, Berry (1995) and North (2005) document that one's conceptions of writing is displayed in her choice of theme; this is quite evident in Example 3.27 with not only a vague CI, but also contradictory ideas throughout the paragraph.

For the Summary paragraphs submitted on day 59, Example 3.23 does well to illustrate salient changes in both Summary A and B. Revisions of both Summary paragraphs are characterized largely by a streamlining of the main points from the article with the inclusion of organizational markers (e.g., "First," "Second"). This streamlining, however, does not necessarily result in improved thematic coherence.

> Example 3.23
> Paul (2013) in their article, "Reading Literature Makes People Smarter and Nicer" asserts that reading literature enhances the capacity of mind for empathy. First, Paul suggest that reading literature enhances people's mind for empathy. She supports that by adding a research which indicated that people who frequently read fiction seems to have more ability to understand other people's intentions… Second, Paul agrees that reading literature is a special experience that fully include sensory detail and emotional and moral complexity. The most important part of reading is to form the whole complete idea. In other words, the author believes that reading a book is different than reading on the web because there is no button advertisement for a book that interrupt the reader…
>
> (Summary A, Day 59)

Similar to the draft submitted on day 43, Student A continues to use the template for the TS incorrectly and much of the content does not change from the initial draft. What was changed is a clear demarcation of which sentences are SIs with the addition of transitional expressions, e.g., "First," "Second." These markers are likely a result of the online written feedback from day 43 that commented on how the SIs were confusing to identify due to the lack of such organizational markers. In regard to Jalilifar's (2010)

analysis that students with a higher proficiency used linear thematic progression because they were aware of the need to assist readers in following their thoughts, Student A seemingly attempts such assistance through enumerating SIs with clear transitions. However, merely adding the transitions does not actually establish coherence. Beyond this relatively simple change, Example 3.23 does eliminate some topics that were illogically related to the CI in Example 3.13, such as the "threatened practice" of "deep reading" or to be "better...socialized." In regard to the relationship between the SIs and CI, the first SI, e.g., "enhances people's mind for empathy" continues to repeat the CI, e.g., "enhances the capacity of mind for empathy." The online written feedback for this paragraph commented on this, stating, "SI 1 simply repeats your CI, thus there is no fit or [thematic coherence] between the CI and this SI." The second SI in Example 3.23 though, includes the idea of the "emotional and moral complexity" of reading literature, which if elaborated on thoroughly could have explicated that literature is better suited to provide complex and moral situations, thus relating to the stated CI. Instead, Student A was unable to define this point and detracts from the argument by introducing characteristics of online reading, e.g., "reading on the web because there is no button advertisement." Online written feedback also noted this point, stating that the focus needs to remain on the aspect of moral complexity not found in superficial and short texts often found online, but that "the real point is not about the Internet, but rather that literary texts involve issues and stories of moral complexity." Consequently, the instructor's feedback for this paragraph names points that draw the readers' attention away from the CI, resembling the feedback for Cause/Effect B above that calls out points that contradict Student A's SIs.

The revision of Response A demonstrates the addition of an SI by Student A, illustrated in Example 3.24.

Example 3.24
Paul is surely right about that, reading fiction often leads to greater understanding and empathy of other people because research has shown that there is a connection between the ability of understanding other and reading literary fiction… Secondly, reading fiction create a social connection between the reader and the characters. Begley believes that readers have a feeling of sadness when "a favorite character dies" (p. 60) that the feeling is true even though there is no real connection between them…

(Response A, Day 59)

Adding an SI to this paragraph, beginning with "Secondly," Student A states that a "social connection" can be formed between readers and characters by reading fiction. She even provides an example of the "feeling of sadness" for a character's death. However, this addition is interesting, namely due to the fact that she was unable to incorporate both the feedback from in-class mediation and her own verbalizations from class on day 50. On day 50, student A received targeted feedback and instruction specifically for this paragraph, including the instructor providing a detailed example of her own, and Student A explicitly stating that she was going to add literature titles as the SIs because "it helps to have a strong suppurting [sic] ideas" (Exit Ticket, Day 50). It may be interpreted that Student A did not understand how the titles of literary texts in the instructor's example on day 52 were in fact examples of the given CI.

The final salient change observed on day 59 was in the revision of Response B with the inclusion of a new CI. Example 3.25 illustrates this change.

Example 3.25
Hertsgaard's suggestion that the United States should study other countries' preparation for climate changes, has failed to take into consideration that animal agriculture is the main cause of climate change issues. The first effect is that using animals for humans' survival, which

effects vegetation in two ways. One way is eating meat as a source of
protein. Research suggest that the number of farm animals grazing has a
direct effect on vegetation, and most of farmers grazed their animal
(Impact of Climate Change, 2016, p 2114)… Moreover, grazing animals
need more space, so humans are cutting plants to graze their animals…
Farmers cut plants in the forests, so they can use the large space for
grazing animals which have a second effect on vegetation. Grazing animal
leads humans to focus on money. The more space they make for grazing
animals, the more money they gain…

(Response B, Day 59)

As a reminder of the instructor's online, written feedback for the initial draft of this

paragraph on day 52, it was suggested that Student A change the CI to: "[Hertsgaard] has

failed to take into consideration that animal agriculture is the major cause of climate

change in the world today." Student A heeded the instructor's advice by copying the

suggested CI for this new version. This is noteworthy because upon first receiving this

feedback on her first draft of this paragraph (see Example 3.25 and relevant discussion),

Student A was hesitant to change the TS altogether. However, because she actually does

revise based on the instructor's feedback instead of rejecting it, she indicates some

awareness of the original CI's vagueness. As for the SI, even though she did not change it

from day 52, the revision of the CI allows for thematic coherence because each SI

highlights aspects of animal agriculture leading to climate change, e.g., "meat as a source

of protein" means necessity of "grazing" and second, with the need to graze, "farmers cut

plants in the forest." Again though, by not changing the SIs, the final SI is still illogical

with a "focus on money" rather than climate change due to vegetation loss. Overall,

despite limited changes to this paragraph, the revision of the CI based on instructor

feedback was pivotal in helping ensure greater thematic coherence with the first SIs.

Following the submission of the above-mentioned paragraphs on day 59, students

participated in the OWC. During preselected times, each student engaged in a 30- to 45-

minute online, synchronous chat. Prior to their chats, students were directed to write out

questions about revising their paragraphs, which they could then copy and paste into the

chat one-by-one when it was time for their conference. Examples 3.26 and 3.27 present

the development of Student A's TS for Cause/Effect A (write about the "effects of

technology on the quality of student life"). The exchange begins with the instructor (I)

and graduate student assistant (GA) offering feedback to Student A (A) who just

expressed a lack of confidence in her current TS for Cause/Effect A (Example 3.21).

Example 3.26
1	I	Here is the TS: "The Internet is a useful tool that helps college students to enhance their quality of life."
2	GA	Tell us what your CI is
3	A	it is faster to use internet rather than book second it allows people to communicate
4	GA	Based on you TS, your CI is "enhanced their quality of life" That means you are telling the reader that you will write about ideas that "enhance their quality of life"
5	A	yes I explained what they would benefits if they saved time
6	I	Here is a topic sentence written by one of your classmates for the same paragraph: "Utilization of technologies, such as Smartphones, can decrease many students' grades."
7	A	I also explained what they will benefits of communicating with other
8	GA	When I read a CI like this, I am uncertain about what aspect. I think "Will you talk about studying? the dormitory life? their grades?" quality of life is vague. How is yours different than the example [I] just showed?
9	A	I will talk about academic life. it is more specific and clearer than mine.
10	I	What parts are more specific?
11	A	how they could have a wise use of their time and spend time to gain knowledge instead of searching on books the controlling idea is more specific
12	I	How?
13	A	by using internet. it is faster, so they could study for a test rather than searching in too many pages.
14	I	TS 1: The Internet is a useful tool that helps college students to enhance their quality of life.

97

		TS2: Utilization of technologies, such as Smartphones, can decrease many students' grades.
15	A	their quality of life should be more specific.
16	I	How is the CI in 2 more specific than the CI in 1?
17	A	decrease many students' grades focus on just their grade but i am focusing in a general thing
18	I	also, your CI basically repeats the questions for this assignment: How does technology effect students' quality of life?

<div align="right">(OWC, Day 59)</div>

In this exchange, Student A is prompted to identify the CI in her most recent Cause/Effect paragraph, but she does not do this, and instead at 3, she names the two SIs, e.g., "faster to use internet" & "allows people to communicate. The GA identifies the CI for the student as "enhanced the quality of student life" and draws her attention to the vagueness of this CI by identifying multiple possible topics to which it could refer. As a means to draw attention to the vagueness through a contrasting example, I focuses Student A's attention on a classmate's appropriate TS, but when prompted in turns 8 through 11, Student A is unable to make a specific contrast between her own TS and he classmate's TS. Student A is only able to state "the controlling idea is more specific" at 11. Even when I prompts Student A to explain how the classmate's CI is more specific, Student A is instead persistent in trying to explain that her paragraph is about the internet being "faster, so they could study for a test rather than searching in too many pages." This is a repetition of the SI, rather than an answer to I's question about how the classmate's TS is narrowed. It seems that at this point, Student A cannot identify that she does not have a CI nor that the two points she continues to mention are not derived from the TS she currently has. This is not new for Student A's, whose productions up to this point in the semester have incorporated vague CIs often. In turns 14 through 17, Student A begins to show greater awareness of the vagueness of her own CI when I juxtaposes

the classmate's TS directly with Student A's TS. Student A is then able to identify what

makes the classmate's CI more specific, e.g., "decrease many students' grade focus[es]

on just their grades" whereas her own is "focusing in [sic] a general thing" (turn 17).

Turn 18 is followed by a brief exchange between I and Student A in which I

makes clear that the CI needs to change, but Student A expresses concern about having to

change all her SIs if the CI changes. I says that whether or not the SIs change depends on

what the CI actually ends up being. Student A continues the conversation, shown in

Example 3.32 by suggesting a new NT.

> Example 3.27
> | 19 | A | Google search helps collage [sic] students to make a balance between time and gaining knowledge |
> |----|-----|---|
> | 20 | GA | That is better. Then you need to think about how Google search affects students' quality of life (but be specific with the type of life) |
> | 21 | I | But I am more worried about your vague CI than your un-narrowed topic the real problem in this paragraph is that you don't really have a CI. You have a little whisper of a writer's voice when you add the word "enhance" to quality of life, but "quality of life" is just copied from the writing prompt (= the question I gave you). |
> | 22 | A | I could write that it helps in making a balance between time and knowledge |
> | 23 | I | what's the "it" in this sentence? In other words, what helps? |
> | 24 | A | Google search helps collage [sic] students to make a balance between time and gaining knowledge |
> | 25 | GA | I'm not quite sure what you mean by "gaining knowledge." Are you referring to studying? |
> | 26 | A | Yes, I am |
> | 27 | I | ah ok. for me, your new CI is not clear. Instead of having two points, i.e. "time" and "gaining knowledge", have just one. ok, if you are referring to studying, state a particular aspect of studying that Google Search "helps" |
> | 28 | A | okay. I will |
> | 29 | I | Here's my TS for this paragraph: The course management system Canvas is an efficient way to collect students' homework. |

and I know what all my SIs are going to be, e.g., not losing
papers, knowing that all work is one time, storing all papers in
one place...hopefully you see how I: a) narrowed my topic
soooooo much; and b) made my CI super specific

<div align="right">(OWC, Day 59)</div>

Beginning at 19, Student A narrows the topic to "Google search" from "the internet" in the previous TS (turn 1), which is appraised as a better NT in general. At 21, I states that the larger issue with the TS is Student A's CI, indicating that it only repeats the prompt. At 24 Student A provides a new TS, e.g., "Google search helps collage [sic] students to make a balance between time and gaining knowledge"; GA highlights "gaining knowledge" as vague and I notes the more problematic issue of having multiple CIs, stating the TS should instead "have just one" CI (at 22). At this point, the allotted time for the conference is over, so I offers her own TS as an example, stating what the SIs could be, followed with an evaluation of how the TS is contains a very specific NT and CI.

Examples 3.26 and 3.27 provide insight into the microgenesis of a single TS Student A uses in her next Cause/Effect paragraph (see Example 3.29 below). The two exchanges highlight the dynamic collaboration between Student A, I, and GA, in which a Zone of Proximal Development (ZPD) is created. Lantolf (2000b) defines the ZPD as "the collaborative construction of opportunities… for individuals to develop their mental abilities" (p. 17). Thus, in the above interaction, the participants co-constructed an exchange that progressed from Student A not being able to identify their own CI, to identifying the vagueness of it, being able to name the difference in specificity between their own and a classmate's CI when explicitly prompted, and to naming a narrowed topic. These exchanges culminated in Student A suggesting a new TS altogether

(Example 3.26, turn 24). Even while the TS contained infelicitous qualities of a CI by naming two separate points, e.g., "to make a balance between time and gaining knowledge," the exchanges do offer insight into positive development of Student A's TS and the pathway she traversed to get there. As is suggested by Aljaafreh and Lantolf (1994), the assistance by the more knowledgeable I and GA was graduated, providing mediation when necessary; for example, following Student A's inaccurate response at turn 9 to the tutor's question in 8, I is explicit in placing the two TSs next to each other and why the classmate's CI is more specific.

On day 66 students completed day 1 of Quiz 2, a timed, in-class writing exam. This data point is important because it offers insight into Student A's production under a timed writing context midway through the semester. For Quiz 2 day 1, students were first provided with a handout each of the 8 SCOBAs, referred to as "thinking tools" in class and for the exam prompt. After reviewing these SCOBAs, students were asked to write one or more advanced academic paragraph(s) explaining how they "used [these] 'thinking tools' to write and revise the paragraphs" for WP2.

Before Student A began writing, she was observed to makes notes on a separate piece of paper as a draft. She wrote out three categories which she listed as "processes." For the first, she wrote, "brin [sic] storming idea," after which Student A wrote, "I make out line [sic] for topic sentence, SI/SED, CS." The second and third processes are to "start writing my pargraph [sic]" then to "Revies [sic]." This pre-writing draft essentially lists three pieces of vague informational content that Student A included in her paragraph (brainstorming, writing, and revising), as will be discussed below. The only indication that Student A is object regulating with the SCOBAs is the mention of the "topic

sentence, SI/SED, CS," each a part represented on SCOBA 1; however, Student A does

not differentiate between the NT and the CI, nor does she indicate any notion of thematic

coherence to regulate the relationship among the different ideas. Based on Student A's

overall difficulty in producing thematically coherent paragraphs in the previous 65 days

of the semester, it is likely that Student A has not begun regulating her choice of ideas

based on the features of superordination-subordination and support for the argument.

Instead, as the pre-writing draft suggests, Student A is more focused on what content to

use.

Example 3.28 is taken from Student A's production of Quiz 2 day 1 which

essentially lists the content information that Student A used in her pre-writing draft.

> Example 3.28
> In writing a paragraph there are three process that include seven thinking
> tools to write and revise an advance paragraph for WP2. The first process
> is about brainstorming ideas and reading about the topic… In process two,
> the person could begin writting [sic] his or their paragraph…
> (Quiz 2 day 1, Day 66)

Example 3.28 contains features similar to those of the Process paragraph produced in

WP1 on day 23 (Example 3.7). The TS for the Process paragraph (e.g., "To make a

perfect omelet which has a yellow color, and not sticking on the pan, follow the

following steps") made clear that there are certain steps that lead to cooking a type of

omelet. For the TS shown here, there are "three process," each with "seven thinking

tools," to make a particular type of "paragraph" (i.e., "advance paragraph"). Example

3.28 illustrates that the following SIs name a separate "process," much like the SIs in the

Process paragraph from day 23. In general, the SIs here are each subordinated units, each

a particular process needed to write a paragraph; however, the SIs offer negligible

support for the argument that these particular processes lead to advanced paragraphs. For

example, the processes of "brainstorming ideas" and "begin writting [sic]" (i.e., beginning to write) are two processes that could take myriad forms relevant to basic or advanced writing alike, and thus the SIs misplace the emphasis on writing in general. The SIs do, however, indicate a sustained ability to produce logically connected SIs. For Example 3.28, the SIs create a sequential order with a logical progression from thinking (e.g., "brainstorming") to producing (e.g., "begin writting"). Student A first produced SIs with a similar logical relationship from one SI to the next in the Process paragraph on day 23, then again in Response B on days 52 and 59 with a couple SIs logically supporting one another. In general, Student A's Quiz 2 day 1 displays a linear thematic progression by offering a "process" for each SI, a strategy for thematic progression observed by Jalilifar (2010) in learners who are aware of the need for an explicit demarcation of how their thoughts are linked.

On day 67, students resubmitted all six paragraphs produced thus far during WP2. Students were advised to use all online, written feedback, the OWC, UWC visits, class PowerPoints, and, crucially, all instructional materials to make necessary revisions. During the week between the OWC and the due date for WP2 when students would submit their final revisions of their 6 paragraphs, Student A had nearly 250 page views on the course website. Accessing the online course management system affords students access to all class PowerPoint, instructional materials, course handouts, instructor feedback, and transcripts of OWC chats. Despite such extensive opportunity for feedback and revisions, Summary B, Response A, and Response B remained the same with no changes from day 59. Summary B included a CI directly from the assigned article with a series of SIs either unrelated to the CI altogether or repeating the assertion. Response A

included a CI similar to that of Summary A with SIs that were unable to establish logical

relationship with each other and do little to provide support for the CI. And for Response

B, the initial SIs were able to establish logical support for the CI, only after explicit

instruction on what the CI should be, but later SIs did not relate logically to one another.

Student A made changes to Cause/Effect A and B, as well as Summary A, which

are discussed in turn below. Beginning with Example 3.29, the changes displayed in

Cause/Effect A are largely due to the OWC on day 59, discussed in Examples 3.26 and

3.27.

> Example 3.29
> Google search is a useful tool that allows college students to find reliable
> sources easily. First, the Google search tool saves student's effort to
> finding answers to questions from dependable sources rather than
> searching too many books. According to the article GOOGLE IT! (2015)
> some students claim that they "automatically get so many answers."
> (p219) [sic]. The students point is that, the internet takes shorter time than
> searching books to find an answer to a particular question. Moreover, A
> student could use the time spent looking up information in books to study
> for a test instead…
>
> (Cause/Effect A, Day 67)

Cause/Effect A reveals significant changes, first in the revision of the TS resulting in an

appropriate NT and CI. The OWC exchanges (Examples 3.26 and 3.27) show the

microgenesis of the TS for this particular paragraph. After the explicit feedback from the

instructor along with an example TS and SIs, Student A produced the Cause/Effect

paragraph in Example 3.34. This is important, because the one other time that Student A

produced a strong TS (i.e., Response B on day 59), the instructor provided similar

feedback by explicitly suggesting what the CI should be. The difference with this

Cause/Effect A however, is that the instructor did not suggest a CI for Student A, just an

example while also highlighting a classmate's specific TS, from which Student A

produced her own specific TS. It is also noted that producing a TS of this type took over 50 days of the semester to produce. For the NT alone, e.g., "Google search," Student A's NT on day 17 was "technology," which progressed to "research tools such as Google" on day 23 and day 37, then again broadened to the relatively vague topic of "internet" on day 59, culminating in "Google search" on day 67. Having taken nearly half of the semester to produce the NT, it is not a surprise that Student A was able to only now produce a specific CI for this paragraph, after copying the task prompt for the earlier drafts. The CI here, e.g., "find reliable sources easily," adequately identifies a proposition that Student A is making about the NT.

In Example 3.29 above, however, thematic coherence between the CI and the SIs is not established because the SIs do not address the appropriate item in the CI. The SIs address the adverb "easily" from the TS, rather than the activity of "finding answers to questions." To illustrate with the first SI, e.g., "Google…saves student's effort," emphasizes the general ability to save energy rather than targeting the ease in accessing sources, which is what the CI actually claims. Similarly, the second SI, beginning with "Moreover," focuses on what can be gained with the time that is saved. Yet, despite the SIs lacking appropriate support for the CI, the SIs that Student A produces here are significant due to their logical relationship: saving "student's effort…rather than searching too many books" students are able to "use the [saved] time…to study." In fact, Student A deleted the final SI from the previous draft on day 59 (e.g., "connect students with people"), allowing for all the SIs to relate to one another. Student A is becoming more aware of the need for ideas to relate to one another but is lacking the ability to make intentional decisions to make these ideas relate to the CI.

Example 3.30 comes from the second revision of Cause/Effect B which displays a significant revision in the production of an entirely new paragraph.

> Example 3.30
> Reading literature have a positive effect on the development of young people. The first effect is, reading literature helps young people in self-improvement… A second effect is that reading literature helps young people to feel more comfortable.
>
> (Cause/Effect B, Day 67)

Only a few sentences are presented in Example 3.35, but they do well to reveal the major changes in Cause/Effect B. The first two drafts of this paragraph asserted that reading literature had "negative impacts on the development of young people," followed by SIs that ultimately did not support the CI or contradicted it. In contradistinction, the SIs in Example 3.30 do seem more believable, with the mention of "self-improvement" and "feel[ing] more comfortable" corresponding to the "positive effect" stated in the TS. The overall thematic coherence however was not improved, due to the CI restating the prompt (e.g., write about the "effects of reading literatures on human cognition and development"). The only addition to the prompt that Student A made was stating that it had "a positive effect." Like many previous paragraphs, the vagueness of the CI makes an interpretation of the SIs uncertain; for Example 3.30, without a definition of "development," "self-improvement" and "feel[ing] more comfortable" are not inherently examples of the CI because they could be referring to someone's attitude instead of other types of psychological growth, for example. The paragraph as a whole lacks the superordinate-subordinate relationship between the CI and SIs.

The final paragraph that Student A revised on day 67 is shown in Example 3.31, coming from Summary A. Much of this paragraph does not change. In fact, Student A

has consistently used the TS template incorrectly and has not been able to specify a

narrowed topic, e.g., a type of literature such as historical fiction or British literature.

> Example 3.31
> According to Paul (2013), in their article "Reading Literature Makes
> People Smarter and Nicer" asserts that reading literature enhances the
> capacity of mind for empathy. First, Paul strongly believe that deep
> reading train the brain to understand literature. A study indicates that the
> more literature parents have read to their children, the highly intelligent
> their "mental model of other people's." (Raymond Mar, 2010, p. 1) [sic].
> In making this comment, Paul discloses that how children empathize with
> other is depending on the number of books, children have listened to, and
> their minds understand literature better by practicing more deep reading…
> (Summary A, Day 67)

The only change that does occur is the addition of a new SI that is inserted in the second

sentence position of the paragraph, beginning at "First, Paul strongly believe[s]…" This

new SI, e.g., "deep reading train[s] the brain to understand literature," is actually never

stated in the article; rather the author of the article argues that reading literary fiction

leads to the development of Theory of Mind. Had Student A explicated the author's

original intent, this new SI would have established thematic coherence with the CI and

the subsequent two sentences would have offered some support as well. That is, claiming

"the more literature parents have read to their children" and "the number of books" read

or listened to, could be examples of when deep reading occurs, which lead to "how

children empathize with other is depending on." As this new SI is written, however,

Student A likely did not fully comprehend the concepts in the article enough to identify

which of them fully and adequately ensure subordinated examples of the CI while also

supporting the claim.

Regarding the remaining unchanged portion of this paragraph, in many respects,

Student A demonstrates a limited understanding of the main points from the article. The

CI is not an abstraction of Student A's alone but rather comes from the subtitle. This is not a criticism, as students were even instructed to use textual clues, such as subtitles, to help identify main points. However, as discussed with Student A's misunderstanding of the new SI above, it is likely that she is simply not fully comprehending the text.

Whereas many previous paragraphs used a strategy of constant or linear thematic progression, as observed by Jalilifar (2010) and explained in Section 1.4.2, the above three paragraphs (Examples 3.29, 3.30, & 3.31) attempted greater continuation of the theme through ideational connection. That is, Student A is showing a progression away from merely using a previously mentioned item and instead is attempting to derive an idea from the TS. In Example 3.29 for instance, albeit the SIs are misplaced in their modification of the adverb "easily," they each identify an activity (e.g., finding many sources, extra time studying) rather than repeating a previous item. Progressing the theme of the paragraph in such a way marks an important change in Student A's writing because this needs to occur for a CI to be abstracted from more specific SIs (i.e., an assertion that is not merely repeated).

The next point in Student A's development occurred on day 73 with Quiz 2 day 2, another timed, in-class writing exam, that asked students to revise their response to Quiz 2 day 1, e.g., explain how they "used 'thinking tools' to write and revise the paragraphs" for WP2. Prior to revising their paragraphs students were provided with a document explaining how the components of the basic academic paragraph, as presented in Table 1.1, are "a **flexible** tool that students can apply to any situation to write a successful paragraph" (emphasis in original). The instructor read through the document explaining that the four components of an academic paragraph allow for four types of information:

(a) structural information, i.e., the information of what parts should be included in any

academic paragraph; (b) functional information, i.e., the job of each part; (c) thematic

coherence, i.e., the relationship between the parts and ideas found in each component;

and (d) the relationship between writers' purposes and linguistic choices, i.e., lexico-

grammatical features chosen for a particular structure, functions, and thematic coherence.

The instructor commented that in general students were able to convey points (a) and (b),

noting that all four components of the paragraph are present to ensure an appropriate

structure with adequate information for each part. However, students were seemingly not

able to establish adequate relationships between the differing parts nor where they

intentionally adding additional types of information to strengthen their points.

To illustrate how students could increase their ability to convey the information in

points (c) and (d), so as to intentionally choose information to support their ideas, the

instructor also provided four specific examples of how to improve Quiz 2 day 1 taken

from student productions on Quiz 2 day 1. This feedback was presented on a PowerPoint

slide and shown in Example 3.32.

Example 3.32
(a) Student R, line 14: support your point with a quote and then cite your
source
(b) Student R, line 20: support your point with a quoted example of how
an actual SI nests in an actual CI. Use tool 3 or 8 for the source of
quotes. After the quotes, explain exactly how they nest.
(c) Student A, line 11: give an actual example of an article you rejected
and one you kept and explain why
(d) Student V, line 21: give an actual example where you used semantic
cohesion instead of a TE and explain why you did that (relate your
choice to your purpose)

(Class PowerPoint, Day 73)

As Example 3.32 illustrates, the instructor identifies specific choices students could

make. In point (c) for Student A, the instructor names a type of example, e.g., "an actual

example of an article…rejected," that could function not only as an SI but would

establish thematic coherence with an appropriate CI. Point (c) could also be interpreted as

a type of example to serve the function of a SED while establishing thematic coherence.

Either way is a choice Student A could make, depending on what the CI is. Regardless of

the interpretation, Student A did not provide such examples.

Following this instruction and feedback, students were asked to repeat the task

from day 66. Example 3.33 is Student A's revision.

> Example 3.33
> In my response Paragraph, I used seven thinking tools to write and revise
> my paragraph in WP2. First, tool is thinking about the topic… Second tool
> is searching and reading about the topic…
> <div align="right">(Quiz 2 day 2, Day 73)</div>

Student A revised the TS from Quiz 2 day 1 to note a focus on the "seven thinking tools"

rather than the "three process"; however, the fundamental revision Student A made was

with the deletion of "advance paragraph." By deleting this modification of advanced

paragraphs, the SIs in Example 3.35 are able to retain similar qualities to those of Quiz 2

day 1 by each demarcating a particular tool, and still represent subordinate units of the

CI. Doing so, however, meant limited substance and exacting information. To be sure,

with the CI claiming "tools to write and revise" a paragraph, the SIs only need to state a

general tool that was used to write. By deleting the modification of paragraph with

"advance" from Quiz 2 day 1, Student A is able to ensure thematic coherence by naming

any act of writing (whether advanced or basic). In general, the thematic coherence that is

established was accomplished by ensuring she had each part of the paragraph, but with

less focus on a sophisticated CI, the rest of the paragraph is less sophisticated as well. In

general, the instruction Student A received prior to this revision did not seem to influence to the point of implementing specific advice.

On day 78, students were presented with feedback for their response for Quiz 2 day 2 (completed on day 73). In general, the instructor again reviewed the handout from day 73 stating four types of information conveyed Table 1.1 detailing the components of the basic academic paragraph. Students were then asked to choose a CI (if they wrote more than one paragraph) and a corresponding SI and SED from Quiz 2 day 2. Students were told to use the eight didactic materials from Quiz 2 day 1 and the handout they received on day 73. The instructor told the class that part of the revision might be to narrow the TS, or to revise their sentences to discuss a specific paragraph. Example 3.40 is Student A's revision.

> Example 3.34
> In writing a response paragraph there are three processes that include seven thinking tools to write and revise an advance paragraph for WP2. The first process is to brinstorm [sic] idea and to read more article and research about the topic in which the writer is planning to write…
> (Quiz 2 day 3, Day 78)

This second revision of this paragraph reproduces the TS that was originally used, indicating the need to include "three processes" that lead to "an advance[d] paragraph." Much like the previous two iterations of this paragraph, the SI provides a straightforward example of a process, allowing for a subordinated relationship to the CI. However, with a reproduction of the original TS, Student A's SI should have supported the production of "an advance[d] paragraph," but like the first iteration with Quiz 2 day 1, the SI illustrated here does not. However, the SI in Example 3.34 is more substantial by adding "read more article[s] and research," which could potentially lead to more advanced paragraphs; yet the connection to such an idea is not made evident.

Example 3.35 is taken from an Exit Ticket following the production of Quiz 2 day

3, designed to elicit students' awareness and reasoning for their revision.

Example 3.35
I chose to revise that point because I want my paragraph to be more
specific. I decided to specifies [sic] what type of paragraph I am talking
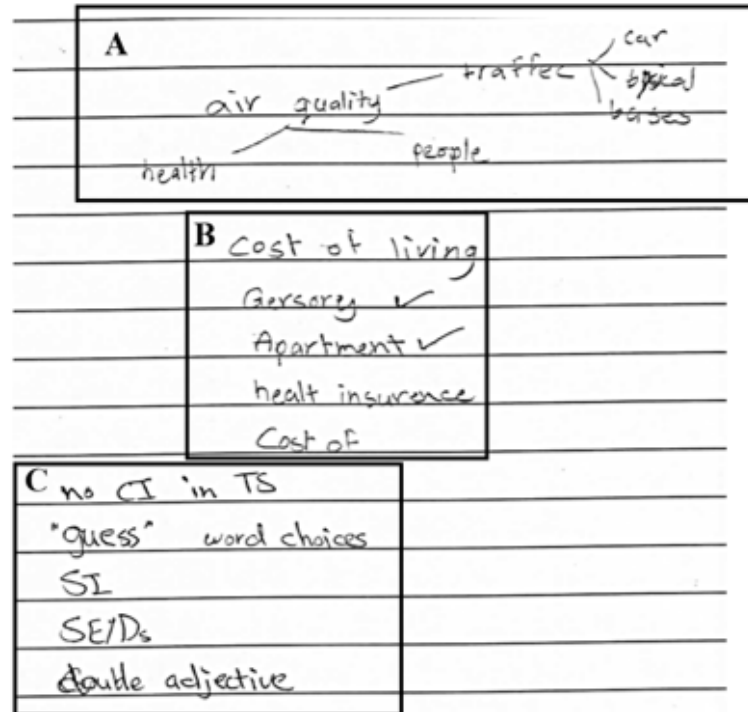about and what I do specifically.
(Exit Ticket, Day 78)

Overall, Student A is focused more on the content she writes, rather than how to abstract

and support her argument. She notes selecting the "type of paragraph" as a means to

make her writing "more specific," rather than making decisions to establish greater

thematic coherence among the parts.

On day 101, Student A completed the post-semester writing sample, a timed, in-

class writing prompt that was the third revision of the Compare/Contrast paragraph from

the pre-semester writing sample on day 1; the first and second revisions were completed

during WP1 on days 15 and 23, respectively. Students repeated the same task that was

assigned for the pre-semester writing sample, contrasting two cities or two universities.

Student A answered the question, "How is life in Midwestern City A similar to or

different from life in another place where you lived?"

Prior to writing her paragraph, Student A planned her writing, illustrated in

Example 3.36. This example was produced by Student A on a single sheet of paper, and

is divided into Sections A, B, and C for analysis.

Example 3.36

Figure contents (handwritten):

A
air quality — traffic — car
— bike[bikes]
— buses
health — people

B Cost of living
Gorsory [Grocery] ✓
Apartment ✓
healt insurance
Cost of

C no CI in TS
"guess" word choices
SI
SE/Ds
double adjective

An initial observation of this draft paper is that Student A focuses on the paragraph content rather than the paragraph structure, much like was noted with Quiz 2 day 3. In Section A, the lines and words emanating from "air quality" (e.g., "health," "people," "traffic") do suggest that Student A is aware of the need to identify subordinate aspects of superordinate topics. Sections B and C focus on content as well, but this time they interestingly list content choices that Student A used in previous iterations of her response to this prompt. Section B lists items used in the Compare/Contrast paragraph on day 23 (Example 3.8), and Section C lists inappropriate features found in her Compare/Contrast paragraph on day 1 (e.g., "no CI," "guess") followed by content that she is seemingly trying to include (e.g., SI, SE/Ds, double adjective").

Following the drafting shown above, Student A produced a Compare/Contrast paragraph, illustrated with the example below.

Example 3.37
~~[City A] is different than [City B] in terms of~~ [City B] is a good and
healthy place to live in comparing with [City A]. Firstly, [City B] is ~~lower~~
cheaper than [City A]. In terms of ~~grocery~~ food and resturants [sic], fruit,
vegetebals [sic], and resturent's [sic] meal cost more in [City A]…
Secondly, air quality is unplluted [sic] in [City B]...

(Post-semester writing sample, Day 101)

The words with a strikethrough indicate those which Student A crossed out in her

response which reveals an immediate revision in producing this paragraph. Student A

revised the CI from "[City A] is different," which repeats the task prompt, to a

moderately more descriptive CI of "[City B] is good and healthy" (in contrast to City A).

This in-the-moment revision indicates an awareness of the need to identify a more

abstract assertion. The ability to abstract a CI has been difficult for Student A the entire

semester, especially noted in the many vague CIs throughout the semester that repeated

the task. Yet, "good and healthy" remains somewhat vague, resulting in two SIs that are

relatively unrelated. The first SI, City B "is cheaper" than City A does not necessarily

mean that it is "good and healthy"; even the example of "food and resturants [sic]" are

unable to explicate a connection between cost and "good and healthy." The second SI,

"air quality is unplluted [sic]" does do well to refer to "healthy," but overall, the SIs

resemble earlier drafts that include disparate ideas, rather than logically connected SIs.

As a means to elicit students' awareness of their production of post-semester

writing sample, students were asked to write what they were thinking while they wrote

their paragraph. Example 3.44 extracts salient pieces of information from Student A's

reflection.

Example 3.38
…Firstly, I think about writing a topic sentence that has the two parts,
which is in the modle [sic] paragraph structure, ~~the~~ a controling [sic] idea
and ~~the~~ a narrow topic. When I decided that my controling [sic] idea will

114

be "[City B] is a good place to live in" and my narrow topic is to compare [City B] with [City A]. Secondly, I think about my supporting ideas. What strong supporting ideas that I have to show that [City B] is a great place to live in. Bisically [sic], what makes ~~people~~ me prefer it more than [City A]…I should have varity [sic] of SI/SEDs units…

(Post-semester writing sample reflection, Day 101)

Example 3.38 highlights Student A's use of metalinguistic terminology (e.g., "controling [sic] idea," "narrow topic," "supporting idea"); again however, the reflection is largely content oriented; Student A identifies which content pieces she will use in which part of her paragraph, rather than focusing on particular choices to strengthen the argument. Thus, while Student A is more consciously using the terms of NT, CI, and SI, she is regulating where to place content within their paragraph, not how to use content to strengthen their response.

The final writing Student A produces for EAP 101 comes from Quiz 3 on day 108. This again, was a timed, in-class exam, and was a repeat task of Quiz 1 that occurred on day 24. As a reminder, this task asked students to first read two short texts where Text A does not exhibit features of an academic paragraph, while Text B exhibits features of an advanced paragraph. Student were then asked to write an advanced academic paragraph in which they contrast Texts A and B with respect to the writers' use of advanced features of academic paragraphs. Prior to beginning, students were offered colored highlighters to mediate their performance; with the highlighters, students could color the texts like they had done early in the semester with the model paragraphs. Student A retrieved highlighters but did not use them to highlight the different components relevant to the paragraph. Instead, she underlined the first sentence in both texts, despite Text A not having a TS. She then highlighted transitional expressions in

Text A, but besides these minimal underlines, Student A did not complete any drafting.

Example 3.45 is taken from Student A's paragraph.

> Example 3.39
> ~~There are differences between Paragraph B is more advance and dens than Paragraph A. Paragraph A has no controling [sic] idea in the Topic sentence in~~ Paragraph B follows the Model paragraph structure more than paragraph A. Paragraph B clearer and more narrowed topic sentence. The topic sentence in paragraph A has no controlling idea… Secondly, Paragraph B has supporting ideas, which is part of the model paragraph structure…
>
> (Quiz 3, Day 108)

Like the post-semester writing sample in Example 3.39, this paragraph displays another in-the-moment revision of the TS, changing the CI from "Paragraph B is more advance" to "Paragraph B follow the Model paragraph structure more." In doing so, Student A changes the focus from the advancedness to simply the use of the model paragraph (i.e., use of the features of academic paragraphs as in Table 1.1). However, the CI states a contradistinction in the two paragraphs, indicating that B uses the structure "more" than A, implying that both represent features of a paragraph. In fact, A is not a paragraph at all because it lacks nearly every component typical to a basic academic paragraph (e.g., TS with NT and CI, SI, SED, CS). This example marks Student A's limited awareness of recognizing the parts of the paragraph, or lack thereof, in A. What this examples does show however, is Student A's incorporation of some lexico-grammatical features in the first SI to establish cohesion with the CI, namely the comparative '-er' morpheme to reference "more," e.g., "Paragraph B [is] clearer" provides an example of the greater use of one feature of an academic paragraph. She is unable to do this with the second SI. Overall, this paragraph shows some ability to establish cohesion from the first sentence to the next, but implying that both texts have features of a paragraph marks a still

116

undeveloped understanding of the feature of an academic paragraph, or an undeveloped ability to notice when texts lack features of an academic paragraph.

While this final production data does not display an ability in producing thematic coherence, Student A is noted to have achieved greater success in using feature characterizing academic writing. Unlike the pre-semester writing sample on day 1 which heavily relied on personal announcements with "I," "my opinion," "I guess," Student A establishes a tone of objectivity (e.g., "Paragraph B follows the Model paragraph structure") and does not including personal deixis.

3.4 Summary of Student A's Developmental Path of Thematic Coherence

As has been closely documented, Student A's development of thematic coherence during EAP 101 was a dynamic process, replete with opportunities to increase her ability to produce academic paragraphs characterized by thematic coherence. In EAP 101, Student A's process data is best understood as supporting the well contended proposition in SCT that social interaction of learners is crucial for their development (Lantolf, 2000a). As a quick reminder, Student A often participated in sharing her writing and reflection with the whole group, which was an important medium to share her work and receive feedback from the instructor. Student A volunteered to share her work at the document camera 52% of the time it was offered. Furthermore, Student A took advantage of the online course management system. For example, Student A was observed to make nearly 130 page views between days 17 and 23; this six day period was the time between the last draft of a paragraph for WP1 and the final submission of all revised paragraphs for WP1. Again, between days 59 and 67, the eight days between the OWC the final submission of WP2, Student A was observed to make 250 page views. Such interaction

with course materials provided affordances that "render further action" (van Lier, 2000, p. 252) for Student A, providing mediation for her process data.

Throughout EAP 101, the component of the academic paragraph that Student A seemed to have most difficulty with was the CI. This is likely due to the complexity of the CI thematizing the paragraph as an abstract, overarching assertion to which the flow of information in subsequent sentences must relate (Brown & Yule, 1983; Fowler, 1986; Martin & Rose, 2007; McCarthy & Carter, 1994). Over the course of the semester, Student A often produced paragraphs without one. Summary A on day 43 was the first instance of Student A producing a paragraph with a CI that did not repeat the prompt or just insert a modifier. In this paragraph summarizing the first article, Paul (2013), Student A incorporated a main idea from the article's subtitle, indexing the use of textual clues to identify main ideas. Doing so was likely due to extensive class time reading the article and an instructional handout detailing how to identify such ideas. The first CI that Student A produced on her own was on day 52 with the production of Response B, e.g., "failed to take into consideration how people organized their life on earth." This CI was the first she produced on her own, because it did not repeat a point from an article, repeat the prompt, or simply include the addition of an adjective. Still, this CI is inclusive of a vague assertion, marked by two SIs that introduced ideas unrelated to "organizing" one's life. After writing Response B, the instructor explicitly advised how Student A should rewrite the CI. While Student A did eventually take the advice, at first, she rejected the feedback and suggested her own, still vague, CI.

The strongest CI Student A produced was on day 67 with Cause/Effect A, e.g., "find reliable sources easily." Though, this one CI was the culmination of a lengthy

online chat in which the instructor, graduate assistant, and Student A co-created a ZPD to collaboratively produce the TS. With the instructor's intent to make Student A notice the vagueness of her initial CI, Student A was unable to do so until her CI was explicitly compared to that of a more specific example. Until explicitly being asked what was not specific about her CI and contrasting it with a more specific example, Student A continued to refer to her SIs. In fact, the heavy focus Student A placed on the SIs in this chat indexes the greater ability in producing SIs throughout the semester than a CI.

Most often, the SIs repeated the CI, rather than providing an example of it; however, Student A did begin to ensure thematic coherence among the SIs by establishing a progression of ideas, early in the semester. A progression of ideas is understood as a presenting a logical "sequence of ideas" (Fowler, 1986, p. 61), of which Student A began to produce as early as day 24. SIs in these early paragraphs were largely progressive due a chronological character, often indexing the emphasis on organizational transitional expressions (e.g., first, second). The relationship between the SIs shifted slightly with the production of Response B on day 52. In this paragraph, each SI logically supported the next (with the exception of the final SI in the paragraph). However, as has been discussed in detail, despite the SIs logically relating to one another, the lack of adequate CIs often meant a continued lack of support of the CI. Effectually, Student A was able to produce logically connected SIs prior to the production of SIs that established support for and ensured a subordinated relationship with the CI. Consistent with many studies documenting that the choices a learner makes to thematize their writing corresponds with the success of the cohesion of their text (cf. Berry, 1995; North, 2005;

Wang, 2007), Student A's regular use of a vague CI led to SIs inadequately supporting the CI.

Chapter Four:

Conclusion

4.1 Summary of Findings

4.1.1 Introduction

The purpose of this thesis was to enhance understandings in L2 development within two areas. First, the study provides a granular description of the under-explored phenomenon of the development of thematic coherence in L2 academic writing. Second, it traces the development of a female Saudi English language learner, a largely under-investigated L2 learner demographic. Until the present, investigation of thematic coherence has largely sought to investigate how varying genres ensure the progression of a common theme (Alyousef, 2016; Bello, 2016; Corvalan Reyes 2004; Francis, 1989; Fries, 2002; Martin & Rose, 2007; Shi, 2013; Simpson, 2000; Wikberg, 1990), or how L2 learners' written production contrasts with professional standards (Arunsirot, 2013; Berry, 1995; Bloor & Bloor, 1992; North, 2005; Wang, 2007). Only on one occasion were proficiency levels used to document differences in thematic progression (Jalilifar, 2010). However, none of these studies defined thematic coherence as the flow of information as a superordinate-subordinate relationship, as has been documented to be relevant to academic writing in English (Brown & Yule, 1983; Hoey, 1983; Martin & Rose, 2007; McCarthy & Carter, 1994; Winter, 1977, 1978). Accordingly, providing a documentation of thematic coherence of a L2 learner of English, which is significantly under-studied in L2 acquisition research (see Belz, 2018, 2019a), offers important insight into the development of L2. The following sections provide a synthesis of the salient

findings observed in the microgenesis of Student A's production of paragraphs and her general awareness of thematic coherence.

4.1.2 Findings: Analysis in Sequence

4.1.2.1 A Developing Proficiency

Measuring Student A's development of thematic coherence was accomplished by tracing her ability to producing thematically coherence paragraph, contextualized by her experience in EAP 101. As a whole, data from the pre- and post-semester writing samples indicate improvement in Student A's production of thematically coherent paragraphs. An initial, and important observation, of change is marked in Student A's implementation of linguistic features of objectivity through the use of definite deixis and fewer personal accounts, as identified to be prototypical to written texts (Halliday, 1989; Hyland, 2004; McCarthy & Carter, 1994). Further, unifying all sentences to a common topic through the use of a TS in the post-semester writing sample stands in contradistinction to separate sentences introducing disparate ideas in the pre-semester writing sample. The focus on the microgenesis allowed for a more complete documentation of the micro-changes that occurred, in particular, to thematic coherence over time.

In her written paragraphs, for nearly two-thirds of the semester Student A's paragraphs included TSs composed of an overly general and vague statement, most often repeating a question posed by the instructor or selecting a point from an article to transplant into her TS. It was not until day 67 that Student A produced a strong CI on her own, and even then through the close mediation of the instructor in the OWC. What did emerge as early as WP1 in the first 23 days are SIs that relate to the overall task. Such SIs even provide some specification of the TS; however, they are unable to ensure a strong

superordinate-subordinate relationship due to the vagueness of the CIs. Similarly, Student A began to develop SIs that logically relate to one another, even when they did not establish thematic coherence with the CI. Overall, Student A's production shows the emergence of features of thematic coherence, first in the production of specific SIs, then SIs that logically progressed to from subsequent SIs, and later in the production of a TS with a specific CI.

Consistent with studies of L2 instruction of theme and thematic progression (Jalilifar, 2010; Wang, 2007), Student A's own production improved. However, what is important to note is that many points of development for Student A occurred through in the social context. Intentional "mediator-learner dialogic interaction" (Poehner & Infante, 2017, p. 332) guided Student A toward greater appropriation of the concepts and eventual improvement in thematic coherence. Through mediation designed and implemented by the instructor for communicative activities, during both in-class activities (e.g., group or individual work and verbalization) and out-of-class activities (e.g., untimed written paragraphs and UWC visits), Student A showed development in her production, consistent to the general experiences of classrooms that intentionally design instruction as well (Lantolf & Poehner, 2014; Negueruela, 2008; Poehner & Infante, 2017).

4.1.2.2 A Developing Awareness

A simple comparison of the pre- and post-semester writing samples and their respective reflection tasks reveals a change in Student A's overall awareness of the components of an academic paragraph. Consistent with previous studies of writing, especially those investigating thematic choices (e.g., Berry, 1995; North, 2005), the themes that Student A chose and the linguistic features employed reveal an increased

123

attention toward academic features of writing. Supporting her statements with phrases such as "I guess" and "my opinion" in the pre-semester writing sample, as opposed to the post-semester writing sample lack of personal announcements and use of objective deixis, indicates greater awareness of the written mode. Further, on day 1 she was thinking about her experience with the cities, whereas on day 101 she was thinking of what information to place in her TS, NT, and CI.

Like her process data, though, Student A's awareness consisted of a multiplex developmental path. Especially early in the semester, Student A often repeated metalinguistic terminology that was used by the instructor, such as UWC self-assessments indicating a need to change her CI. These accounts reveal her utilization of instructional content through repetition of key terms as a means to effectively complete a task, a strategy similarly documented among other L2 learners (see Buckwalter, 2001; DiCamilla & Antón, 1997; Frawley, 1992; McCafferty, 1994; Roebuck, 2000). However, a poignant example of Student A repeating metalinguistic terminology was on day 101 with the final timed, in-class writing exam. For this exam, she identified the differing components of the academic paragraph in both her draft prior to writing the paragraph and in her reflection following. In both instances, while repeating the parts may have assisted her in ensuring the structural components of the paragraph were present, she showed little ability to make decisions with linguistic features to better support her argument. It is likely that Student A had yet to make a connection with the rhetorical magnitude the linguistic features can have.

In general, while Student A showed an increased use of features of academic writing, she still needs to develop a complete conceptual understanding of thematic

coherence to regulate her writing. As Negueruela and Lantolf (2006) explicate, the critical point is "establishing the connection between visible explicit knowledge and its functionality in performance" (p. 98). Through Student A's experience in EAP 101, she was explicitly presented with the concept of thematic coherence, and through communicative interaction (both written and oral), began to show some control by implementing pieces of the concept (e.g., the structural components).

4.2 Microgenesis of Thematic Coherence and Implications

While the development of advanced language proficiency will likely take many more years (see Cummins, 1991), EAP 101 did offer a snapshot into the experience of Student A as she traverses the "semiotic abyss" (Watson, 2010, p. iv) from orality to literacy. As was discussed in chapter 1 (section 1.4.3), very little research offers insight into the developmental trajectories of Saudi learners of English. An entire generation of a learner population are likely the first in their family to pursue tertiary education, and even to have achieved secondary education. This thesis provides detailed documentation of the ebb and flow of learning for one such student, a necessary contribution to ensure appropriate sequencing of content and courses alike.

One implication of this thesis is to argue the validity of a microgenesis to document and understand the development of thematic coherence, especially for a single student. Through the use of multiple data sources I was able ascertain micro-changes in Student A's proficiency and awareness that would otherwise not have been identified had I used a different analytical approach. This more nuanced approach particularized Student A's experience to ensure a "more complete and fair evaluation" (García, 2017, p. 120) of her abilities. It is noted that much of Student A's development often required more than

corrective feedback on language form. From a SCT perspective, such an emphasis on meaning-making over form is vital for students to develop conceptual understandings rather than just the ability to perform (Lantolf & Poehner, 2014). Accordingly, tracing the micro-changes in Student A's development points to the pertinence of needing intentional, interactive experiences for learners. One such example was when the instructor provided students with an example SI for a Response paragraph that named a novel about Saudi women. Immediately following this example, Student A was able to reflect that she needed to "add an example of a fiction book… to have a strong suppurting [sic] ideas" (Exit Ticket, day 52). Another poignant point was the OWC in which the instructor and graduate assistant co-constructed an interaction that gradually led Student A to noticing the vagueness of her CI and producing a new, more specific CI afterwards. Such experiences are best when interactions are co-constructed, bidirectional relationships; such interactions both inform instructors of their learners' needs based on their performance in the moment, and aid the learner in regulating their performance.

Through intentionally designed interactions—with the notion that social activity is crucial for development (Lantolf, 2000a)—the course was enriched with ongoing contact and engagement with peers, didactic materials, instructor mediation, and student production. In relation to the skill under question, Student A's performance often shifted toward greater thematic coherence when she was assisted in regulating her performance, which as explicated by Stetsenko and Arievitch (2002), is "not an inherent mental capacity" (p. 88). Thus, increasing Student A's affordances to engage in other-regulatory behavior supported her development. Taking Student A's production out of context, such as the TS Student A used on day 67 for Cause/Effect A, for example, (see Example 3.34),

one would overlook the extensive interaction she went through with the instructor and tutor during the OWC. This mediated interaction intentionally drew awareness to the metalinguistic terminology and ensured that Student A could name what features made her previous TS inadequate. In fact, this one instance provides a poignant illustration of Student A's bourgeoning actualization of thematic coherence.

Cause/Effect A on days 59 and 67 mark Student A's heightened focus on organizing her ideas around SIs, more so than the CI. On day 59, the SIs (e.g., save time researching and socialize with others) offer specific examples which, under the right circumstances, could potentially serve as adequate SIs. What makes these SIs inappropriate for this paragraph is that the paragraph as a whole lacks a CI and that the second SI is not related to the topic of academic life. The mediated interaction Student A experienced during the OWC (Examples 3.26 & 3.27) shows her referencing the SIs when asked what the CI was. Even when her CI was explicitly referenced by the tutor and instructor, Student A was unable to name what was vague about it. Following the OWC though, she kept the first SI and revised the second to show a logical progression from the first, as shown in Example 4.1.

> Example 4.1
> …First, the Google search tool saves student's effort to finding answers to questions from dependable sources rather than searching too many books… Moreover, A student could use the time spent looking up information in books to study for a test instead…
> (SIs from Cause/Effect A, Day 67)

The CI (e.g., "find reliable sources easily") for this production is the first that Student A independently wrote that did not copy either the prompt, a point from an article, or an explicit feedback point from the instructor. Interestingly, by considering the variable of time in the analysis, Student A produce the initial SI first, followed by the second SI and

the CI on day 67. Whether she produced the second SI or the CI first is not a major concern; what is important is that both are resultant to the production of the first SI. This successfully led to the two SIs establishing thematic coherence amongst each other; however, the SIs did not establish thematic coherence with the CI because they focused on the adverb "easily" rather than the action of finding "reliable sources."

This is to suggest that Student A's writing progressed first through the production of logically related SIs, prior to the production of a superordinate-subordinate relationship between the CI and SIs. By analyzing such particularities of acquiring and forming thematic coherence in academic paragraphs, not only an analysis of Student A's abilities are provided, but also a better understanding of thematic coherence in general is provided (Kochurova et al., 1981). Thus, in regards to thematic coherence, Student A had much greater difficulty in abstracting information than deriving more specific examples, such as SIs.

In general, the above discussion marks the complexity of thematic coherence, specifically the skill of establishing trans-phrasal relationships among ideas that both support the CI and ensure a superordinate-subordinate structure. Coherence in general is the semantic structure of uniting several sentences into a holistic message, extending beyond the linguistic resources that relate to other sentences (Bussmann, 1998). For Student A, her shifts in development progressed toward greater unity of the paragraph, often through cohesion formed through organizational transitions (e.g., first, second), or through repetition and reference to items noted in the TS. However, as discussed above, she was unable to gain control over the superordinate-subordinate relationship between the CI and SIs, largely due to the breakdown in conceptualizing the relationship between

these parts of the paragraph. However, through the rich description and tracing of her development in EAP 101, instruction can take this into consideration.

4.3 Limitations of the Study and Future Research

This study has offered an important description of the microgenesis of thematic coherence, but it is not without limitations. The analysis of thematic coherence required an interpretative analysis of the logic of the relatedness of ideas, which are often at the discretion of the analyst, making complete objectivity difficult to replicate. Additionally, any comparison of the microgenesis of the focal student's development with future studies may be tenuous due to the inability of instructional contexts to be implemented identically to that of the current study. That is, much of the data that was collected involved learner performance following an interaction with an instructor, such that many paragraphs that were produced were revisions based on instructor mediation. Nevertheless, while the data may not represent duplicable experimental conditions, the theoretical principles of SCT, of which CBI is based and was used to teach academic writing, is not commensurate with other controlled experimental settings. This is because SCT maintains that learning is socially constructed and thus instructional contexts involve interactions based on what learners need assistance (Lantolf & Thorne, 2006).

Another potential limitation was the scope of the study. Documenting and analyzing the data from only one participants in one EAP course led to data that is not comprehensive to KSA student population. The scope of the investigation also remained limited to the relatively small time-frame in relation to the number of institutional and course changes that Saudi learners of English have reported to have experienced (e.g., from KSA to U.S.-based IEPs to U.S. collegiate EAP programs). To better sequence

intervention, instructors need greater understanding of development from one context to the next to ensure fluid course articulation that supports L2 development. Still, providing an in-depth description of one learner over one semester, does aid in the particularization of micro-changes within one context in which Saudi learners of English are studying, from which L2 development research can compare their findings.

Regardless of the limitations, this study does offer insight into future directions of L2 research. First, a closer examination into specific sites and incidents of mediation between the instructor and students could assist in understanding how to foster self-regulation among learners. In particular, research of learner reciprocity in L2 instructional settings is needed. Learner reciprocity is defined by Lidz (1991) and van der Aalsvoort and Lidz (2002) as the contribution a learner makes in instructional situations in an attempt to be autonomous. Learner reciprocity is thus observed when learners are attempting to produce a skill that remains outside their independent ability. Poehner (2008) emphasizes that such contributions include various types of behavior, such as "implicit and explicit acceptance of [instructor] mediation and requests for additional support as well as their questioning of and refusal to accept...support" (p. 39), which extends beyond a correct-incorrect dichotomy. With only a few published studies investigating learner reciprocity in L2 development classrooms (Ableeva, 2018; Ozkose-Biyik & Meskill, 2015; Poehner, 2008; Poehner & Ableeva, 2011), a dearth of research on L2 learner reciprocity persists on what behaviors mean in terms of learners' understanding and development of L2 features. For a course that seeks to intentionally integrate and sequence instruction through didactic materials, verbalization tasks, and performance tasks, a fuller examination of the interrelatedness between all these

components is necessary to provide greater understanding of how students gain

autonomy.

Another needed area of research among Saudi students in particular is how past

educational and cultural experiences shape their development in L2 academic writing.

Beyond specific language abilities, Bhowmik (2016) suggests that students' agency,

identity, and experiences during a single assignment all have an impact on their

development. With Saudi learners underrepresented in L2 acquisition research, increased

ethnographic studies are needed to ensure a greater understanding L2 development

among this learner population, while also providing well-articulated language instruction

for the increasing number of students attending U.S. universities.

4.4 Concluding Remarks

This thesis had the intention of contributing to the dearth of research on thematic

coherence and Saudi learners of English by providing a descriptive analysis of

development of L2 academic writing among a single focal learner. While the study does

not provide a fully comprehensive description of what L2 development looks like for

thematic coherence, it does serve to provide insight and background into one aspect of L2

development for Saudi learners of English. What I have presented serves to justify the

implications for instruction of thematic coherence and suggestions for further research;

yet there are undoubtedly many more. The intent is to encourage future studies to

continue to contribute to the betterment of instruction and understanding of thematic

coherence and of Saudi learners of English.

References

Ableeva, R. (2018). Understanding learning L2 development through reciprocity. In J. P. Lantolf, M. E. Poehner, & M. Swain (Eds.), *The Routledge handbook of sociocultural theory and second language development* (pp. 266-281). New York: Routledge.

Ableeva, R., & Lantolf, J. P. (2011). Mediated dialogue and the microgenesis of second language listening comprehension. Assessment in Education: Principles, Policy & Practice, 18(2), 133- 149.

Al-Gahtani, S., & Roever, C. (2012). Proficiency and sequential organization of L2 requests. *Applied Linguistics, 33*(1), 42-65.

Al-Hazmi, S. (2003). EFL teacher preparation programs in Saudi Arabia: Trends and challenges. *TESOL Quarterly, 37*(2), 341-344.

Aljaafreh, A., & Lantolf, J. P. (1994). Negative feedback as regulation and second language learning in the zone of proximal development. *The Modern Language Journal, 78,* 465-483.

Al Murshidi, G. (2014a). The impact of American students and teachers on Gulf students' academic success. *Theory and Practice in Language Studies, 4*(8), 1576-1585.

Al Murshidi, G. (2014b). Participation challenges of Emirati and Saudi students at US universities. *International Journal of Research Studies in Language Learning, 3*(5), 33-52.

Al-Qahtani, A. (2015). Acculturation and perceived social distance among Arabs and Saudi Arabians in an ESL situation. *English Language Teaching, 9*(1), 188-198.

Al Rawaf, H. S., & Simmons, C. (1991). The education of women in Saudi Arabia.

    Comparative Education, 27(3), 287-295.

Al-Seghayer, K. (2014). The four most common constraints affecting English teaching in

    Saudi Arabia. *International Journal of English Linguistics, 4*(5), 17-26.

Al-Seghayer, K. (2015). Salient key features of actual English instructional practices in

    Saudi Arabia. *English Language Teaching, 8*(6), 89-99.

Alyousef, H. S. (2016). A multimodal discourse analysis of the textual and logical

    relations in marketing texts written by international undergraduate students.

    Functional Linguistics, 3(1), 1-29.

Amaro-Jiménez, C., Hungerford-Kresser, H., & Pole, K. (2016). Teaching with a

    technological twist: Exit Tickets via Twitter in literacy classrooms. *Journal of

    Adolescent & Adult Literacy, 60*(3), 305-313.

Arunsirot, S. (2013). An analysis of textual metafunction in Thai EFL students' writing.

    Novitas-ROYAL (Research on Youth and Language), 7(2), 160-174.

Barnawi & Al-Hawsawi (2017). English education policy in Saudi Arabia: English

    language education policy in the Kingdom of Saudi Arabia: Current trends, issues

    and challenges. *English Language Education Policy in the Middle East and North

    Africa, 13*, 199-222.

Barro, R., & Lee, J.W. (2018). Saudi Arabia: Educational attainment for total population.

    Educational Attainment Dataset. Retrieved April 16, 2019, from

    http://www.barrolee.com/

Bell, D. C., & Elledge, S. R. (2008). Dominance and peer tutoring sessions with English

    language learners. *Learning Assistance Review, 13*(1), 17-30.

Bello, I. (2016). Cognitive implications of nominalizations in the advancement of

    scientific discourse. *International Journal of English Studies, 16*(2), 1-23.

Belz, J. A. (2018). The metacognition of academic writing among Saudi learners of

    English in concept-based instruction. Manuscript under review.

Belz, J. A. (2019a). Inter-educational perspectives on second language development:

    Lessons from Saudi Writers. Manuscript under review.

Belz, J. A. (2019b). The orientation of Gulf Cooperation Council students to tutoring

    opportunities in US higher education. Manuscript under review.

Belz, J. A., & Kinginger, C. (2002). The cross-linguistic development of address form

    use in telecollaborative language learning: Two case studies. *The Canadian*

    Modern Language Review, 59(2), 189-214.

Belz, J. A., & Kinginger, C. (2003). Discourse options and the development of pragmatic

    competence by classroom learners of German: The case of address forms.

    Language Learning, 53(4), 591-647.

Belz, J. A., & Vyatkina, N. (2005). Learner corpus analysis and the development of L2

    pragmatic competence in networked inter-cultural language study: The case of

    German modal particles. *The Canadian Modern Language Review, 62*(1), 17-48.

Belz, J. A., & Vyatkina, N. (2008). The pedagogical mediation of a developmental

    learner corpus for classroom-based language instruction. *Language Learning &*

    Technology, 12(3), 33-52.

Berry, M. (1995). Thematic options and success in writing. In M. Ghadessy (ed.),

    Thematic development in English text (pp. 55-84). London: Pinter.

Bhowmik, S. K. (2016). Agency, identity and ideology in L2 writing: Insights from the EAP classroom. *Writing & Pedagogy, 8*(2), 275-308.

Bigelow, M., & Watson, J. (2012). The role of education level, literacy, and orality in L2 learning. In S. M. Gass and A. Mackey (Eds.), *The Routledge handbook of second language acquisition* (pp. 461-475). London: Routledge.

Bitchener, J., Storch, N., & Wette, R. (2017). *Teaching writing for academic purposes to multilingual students: Instructional approaches*. New York: Routledge.

Bloor, M., & Bloor, T. (1992). Given and new information in the thematic organization of text: An application to the teaching of academic writing. *Occasional Papers in Systemic Linguistics, 6,* 33-43.

Brandt, C. (2009). *Read, research and write: Academic skills for ESL students in higher education*. London: Sage.

Brooks, J. (1991). Minimalist tutoring: Making the student do all the work. *Writing Lab Newsletter, 15*(6), 1-4.

Brown, G., & Yule, G. (1983). *Discourse analysis*. Cambridge: Cambridge University Press.

Bruce, I. (2008). *Academic writing and genre: A systematic analysis*. London: Continuum.

Buckwalter, P. (2001). Repair sequences in Spanish L2 dyadic discourse: A descriptive study. *Modern Language Journal, 85*(3), 380–397.

Bussmann, H. (1998). Routledge dictionary of language and linguistics. (G. Trauth & K. Kazzazi, Eds., Trans.). London: Routledge.

Cassidy, T., & Miller, M. (2002). *Higher education in the Arab states: Responding to the challenges of globalization* (Doctoral dissertation). Harvard University.

Cole, M. (1996). Interacting minds in a life-span perspective: A cultural-historical approach to culture and cognitive development. In P. B. Baltes & U. M. Staudinger (Eds.), *Interactive minds: Life-span perspectives on the social foundation of cognition* (pp. 59-87). New York: Cambridge University Press.

Corvalan Reyes, P. (2004). Thematic progression and the perception of coherence in the written composition of students of English as a foreign language. *Lenguas Modernas, 30,* 81-107.

Cummins, J. (1991). Interdependence of first- and second-language proficiency in bilingual children. In E. Bialystok (Ed.), *Language processing in bilingual children* (pp. 70-89). New York, NY, US: Cambridge University Press.

Danes, F. (1974). Functional Sentence Perspective and the Organization of Text. In F. Danes (Ed.), *Papers in Functional Sentence Perspective*. Prague: Academia, 106-128.

Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods* (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.

Denzin, N. K. (2012). Triangulation 2.0. *Journal of Mixed Methods Research, 6*(2), 80–88.

DeWalt, K. M. & DeWalt, B. R. (2002). *Participant observation: a guide for fieldworker*s. Walnut Creek, CA: AltaMira Press.

DiCamilla, F., & Antón, M. (1997). Repetition in the collaborative discourse of L2 learners: A Vygotskian perspective. *The Canadian Modern Language Review, 53*(4), 609-633.

Educational Testing Services. (2014). *A guide to understanding TOEFL ibt scores* [Brochure]. Author. Retrieved May 22, 2019, from https://www.ets.org/toefl/institutions/scores/interpret/

Educational Testing Services. (2016). *Test and score report: Test and score report summary for TOEFL iBT Tests* [Scholarly project]. In *ETS: TOEFL.* Retrieved April 5, 2018, from www.ets.org/toefl

Educational Testing Services. (2017). *Test and score report: Test and score report summary for TOEFL iBT Tests* [Scholarly project]. In *ETS: TOEFL.* Retrieved April 5, 2018, from www.ets.org/toefl

Elyas, T. (2013). Critiquing of higher education policy in Saudi Arabic: Towards a new neoliberalism. *Education, Business and Society: Contemporary Middle Eastern Issues, 6*(1), 31-41.

Elyas, T., & Picard, M. (2010). Saudi Arabian educational history: Impacts on English language teaching. *Education, Business & Society: Contemporary Middle Eastern Issues, 3,* 136-145.

Engelhardt, D. (2013). *Practice makes perfect: Intermediate English reading and composition*. New York: McGraw Hill Publishing Company.

Federal Research Division, Library of Congress. (1992). *Saudi Arabia: a country study.* H. C. Metz (Ed.) Washington, D.C.: Library of Congress.

Ferris, D. R., & Hedgcock, J. (2014). *Teaching L2 composition: Purpose, process, and practice* (3rd ed.). New York: Routledge.

Flowerdew, J., & Peacock, M. (2001). Issues in E.A.P.: A preliminary perspective. In J. Flowerdew, & M. Peacock (Eds.), *Research perspectives on English for academic purposes*. Cambridge: Cambridge University Press.

Fowler, R. (1986). *Linguistic criticism.* Oxford: Oxford University Press.

Francis, G. (1989). Thematic Selection and Distribution in Written Discourse. *Word, 40,* 201-221.

Frawley, W. (1992). *Linguistic semantics*. Hillsdale, NJ: Lawrence Erlbaum.

Fries, P. H. (2002). The flow of information in a written English text. In P. H. Fries, M. Cummings, D. Lockwood, & W. Spruiell (Eds.), *Relations and function within and around language* (pp. 117-155). London: Continuum.

Gal'perin, P. I. (1989). Organization of mental activity and the effectiveness of learning. *Soviet Psychology, 27*(3), 65-82.

Gal'perin, P. I. (1992). Stage-by-stage formation as a method of psychological investigation. *Journal of Russian and East European Psychology, 30*(4), 60-80.

Gánem-Gutiérrez, A. (2008). Microgenesis, method and object: A study of collaborative activity in a Spanish as a foreign language classroom. *Applied linguistics, 29*(1), 120-148.

Gánem-Gutiérrez, G. A., & Harun, H. (2011). Verbalisation as a mediational tool for understanding tense-aspect marking in English: An application of concept-based instruction. *Language Awareness, 20*(2), 99-119.

García, P. N. (2017). A sociocultural approach to analyzing L2 development in the

    Spanish classroom. *Vigo International Journal of Applied Linguistics, 14,* 99-124.

Gardner, P. S. (2005). *New directions: Reading, writing, and critical thinking (2nd ed.).*

    New York: Cambridge University Press.

George, A. L., & Bennett, A. (2005). *Case studies and theory development in the social*

    sciences. Cambridge, MA: MIT Press.

Gillespie, P., & Learner, N. (2000). *The Allyn and Bacon guide to peer tutoring*. Boston,

    MA: Allyn and Bacon.

Giroir, S. (2014). Narratives of participation, identity, and positionality: Two cases of

    Saudi learners of English in the United States. *TESOL Quarterly, 48*(1), 34-56.

Goffman, E. (1959). *The presentation of self in everyday life*. Garden City, NY: Anchor.

Graff, G., & Birkenstein, K. (2016). *They say I say: The moves that matter in academic*

    writing (3rd ed.). New York: Norton.

Haenen, J. (2001). Outlining the teaching-learning process: Piotr Gal'perin's

    contribution. *Learning and Instruction, 11*, 157-170.

Hall, B., & Wallace, E. (2018). College ESL Writers: Applied Grammar and Composing

    Strategies for Success. *English Open Textbooks*. Atlanta, GA: University

    System of Georgia.

Halliday, M. A. K. (1989). *Spoken and written language.* (2nd ed.). Oxford: Oxford

    University Press.

Halliday, M. A. K. (1993). Towards a language-based theory of learning. *Linguistics and*

    Education, 5, 93-116.

Halliday, M. A. K. (1994). *An introduction to functional grammar* (2nd ed.). London: Edward Arnold.

Halliday, M. A. K., & Hasan, R. (1976). *Cohesion in English*. English Language Series, London: Longman.

Hamdan, A. K. (2014). The road to culturally relevant pedagogy: Expatriate teachers' pedagogical practices in the cultural context of Saudi Arabian higher education. *Journal of Education, 49*(1), 201-226.

Hamp-Lyons, L., & Heasley, B. (2006). *Study writing: A course in writing skills for academic purposes.* Cambridge: Cambridge University Press.

Harris, M., & Silva, T. (1993). Tutoring ESL students: Issues and option. *College Composition and Communication, 44*, 525-537.

Hertsgaard, M. (2007, March 29). On the Front Lines Of Climate Change. Retrieved from http://content.time.com/time/magazine/article/0,9171,1604879-2,00.html

Hinkel, E. (2019). *Teaching essential units of language: Beyond single-word vocabulary.* New York: Routledge.

Hoey, M. P. (1983). *On the surface of discourse.* London: Allen & Unwin.

Howard, R. M. (2018). *Writing matters: A handbook for writing and research (3rd ed.).* New York: McGraw Hill Publishing Company.

Hudson, P. (2012). 'Shababbery' and 'banattitude': Wester ELT professionals' perceptions of the role of gender in English-medium higher educational institutions in the Gulf. *Learning and Teaching in Higher Education: Gulf Perspectives, 9*(2), http://lthe.zu.ac.ae

Hyland, K. (2004). *Genre and second language writing.* Ann Arbor, MI: The University
of Michigan Press.

Ishida, M. (2006). Interactional Competence and the Use of Modal Expressions. In K.
Bardovi-Harlig, C. Félix-Brasdefer, & A. S. Omar (Eds.), Pragmatics and
language learning, 11 (pp. 55-79). University of Hawai'i at Manoa, National
Foreign Language Resource Center.

Jalilifar, A. (2010). Thematization in EFL students' composition writing and its relation
to academic experience. *RELC Journal, 41*(1), 31-45.

Johnson, D. (1992). *Approaches to research in second language learning.* New York:
Longman.

Jones, R. H., & Lock, G. (2011). *Functional grammar in the ESL classroom: Noticing,
exploring and practicing.* London: Palgrave Macmillan.

Kail, H., & Trimbur, J. (1987). The politics of peer tutoring. *WPA: Writing Program
Administration, 11*, 5–12.

Karpov, Y. V. (2003). Vygotsky's doctrine of scientific concepts. In A. Kozulin, B.
Gindis, V. S. Ageyev, and S. M. Miller (Eds.), *Vygotsky's educational theory in
cultural context* (pp. 138-55), Cambridge: Cambridge University Press.

Kim, J., & Lantolf, J. P. (2018). Developing conceptual understanding of sarcasm in
L2 English through explicit instruction. *Language Teaching Research,
22*(2), 208-229.

Kinginger, C., & Belz, J. A. (2005). Socio-cultural perspectives on pragmatic
development in foreign language learning: Microgenetic case studies from
telecollaboration and residence abroad. *Intercultural Pragmatics, 2*(4), 369-421.

Knapp, P., & Watkins, M. (1994). *Context—text—grammar: Teaching the genres and grammar of school writing in infants and primary classrooms.* Sydney: Text Production.

Kochurova, E. I., Visyagina, A. I., Gordeeva, N. D., & Zinchenko, V. P. (1981). Criteria for evaluating executive activity. In J. V. Wertsch (Ed.), *The concept of activity in Soviet psychology* (pp. 383-433). Armonk, N. Y.: Sharpe.

Lantolf, J. P. (Ed.) (2000a). *Sociocultural theory and second language learning*. Oxford, UK: Oxford University Press.

Lantolf, J.P. (2000b). Introducing sociocultural theory. In J.P. Lantolf (Ed.), Sociocultural theory and second language learning (pp. 1–26). Oxford: Oxford University Press.

Lantolf, J. P., & Poehner, M. E. (2014). *Sociocultural theory and the pedagogical imperative in L2 education: Vygotskian praxis and the research/practice divide.* New York: Routledge.

Lantolf, J. P., Poehner, M. E., & Swain, M. (2018). *The Routledge handbook of sociocultural theory and second language development*. New York: Routledge.

Lantolf, J. P., & Thorne, S. (2006). *Sociocultural theory and the genesis of second language development.* Oxford: Oxford University Press.

Lantolf, J. P., Thorne, S., & Poehner, M. E. (2015). Sociocultural theory and second language development. In B. van Patten & J. Williams (Eds.), *Theories in second language acquisition* (pp. 207-226). New York: Routledge.

Lapkin, S., Swain, M., and Knouzi, I. (2008). French as a second language: University students learn the grammatical concept of voice: Study design, materials

development, and pilot data. In J. P. Lantolf and M.

E. Poehner (Eds.), *Sociocultural theory and the teaching of second languages* (pp.

228-255). London: Equinox.

Leki, I. (1992). *Understanding ESL writers: A guide for teachers*. Portsmouth, N.H.:

Boynton/Cook Publishers Inc.

Lidz, G. S. (1991). *Practitioners guide to dynamic assessment*. New York: The Guilford

Press.

Lunsford, A. (1991). Collaboration, control, and the idea of a writing center. *The Writing

Center Journal, 12*(1), 3-10.

Mahboob, A., & Elyas, T. (2014). English in the Kingdom of Saudi Arabia. *World

Englishes, 33*(1), 128-142.

Marshall, C., & Rossman, G. B. (1989). *Designing qualitative research*. Newbury Park,

CA: Sage.

Martin, J. R. (2001). Language, register, and genre. In A. Burns & C. Coffin (Eds.),

Analysing English in a global context: A reader (pp. 149-166). London, England:

Routledge.

Martin, J. R., & Rose, D. (2003). *Working with discourse: Meaning beyond the clause*

(1st ed.). London: Continuum.

Martin, J. R., & Rose, D. (2007). *Working with discourse: Meaning beyond the clause*

(2nd ed.). London: Continuum.

McCafferty, S. G. (1994). The use of private speech by adult ESL learners at different

levels of proficiency. In J. P. Lantolf & G. Appel (Eds.), *Vygotskian approaches

to second language research* (pp. 117–134). Norwood, NJ: Ablex.

McCarthy, M., & Carter, R. (1994). *Language as discourse: Perspectives for language teaching*. New York: Longman.

McNamara, D. S., Kintsch, E., Songer, N. B., & Kintsch, W. (1996). Are good texts always better? Interactions of text coherence, background knowledge, and levels of understanding in learning from text. *Cognition and Instruction, 14*(1), 1-43.

Mercer, J. (2007). Appraising higher education faculty in the Middle East: Leadership lessons from a different world. *MiE, 20*(1), 17-26.

Nation, I. S. P. (2009). *Teaching ESL/EFL reading and writing.* New York: Routledge.

Negueruela, E. (2008). Revolutionary pedagogies: Learning that leads (to) second language development. In J.P. Lantolf, & M.E. Poehner (Eds.), *Sociocultural theory and the teaching of second languages* (pp. 189–227). London: Equinox.

Negueruela, E., & Lantolf, J. P. (2006). Concept-based pedagogy and the acquisition of L2 Spanish. In R. M Salaberry and B. A. Lafford (Eds.), *The art of teaching Spanish: Second language acquisition from research to praxis* (pp. 79-102). Washington, D.C.: Georgetown University Press.

Nelson, J. (2007). Avidly seeking success. *Educational Leadership, 64*(7), 72–74.

North, S. (2005). Disciplinary variation in the use of theme in undergraduate essays. *Journal of Applied Linguistics, 26*(3), 1-18.

Open Doors Report: *FastFacts* [PDF]. (2005). New York: Institute of International Education.

Open Doors Report: *FastFacts* [PDF]. (2017). New York: Institute of International Education.

O'Reilly, R., & McNamara, D. S. (2007). Reversing the reverse cohesion effect: Good

    texts can be better for strategic, high-knowledge readers. *Discourse Processes, 43,*

    121-152.

Ortega, L. (2009). *Understanding second language acquisition*. Hodder Education:

    London.

Ozkose-Biyik, C., & Meskill, C. (2015). Plays well with others: A study of EFL learner

    reciprocity in action. *TESOL Quarterly, 49*(4), 787-813.

Paul, A. M. (2013, June 03). Reading Literature Makes Us Smarter and Nicer: "Deep

    reading" is vigorous exercise from the brain and increases our real-life capacity

    for empathy. Retrieved from http://ideas.time.com/2013/06/03/why-we-should-

    read-literature/

Phan, L. H., & Barnawi, O. (2015). Where English, neoliberalism, desire and

    internationalization are alive and kicking: Higher education in Saudi Arabia

    today. *Language and Education, 29*(6), 545-565.

Peregoy, S., & Boyle, O. F. (2000). *Reading, writing, and learning in ESL (2nd ed.).*

    Boston, MA: Addison Wesley Publishing Company.

Picard, M. Y. (2006). *Academic literacy right from the start?: A critical realist study of*

    the way university literacy is constructed at a Gulf university (Doctoral

    dissertation). Rhodes University.

Poehner, M. E. (2008). Both sides of the conversation: The interplay between mediation

    and learner reciprocity in dynamic assessment. In J. P. Lantolf and M.

    E. Poehner (Eds.), *Sociocultural theory and the teaching of second languages* (pp.

    33-56). London: Equinox.

Poehner, M. E., & Ableeva, R. (2011). Dynamic assessment: From display of knowledge

    to engagement in the activity of development. In D. Tsagari & I. Csepes (Eds.),

    Classroom-based language assessment (pp. 15-28). Frankfurt: Peter Lang.

Poehner, M. E., & Infante, P. (2017). Mediated development: A Vygotskian approach to

    transforming second language learner abilities. *TESOL Quarterly, 51*(2), 332-357.

Poehner, M. E., & Lantolf, J. P. (2013). Bringing the ZPD into the equation: Capturing

    L2 development during computerized dynamic assessment (C-DA). Language

    Teaching Research, 17(3), 323-342.

Popham, W.J. (2008). *Transformative assessment.* Alexandria, VA: Association for

    Supervision and Curriculum Development.

Ravelli, L. J., & Ellis, R. (2005). *Analysing academic writing: Contextualized

    frameworks.* London: Continuum.

Razek, N. (2014). Academic integrity: A Saudi student perspective. *Academy of

    Educational Leadership Journal, 18*(1), 143-154.

Razek, N. A., & Coyner, S. C. (2013). Cultural impacts on Saudi students at a mid-

    western American university. *Academy of Educational Leadership Journal,

    Volume 17*(1), 103-117.

Roebuck, R. (2000). Subjects speak out: How learners position themselves in a

    psycholinguistic task. In J. P. Lantolf (Ed.), *Sociocultural theory and second

    language learning* (pp. 79–95). Oxford: Oxford University Press

Rugh, W. A. (2002). Education in Saudi Arabia: Choices and constraints. *Middle East

    Policy Council, 9*(2). Retrieved from https://www.mepc.org/journal/education-

    saudi-arabia-choices-and-constraints

Safi, S. (1992). Function of code-switching: Saudi Arabic in the United States. In

    A. Rouchdy (Ed.), *The Arabic language in America* (pp. 72-80). Detroit, MI:

    Wayne State University Press.

Saudi Arabian Cultural Mission. (1995). *Education in Saudi Arabia.* (H. Al Salloom, Ed.)

    Beltsville: Amana Publications.

Schensul, S. L., Schensul, J. J., & LeCompte, M. D. (1999). *Essential ethnographic*

    methods: observations, interviews, and questionnaires (Book 2 in Ethnographer's

    Toolkit). Walnut Creek, CA: AltaMira Press.

Schleppegrell, M. J. (2006). The linguistic features of advanced language use: The

    grammar of exposition. In H. Byrnes (Ed.), *Advanced language learning: The*

    contribution of Halliday and Vygotsky (pp. 134-146). London: Continuum.

Serrano-Lopez, M. & Poehner, M. E. (2008). Materializing linguistic concepts through 3-

    D clay modeling: a tool-and-result approach to mediating L2 Spanish

    development. In J. P. Lantolf & M. E. Poehner (Eds.), *Sociocultural Theory and*

    the Teaching of Second Languages, (pp. 321-346). London: Equinox.

Shaw, D. (2012). Secretes of success: Saudi student voices. *ORTESOL Journal, 29*, 1-11.

Shi, J. (2013). The exploration of the topical progression patterns in English discourse

     analysis. *Theory and practice in language studies, 3*(9), 1639-1644.

Silva, T., & Leki, I. (2004). Family matters: The influence of applied linguistics and

    composition studies on second language writing studies—past, present, and

    future. *Modern Language Journal, 88,* 1-13.

Simpson, J. M. (2000). Topical structure analysis of academic paragraphs in English and

    Spanish. *Journal of Second Language Writing, 9*(3), 293-309.

Singleton, J. (2005). *Writers at work: The paragraph*. Cambridge: Cambridge University Press.

Smalley, R. L., Ruetten, M. K., & Kozyrev, J. R. (2011). *Refining composition skills: Academic writing and grammar (6th ed.).* Boston, MA: Heinle ELT.

Stetsenko, A., & Arievitch, I. (2002).Teaching, learning, and development: A post-Vygotskian perspective. In G. Wells & G. Claxton (Eds.), *Learning for life in the 21st century: Sociocultural perspectives on the future of education* (pp. 84-96). Oxford, UK: Blackwell Publishers.

Swain, M., Lapkin, S., Knouzi, I., Suzuki, W., and Brooks, L. (2009). Languaging: University students learn the grammatical concept of voice in French. *Modern Language Journal, 93*, 5-29.

Swick, E. (2009). *Writing better English for ESL learners (2nd ed.).* New York: McGraw Hill.

Syed, Z. (2003). The sociocultural context of English language teaching in the gulf. *TESOL Quarterly, 37*(2), 337-341.

Thorne, S. L., Reinhardt, J., & Golombek, P. (2008). Mediation as objectification in the development of professional academic discourse: A corpus-informed curricular innovation. In J. P. Lantolf and M. E. Poehner (Eds.), *Sociocultural theory and the teaching of second languages* (pp. 256-284). London: Equinox.

Tibi, B. (1998). *The challenge of fundamentalism: Political Islam and the new world disorder*. Berkeley, CA: University of California Press.

Tocaimaza-Hatch, C. C. (2016). Mediated vocabulary in native speaker-learner interactions during an oral portfolio activity. *Foreign Language Annals, 49*(2), 336-354.

Unruh, S., & Obeidat, B. F. (2015a). Adjusting to learning in the US: Saudi students speak out. *Journal of Higher Education Theory and Practice, 14*(4), 45-56.

Unruh, S., and Obeidat, F. (2015b). Learning English: Experiences and needs of Saudi engineering students. *College Quarterly, 18*(4), 1-13.

van Compernolle, R. A., & Williams, L. (2012). Promoting sociolinguistic competence in the classroom zone of proximal development. Language Teaching Research, 16(1), 39-60.

van der Aalsvoort, G. M., & Lidz, C. S. (2002). Reciprocity in dynamic assessment in classrooms: Taking contextual influences on individual learning into account. *Learning Potential Assessment and Cognitive Training, 7*, 111-144.

van Lier, L. (2000). From input to affordance: Social-interactive learning from an ecological perspective. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning*, (p. 245-259). Oxford: Oxford University Press.

Vyatkina, N. A. (2007). *Development of second language pragmatic competence: The data-driven teaching of German modal particles based on a learner corpus* (Unpublished doctoral dissertation). The Pennsylvania State University, State College, PA.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Cambridge, MA: Harvard University Press.

Vygotsky, L. S. (1986). *Thought and Language*. Cambridge, MA: MIT Press.

Wang, L. (2007). Theme and rheme in the thematic organization text: Implications for teaching academic writing. *Asian EFL Journal, 9*(1), 164-176.

Watson, J. (2010). *Interpreting across the abyss: A hermeneutic exploration of initial literacy development by high school English language learners with limited formal schooling*. (Doctoral dissertation). University of Minnesota, Minneapolis.

Wertsch, J. V. (1985). *Vygotsky and the social formation of mind.* Cambridge, MA: Harvard University Press.

White, B. J. (2012). A conceptual approach to the instruction of phrasal verbs. *The Modern Language Journal*, 12, 419–438. https://doi.org/10.1111/j.1540-4781.2012.01365.x

Wikberg, K. (1990). Topic, theme, and hierarchical structure in procedural discourse. In J. Aarts, & W. Meijs (Eds.), *Theory and practices in corpus linguistics* (pp. 231-254). Amsterdam: Rodopi.

Winter, E. O. (1977). A clause-relational approach to English texts: A study of some predictive lexical items in written discourse. *Instructional Science, 6*(1), 1-92.

Winter, E. O. (1978). A look at the role of certain words in information structure. In K. P. Jones and V. Horsnell (Eds.), *Informatics* (pp. 85-97). London: ASLIB (Association of Special Libraries and Information Bureaux).

World Bank (2002). *Literacy in the Middle East*, United Nations, Geneva, p. 18.

Yanez-Prieto, M. (2014). Sense and subjectivity: Teaching literature from a sociocultural perspective. *Language and Sociocultural Theory, 1*(2), 179-203.

Yin, R. K. (2009). Case study research: Design and methods (4th ed.). Thousand Oaks, CA: Sage Publications.

Yizraeli, S. (2012). *Politics and society in Saudi Arabia, the crucial years of development, 1960-1982.* New York: Columbia University Press.

Zhang, X., & Lantolf, J. P. (2015).Natural or artificial: Is the route of L2 development teachable? *Language Learning, 65*(1), 152-180.

Zuhur, S. (2011). *Saudi Arabia: Middle East in focus.* Santa Barbara, California: ABC-CLIO, LLC.

<div align="center">

Curriculum Vitae

GRADY KEPLER

</div>

Education
MA in TESOL, Indiana University at earned at Indiana University-Purdue University
      Indianapolis, August 2019
BA in Sociology, Whitworth University, May 2013

Experience
Teaching Assistant   2017 – 2018
      Department of English for Academic Purposes, IUPUI
Graduate Assistant   2017 – 2018
      International Center for Intercultural Communication, Indiana U Purdue U
English Language Instructor & Syllabus Planner (unpaid internship)   2017
      International Center for Intercultural Communication, Indiana U Purdue U
English Instructor (unpaid volunteer)   2018 – Present
      Exodus Refugee Immigration, Indianapolis, IN
English for Specific Purposes Instructor (unpaid volunteer)   2017 – 2018
      Salem Lutheran Church, Indianapolis IN

Awards & Honors
Recipient, Fulbright English Teaching Assistantship to Amman, Jordan, 2019-2020.
Recipient, Dr. Charles R. Bantz Award for Excellence, IUPUI, 2019. [Awarded to top-
      ranked graduate student]
Recipient, Albert H. Marckwardt Travel Grant, TESOL International, Atlanta, GA,
      Spring 2019. [One of two awarded for MA students]
Recipient, Loretta Lunsford Grant for Faculty supervised research and service, IU School
      of Liberal Arts, 2018-2019. [$5,000 grant]

Selected Presentations
Kepler, G. (2019, April). *The paths of development toward thematic coherence: A case of
      Saudi female writers*. IUPUI TESOL Forum, Indianapolis, IN.
Kepler, G. (2019, March). *Learner Reciprocity to Instruction of Academic Paragraphs
      Among Saudi Students*. TESOL International Convention, MA Student Forum,
      Atlanta, GA.