Spring 5-10-2016

Visual Support in Discourse Writing for Students With Limited or Interrupted Formal Education

Brady John Fossenbell
Hamline University, bfossenbell01@hamline.edu

VISUAL SUPPORT IN DISCOURSE WRITING

FOR STUDENTS WITH LIMITED OR INTERRUPTED FORMAL EDUCATION

by

Brady Fossenbell

A capstone submitted in partial fulfillment of the requirements
for the degree of Master of Arts in English as a Second Language

Hamline University

Saint Paul, Minnesota

May 2016

Primary Advisor: Bonnie Swierzbin
Secondary Advisor: Jill Watson
Peer Reviewer: Jennifer Fossenbell

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE: INTRODUCTION

Over the past four years, I have worked with East African English Language Learners (ELLs) in Grades 3 through 7, and in that time, the number of Students with Limited or Interrupted Formal Education (SLIFE) has risen dramatically at my school. At last count, approximately 95% of our student body was determined to be Limited English Proficient (LEP) using federal Title III guidelines, and 30% of our student body was determined to be SLIFE through personal history obtained via student and parent interviews. The definition of SLIFE varies in different states and, sometimes, from school to school. A working definition of SLIFE as follows will serve as a point of reference: Students with limited or no prior education, very little or no literacy in *any* language, and very little or no English proficiency, academic or literacy history in their family (Watson, 2015).

Of my caseload of over 60 students, more than 20 are considered SLIFE. Many of my ESL colleagues seem to have encountered only a handful of SLIFE in their careers. On a personal level, I enjoy working with these particularly dynamic students, and view my time with such a large group of SLIFE as a unique opportunity to learn more about their particular needs. While there is a growing recognition that SLIFE have numerous academic challenges, my experience has shown me that one skill set above all others has a profound impact on their lives:

writing. Recently our School Improvement Team (SIT) conducted an analysis of student work and test scores from the World-class Instructional Design and Assessment (WIDA) Assessing Comprehension and Communication in English State-to-State (ACCESS) for ELLs (WIDA, 2015e). They discovered that, across the board, our ELLs' weakest modality was writing. For example, 69% of our eighth-grade students scored between a 1 and a 2 on the modality of writing on a 5 point scale, whereas 59% of our students scored in the same range for reading; 55% of our students scored in this range for speaking; and 38% of our students scored in this range for listening. This trend was even more pronounced with our SLIFE. After looking through several writing samples across grade bands, and using WIDA Performance Definitions (WIDA, 2015b) and the Writing Rubric of the WIDA Consortium (WIDA, 2015c), our ELL team determined that the area with which our students struggle most is the *discourse level* as compared with *sentence level* and *word/phrase level*.

Discourse writing is defined as speech or writing typically longer than a sentence that deals formally with a certain subject (Literary Devices, 2015). WIDA (2015c) evaluates discourse writing in terms of what they call *linguistic complexity* based on whether students employ "a variety of sentence lengths of varying linguistic complexity in a single tightly organized paragraph or in well-organized extended text" (p. 56) Further, WIDA's linguistic complexity calls for "tight cohesion and organization" (WIDA, 2015c, p. 56).

My interest in discourse-level writing increased during a practicum I completed at a newcomer high school site in a large urban school district, where I worked with some of my previous students' older siblings, in addition to SLIFE from Asia and Central America. It was striking to witness these older students struggling with many of the same problems; I helped several of them with their college entrance essays and became familiar with their writing proficiency and tendencies working in a sheltered language arts setting. In short, many of these students could not write at a level required for university study even though they had received push-in, pull-out, and sheltered English as a Second Language (ESL) instruction for several years. While all of these students' composite ACCESS (WIDA, 2015e) scores were Level 4s and 5s, their ACCESS writing scores averaged between 3 and 4. They struggled with general cohesion, linking words, accurately employing pronoun referencing, and applying features of the particular text genre they were attempting to emulate. For example, it was common for students not to use paragraphing and to use pronouns that did not match their intended referents. In other words, their main obstacle was discourse structures.

Meanwhile, getting to know adult Somali staff at my school over four years has further intensified my burgeoning interest in SLIFE discourse writing, as most of these staff members were SLIFE themselves at one point and had interrupted formal education in Somalia, Kenya and the United States. Though college educated now, most of my colleagues from this background admit to still struggling with writing. They can speak fluently and compose proficiently at a sentence level, but their

discourses, most readily viewed in emails, are problematic for them. For example, many of these peers inconsistently use signal words within longer email discourses. Further, several of them have shared that their writing is a source of some shame for them, and that they feel it holds them back professionally. Data suggest that their concerns are well founded. Based on a literacy score that included writing proficiency, Sum, Kirsch, and Yamamoto (2004) found that employment rates of adult immigrants in the United States ranged from 59% for those with low literacy rates to 95% for those with high literacy rates. Further, the study found a direct correlation between higher writing proficiency and higher paying jobs for adult American immigrants.

Interacting with the writing of SLIFE at the elementary, middle school, high school, and adult/professional level has galvanized my commitment to helping my students move past the plateau of oral proficiency with low to moderate writing ability. I do not want my students to be ashamed of their writing when they are older. This has prompted me to study discourse writing techniques as they relate to SLIFE in an effort to help them bridge the gap from sentence-level writing to discourse level proficiency. To better contextualize the issue, this chapter introduces some of the distinctive and significant challenges that SLIFE encounter and the guiding questions that lay the foundation for my research.

The Unique Struggles of SLIFE

Over the course of the past four years, I have come to appreciate the specific obstacles that Students with Limited or Interrupted Formal English (SLIFE) face. But

before delving into these struggles, it is important to make a brief distinction between ELLs and SLIFE. Wright (2010) defines ELL as "a label for students who are non-native speakers of English and are in the process of attaining proficiency in English." As a large umbrella term, there is no specification regarding literacy or education inherent in the acronym. That being said, it is generally accepted that first language (L1) literacy is a tremendous asset for any student attempting to become proficient in academic English (Cummins et al., 2005; Weber, 2000; Wright & Li, 2006). On the other hand, limited formal education is foremost in many definitions of SLIFE.

Due to the gap in formal education, DeCapua, Smathers and Tang (2009) describe SLIFE as lacking "basic academic skills and concepts, content knowledge, and critical-thinking skills and may not be literate in their native language" (p. 4). This gap is further described as three-pronged in that SLIFE need to develop proficiency in cognitively demanding academic language in a second language while also learning basic literacy and numeracy skills and grade-level content. In addition to having to overcome sizeable academic and literacy gaps compared to their English-speaking peers who were born in the United States, SLIFE also have a shorter window leading up to high school graduation in which to achieve proficiency. Moreover, they must take high-stakes standardized tests, for which they are ill prepared. DeCapua and Marshall build on this idea by stating that SLIFE generally do not possess much of the background knowledge needed to frame academic content (2011a). For example, in a science experiment measuring

combustion rates of various chemical compounds, many ELLs may struggle with academic vocabulary, such as *incineration*, *evaporation*, and *condensation*, but SLIFE might be further disadvantaged by not having the prerequisite understanding of the scientific method. I encountered a memorable instance of this while administering the ACCESS for ELLs (WIDA, 2015e) during my first year with Somali students. One of the speaking prompts involved listening to a narrative about Jesse Owens and his track coach. The students were supposed to a) understand that Jesse's coach went above and beyond by offering to train him in the mornings and then b) speak about this extraordinary help in academic terms. Not only did the students not have the background knowledge to understand that school athletic practices are usually held in the afternoons and not in the mornings, but most of my SLIFE also asked questions like "What is track and field?" or "What is a coach?" or "Why do you need someone to tell you to how to run?" This underscores the need for teachers of SLIFE to draw from real-world contexts that are relevant to their students.

Different Modes of Learning

Beyond missing background information and fundamental academic skills, SLIFE also have cognitive learning differences compared to their native-born peers. Flynn (2007) explains that many ELLs with limited education come from what are termed *collectivistic cultures*, which tend to view the world through pragmatic lenses compared to a Western scientific viewpoint. Gutierrez and Rogoff (2003) elucidate that the Western-style education model is built on scientific conventions and is characterized by abstract reasoning separated from the concrete world along

with problem solving on a formal level. Further, the Western model is heavily reliant on print to carry complex and nuanced meaning (Flynn, 2007; Gutierrez and Rogoff, 2003). In contrast, SLIFE learning experiences are likely to have been characterized by the concrete and practical needs and skills of everyday life (DeCapua, Smathers, & Tang, 2009; Flynn, 2007; Scribner & Cole, 1978). Rogoff (2003) describes this mindset as *pragmatic* and states that children from collectivistic cultures tend to learn by observation and participation in ongoing tasks, which lend immediate relevance to their learning. In pragmatic learning tasks, she includes childcare, agricultural practices, pottery making, weaving, automobile repair, and masonry, among others.

Similar to the views put forth by the researchers noted above, Ong (1982) describes the thought processes of oral cultures as being distinguished by a focus on the importance of context and relationship, in addition to the well-being of the community. He states that these are often in conflict with Western traditions of abstraction, classification, hierarchicalization, and hypothesis. Further, Ong states that the transformation from orality to literacy is a permanent one that can only go in one direction, and always entails a loss of orality.

Bigelow and Watson (2013) view literacy as being fundamentally intertwined with formal schooling and thus view the cultural differences that face SLIFE in Western schools as being grounded in literacy. They refer to the difference in schemata as *literate* versus *oral*. Similarly, Olson (2006) believes that literacy and formal education create distinct intellectual processes manifested in distinct ways of

understanding and acting in the world. In that light, Bigelow and Watson (2013) put forth that, in exploring educational level in a second language (L2), it is important to consider how the psychological circumstances of learners' lives may have affected their cognitive and linguistic development, as they can be fundamentally different from students who have grown up in a literate background.

Smith (1999) believes this difference extends to values, in that print-oriented cultures are oriented according to a particular way of "arriving at what should be valued, and how." (p. 71). As a specific example of cognitive difference, Bigelow and Watson (2013) discuss how during Piaget's (1952) concrete operational stage, individuals typically develop the classification skills prerequisite to the formal operational stage, which is typified by the ability to solve abstract problems and think hypothetically. They point out that non-print literate L2 learners have not had the same experiences in oral or written stimuli, nor specific social interaction supporting literacy. Using this logic, they posit that the cognitive development of non-print literate L2 learners may have progressed in ways promoted by different environmental stimuli that are characteristic of oral cultures.

Regardless of nomenclature, this difference in experiential and cognitive schemata can create a barrier for SLIFE in that pragmatic cognitive structures and experiences, once internalized, lead to of a way of thinking that can be different and sometime incongruent with the approach used and expected in Western schools. Specifically, Flynn (2007) states that ELLs who have not fully participated in formal, Western-style education tend not to have developed the same cognitive skills, such

as formal problem solving and abstract reasoning, that are valued in our schools. Subsequently, they can be at a disadvantage compared to other ELLs who have grown up with Western-style education models in a different L1.

This is not to say that SLIFE do not possess proficiency with higher order logic and analysis. In fact, it can be said that all cultures have developed sophisticated problem solving and reasoning. For example, pre-literate communities in the South Pacific developed elaborate navigation systems involving patterns of the stars, wave and current patterns, and knowledge of sea and land birds, which allowed them to travel thousands of miles to undiscovered islands and back again. Bigelow and Watson (2013) state that language learners with low literacy have highly sophisticated skills typical of the environments they come from, which often do not have the same usefulness in Western culture. The point is that many SLIFE have not been exposed to nor practiced the particular aptitudes that are emphasized in Western education. In this regard, students from oral cultures tend to look to classroom lessons for some immediate benefit to themselves or relevance to their experience (DeCapua & Marshall, 2010; Ong, 1982). Consequently, in addition to learning a new language, new academic vocabulary, and preparing for state tests in a relatively short time frame, SLIFE also have to learn and become proficient with a new way of viewing and analyzing the world.

It should also be noted that we must be careful about framing collectivistic and Western-style frameworks as a dichotomy. Oyserman, Coon, and Kemmelmeier (2002) state that elements of both collectivism and individualism can be observed

within any majority culture. Further, people across cultural lines exploit the particular resources of speech and writing for special purposes, such as building communities or creating records and specialized genres. These specific purposes can influence reasoning and the production of speech and writing as much as the cultural relationship between collectivism and individualism (Olson & Torrance, 1991). In this vein, it can be said that the constructs of collectivism and individualism are not mutually exclusive, and that *collectivism-individualism,* and *literate-oral*, should be regarded as continuums with subcultural variations (Green, Deschamps, & Paez, 2005) rather than as binaries.

Social and Emotional Needs

In addition to these academic struggles, ELLs coming from an immigration background—and especially SLIFE—have social and emotional needs related to acculturation. According to DeCapua and Marshall (2011a), on top of learning a new mode of thinking and problem solving, many SLIFE are also dealing with the stresses that come with experiences such as separation from family, culture shock, trauma and poverty. Several SLIFE that I work with come from single-parent families or families where both parents work long hours. This can lead to these students being left without adult guidance to provide structures for responsible and socially acceptable behaviors. Further, because of high housing costs relative to income, many SLIFE and their families live with two or three other groups of people in a space meant for a single family of three or four. This state of overcrowding can

lead to a host of issues for these students, including a less than ideal studying environment.

According to DeCapua, Smathers, and Tang (2009), simply meeting basic needs can monopolize the attention of many SLIFE and make it difficult for them to make academic gains. Furthermore, a number of SLIFE face profound psychological effects of exposure to civil war, natural disasters and other types of violence and upheaval in their home country, and may even suffer from post-traumatic stress disorder (PTSD). The WIDA (2015a) Focus on SLIFE brief underscores the importance of having available social services and counseling given that many SLIFE are separated from family, have experienced trauma and may be in need of professional counseling or a support group or discussion group. The brief also states that sometimes the families of SLIFE need social service connections and that it can helpful for schools to have a social worker or a parent liaison to put them in touch with community organizations that might aid in job referrals, housing, or health issues.

In the case of many of my own students, they are separated from family members and live below the poverty line. A full 97% of our school body qualifies for federally subsidized free and reduced lunch due to low socioeconomic status. In addition, several of my students have experienced deaths in their immediate family. In fact, I have known more than one young boy to be the sole male in their families because all the other men were killed or died from illness. The effects of culture shock and PTSD range from sleeplessness, weight gain or loss, headaches and

digestive problems to withdrawal from group activities, increased agitation, depression, outbursts of anger and self-destructive behavior (Arroyo & Eth, 1996). I have witnessed all of these behaviors among many of my students. As these conditions affect academic performance, they bear keeping in mind.

Writing Challenges and the Use of Visual Support

While mastering another language is generally considered to be extremely difficult, learning to write academically in a second language (L2) is widely considered the most difficult task in second language acquisition due to the need to master a variety of linguistic, cognitive, and sociocultural competencies (Barkaoui, 2007; Khoii, 2011). English as a Second Language (ESL) teachers that I informally surveyed stated that writing is the hardest modality to teach, and the one they feel the least qualified to explain. They clarified that even as native speakers, they did not study discourse writing explicitly until college. They said they "know good writing when [they] see it" but struggle to explain it beyond the traditional five-paragraph essay and the *hamburger model* for a paragraph (wherein the buns are the topic and concluding sentences, and the meat and fixings are supporting details). This gap in teaching expertise becomes especially relevant when teaching students with a limited writing background.

In addition to the difficulty of teaching writing in an L2, SLIFE present unique challenges to ESL teachers in that they have often had little exposure to print materials compared to their native-speaking peers (Freeman & Freeman, 2003). Further, as noted as noted above, much of the cultural inheritance of SLIFE is oral,

and thus SLIFE are oral- rather than print-based learners. As such, print materials have had relatively minor significance to SLIFE (DeCapua, Smathers, & Tang, 2009; Freeman & Freeman, 2002; Scribner & Cole, 1978). Additionally, students from oral backgrounds often rely on formulaic expressions, proverbs, and idioms, and more likely to use redundancy as a built-in maintainer of meaning compared to students from Western traditions (Olson & Torrance, 1991; Ong, 1982). This lack of exposure and unique oral learning schema exacerbate the dynamics that make L2 writing mastery so elusive.

All of these factors come together to have substantial impact for SLIFE in that student achievement is closely correlated with academic language and writing proficiency (Echevarria, Vogt, & Short, 2008). Unfortunately, many SLIFE are not making adequate headway in these areas and are, in fact, contributing to disproportionately high dropout rates (DeCapua, Smathers, & Tang, 2009). According to Fry (2005), ELLs account for up to a quarter of the national high school dropout rate, and 70% of those are SLIFE. With stakes this high and trends so pronounced, it is clear that this issue is one of tremendous import.

To help bridge these gaps—between exposure to print material and the proficiency with print needed to write well, and between oral and written learning schemata—many researchers recommend the use of visual support (Barkaoui, 2007; Derewianka, 1991; DeCapua & Marshall, 2011; DeCapua, Smathers, & Tang, 2009; Freeman & Freeman, 2002; Gibbons, 2009; Porter, 2013). Graphic aids, such as concrete imagery, graphic organizers, and sentence frames have been shown in

several classrooms to help break down print concepts into more manageable pieces, ultimately making them more useable by ELLs (Feldman & Kinsella, 2005). As noted above, it can be difficult for SLIFE to address abstract concepts that do not directly connect with their lives or background (Bigelow & Watson, DeCapua & Marshall, 2010; Olson, 2006; Olson & Torrance, 1991; 2013; Ong, 1982). For this reason, it is important to use familiar, tangible tools in instruction with SLIFE.

Classroom Setting

I currently collaborate with several mainstream educators to support writing. Together, we use a range of teaching techniques outlined later, but in terms of graphic support, our instruction is largely limited to mind maps and word webs. We currently use graphic organizers for brainstorming and for the general arrangement of ideas. We do some analysis of models, but it is my belief that we need to do more of this as well as provide more direct instruction on text genres and how they differ. In particular, I believe we need to move beyond the general ideas and relationships that mind maps can generate, and move into how to connect specific ideas through language. I predict that more explicit and specific graphic organizers can help with this process.

Research Gap

ESL pedagogy has long since espoused the need for visual support with all modalities for students with low English proficiency (DeCapua, Smathers, & Tang, 2009; DeCapua & Marshall, 2011a; Ellis, 2005; Gass & Varonis, 1994; Long, 1996). But the question remains: how does one use visual support to facilitate the

progression from building sentences to creating written discourses among students with limited education *and* low English proficiency? Further, for these students in particular, on which of the many components of discourse writing should we focus first?

To answer the latter question, I examined my students' writing samples for patterns; one of the clearest discourse issues is a failure to accurately develop the relationship between the *why* and *how* of their opinions and arguments. Simply put, *causality* and *exemplification* are problematic for them across the board, a realization that brings to mind this standard:

> Standard 7.7.1.1:
>
> Write arguments to support claims with clear reasons and relevant evidence.
>
> c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence. (Minnesota Department of Education, 2014)

The ability to express causality and exemplification in writing is a core skill set that extends to many genres; moreover, readers tend to be less forgiving of errors in logic and causality than of other linguistic errors. According to my colleagues and students, oral debates and arguments are a long-standing tradition in Somali culture, so with this in mind, I wanted to tap into the cultural fund of knowledge of orality and help students pair that strength with the type of reasoning they will be expected to do in high school and beyond. It should be noted that, even in a context where a cultural inheritance of argumentation is prevalent, what counts

as valid reasoning and exemplification may differ drastically due to the epistemological systems inherent in each tradition (Bigelow & Watson, 2013; Flynn, 2007; Olson, 2006; Ong, 1982). Put another way, putting arguments into writing goes beyond language. By teaching the exterior features of argumentative discourse connectors—the surface of our logical systems—we teachers are implicitly teaching Western logic as well. I believe direct instruction in result and exemplification discourse features, with its underlying foundation of relevant cultural norms of reasoning, will have the greatest bearing on my students' writing and future opportunities in this country.

One promising approach that has experienced some classroom success (DeCapua & Marshall, 2010) in helping SLIFE bridge their own backgrounds to academic skill sets is the Mutually Adaptive Learning Paradigm (MALP, 2015). The nuances of the paradigm will be addressed later, but in short, MALP suggests that the cultural differences of SLIFE should be celebrated and used as foundation to expand upon as students progress into more formal academic processes such as writing. While the efficacy of MALP needs more longitudinal research, it can be said to be facilitating success anecdotally in multiple classrooms in New York and Minnesota (MALP, 2015). Further, as a reflective practitioner with almost a decade of classroom experience with ELLs, I believe the following practices of the MALP protocol to be effective and have seen them be fruitful in my own classroom:

- Striving to make content immediately relevant to students while developing and maintaining interconnectedness

- Incorporating both shared responsibility and individual accountability in student work
- Scaffolding reading and writing through oral interaction
- Explicitly focusing on tasks requiring academic ways of thinking and making academic tasks accessible with familiar language and content

Because MALP is a model, not a technique, it can be said that it cannot be "taught" in isolation. Therefore, I implemented the above stated practices into my daily instruction for several months before attempting to do research in my own classroom. In this sense, I hoped to create a MALP-inspired classroom.

There exists a small body of research regarding ELLs and writing with graphic support, which will be discussed in Chapter Two. There are also some nascent studies regarding the efficacy of MALP in supporting gains in reading comprehension. Yet there exists a gap in understanding how graphic support or MALP can support the discourse writing proficiency of SLIFE.

Research Question

I will attempt to answer the following question: For Students with Limited or Interrupted Formal Education (SLIFE) in Grades 7-8, how can a series of integrated graphic organizers, implemented in an environment informed by the Mutually Adaptive Learning Paradigm (MALP), improve students' use of result and exemplification discourse connectors in developing written arguments?

My role in conducting this research was to conduct *action research*. Specifically, for two months before the study, I attempted to infuse my classroom

with the MALP practices outlined above in order to have some these procedures well practiced by the time my research began. Next, I implemented two writing interventions. I performed a one-week series of lessons targeted at discourse features, along with a week of writing practice using an integrated group of graphic organizers. I also collected and analyzed writing samples before and after the implementation. I reflected upon the efficacy of my intervention and then repeated it with modifications.

I am motivated personally and professionally to teach academic writing and effectively narrow the gap between the native speaking students and SLIFE that I teach. On a personal level, I am knowledgeable and capable at teaching ESL writing at the word and sentence level, but I want to improve my writing instruction at the discourse level. Research in this area is important for the above-stated reasons, to help students extend beyond crutches and coping mechanisms to the confidence and aptitude that can serve them in their chosen future activities.

This research begins with certain assumptions and biases. Firstly, it is assumed that SLIFE struggle more with writing than other ELLs and that writing is extremely important to professional success. It is also assumed that many writing skills are implicit to those who write well and that more explicit teaching and actionable steps are needed to help struggling ELLs. Further, the ideological model of literacy is followed—which assumes that writing is a social practice—as is the belief that ESL writing techniques tend to make implicit writing skills explicit, which benefits all students. In addition, it is assumed that SLIFE need access to different

models that reflect specific writing genres, as well as more direct instruction on how they differ. Finally, I proceed on the assumption that using graphic organizers has the potential to increase SLIFE's discourse writing proficiency.

There is undoubtedly a need for targeted discourse writing instruction for SLIFE. Generally, they face a demanding path to college readiness and, as stated, much depends on whether or not they can achieve proficiency in writing. The results of my study will provide some insight into the effectiveness of visual support in teaching discourse writing to SLIFE in Grades 7-8. It is my hope that my research will promote further discussion and study of discourse writing strategies and SLIFE, and will contribute to a larger understanding of teaching writing, from which all students may benefit. Additional study of this subject may eventually produce stronger pedagogy and writing curriculum for SLIFE.

Chapter Overviews

Chapter One introduces my research by establishing SLIFE's unique struggles and how these relate to their writing and future success. The context of the study is explained, as well as my role, assumptions and background. In Chapter Two, a review of the literature pertinent to SLIFE and discourse writing strategies is provided, addressing such questions as: What strategies and specific practices are effective in mitigating complicating factors for SLIFE? What are the elements of discourse writing and how can they be measured? How can teachers tap into the *funds of knowledge* (Moll, Amanti, Neff, & Gonzalez, 1992) and the cultural orientations of SLIFE? Finally, what scaffolds have been shown to help students

move from sentence level to discourse level writing proficiency? Chapter Three includes a description of the research design and methodology that guides this study. Chapter Four states the results of the study. Chapter Five analyzes and reflects on data collected during research, discusses the limitations and implications of the study, and makes recommendations for further research.

CHAPTER TWO: LITERATURE REVIEW

The purpose of this study is to determine the effectiveness of discourse writing instruction for middle school SLIFE that includes visual supports such as graphic organizers. This chapter presents my current working definition of SLIFE, contextualizes SLIFE within the larger landscape of American immigration, and provides an overview of relevant pedagogy and studies. Next, a synopsis of discourse writing components within an ESL framework is provided, and the research on applicable discourse writing strategies and their link to SLIFE writing aptitude are summarized. Finally, specific methods for advancing proficiency are discussed, and the need for research in the area of SLIFE writing is demonstrated.

SLIFE is a relatively new term used to refer to this particular group of students and was adapted from the acronym SIFE (*Students with Interrupted/Inadequate Formal Education*), which has been used by the New York Department of Education and was coined by DeCapua, Smathers, and Tang (2007). They later changed the acronym because they did not believe that the label accurately reflected the reality of students whose education had been interrupted (2009). Other common names that have been used are *newcomers* (Constantino & Lavadenz, 1993); *unschooled migrant youth* (Morse, 1997); and *LFS ELLs* (Limited Formal Schooling ELLs) (Freeman & Freeman, 2003). Due to the precision of the

term and the increasing body of research being generated by DeCapua and Marshall, SLIFE is quickly becoming the label of choice for many educators and is now the official term for these students used by the Minnesota state legislature (LEAPS Act, 2014), Teaching English to Speakers of Other Languages (TESOL) International Association (TESOL, 2013), and WIDA (2015a).

DeCapua, Smathers, and Tang (2009) offer the following possible SLIFE indicators:

- Inadequate school records, no school records or school records with gaps
- Reports by student or parent/guardian of not having attended school
- Poor attendance records from prior schools, frequent absences, and/or tardiness at current school
- Low literacy level in native language
- Weak grasp of grade-level content material

A checklist that can be used to identify SLIFE is found in Appendix A.

The Minnesota Statutes (2015) define an English learner with interrupted formal education as an English learner who

1. Comes from a home where the language usually spoken is other than English, or usually speaks a language other than English
2. Enters school in the United States after Grade 6
3. Has at least two years less schooling than the English learner's peers
4. Functions at least two years below expected grade level in reading and mathematics and

5. May be preliterate in the English learner's native language

Although Collier (1989) has shown that it can take much longer to acquire academic language and skills for later onset learners, and it is generally accepted that challenges for older ELs may be more difficult to overcome, there is little in my four years' experience teaching SLIFE that supports the notion that the term *SLIFE* should apply to older students exclusively. The academic urgency is understandably less for an ELL kindergartener than for, say, an ELL high schooler, but nevertheless, "a third-grader who is SLIFE, is still SLIFE" (J. Watson, personal communication, December 21, 2015). In other words, even at earlier ages and grade levels, students can still be strongly influenced by the differences in cultural schemata and lack of formal education outlined in Chapter One. For this reason, my working definition will not include a grade level requirement. For the purposes of this study, I will define SLIFE in the way that my school defines them:

- No or limited prior education
- Lower literacy in ANY language than typical grade level peers
- No or little academic or literacy history in family
- English is not the primary language spoken at home
- Came to the United States after Grade 2
- Upon enrollment, has had at least two years less schooling than peers
- Functions at least two years below expected grade level in reading

As noted above, Bigelow and Watson (2013) observed that SLIFE students are oral learners because they come from a background of orality, from oral

cultures, as well as having had limited exposure to print. In this sense, their cultural inheritance can largely be seen as oral. For these reasons, I will include an oral component to my definition, with the caveat that I am viewing Western and pragmatic frameworks—as well as oral and literate backgrounds—as continua and not dichotomies.

Demographic Shift

A major factor to be considered in surveying SLIFE is their context within broader immigration trends in the United States. Foremost is the fact that the United States is experiencing the largest immigration boom in its history. Figure 1 shows that from 1990 to 2010, the number of immigrants in the United States doubled, reaching a record-setting 40 million. This increase itself is more than the total number of immigrants living in the United States at any one time in its history up to 1990. The spike in immigration has impacted the United States education system profoundly: a study from The National Clearinghouse for English Language Acquisition (NCELA, 2011) showed that total enrollment of English Language Learners in United States schools had risen from approximate 3.1 million in the 1994-95 school year to over 5.2 million in 2009-2010—an increase of over 63% in 15 years. By comparison, the level of overall pre-kindergarten to 12th grade enrollment has remained relatively flat.

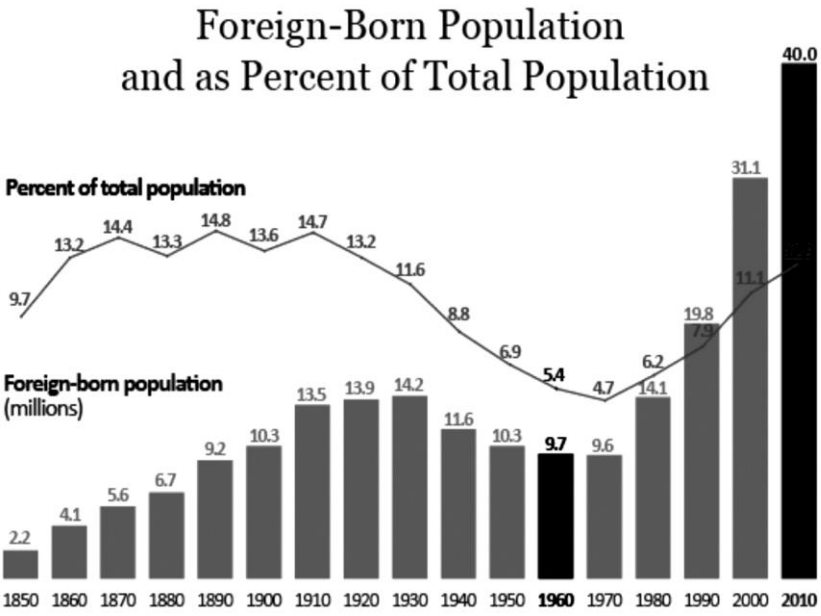


Figure 1: Foreign-Born Population and as Percent of Total Population. Shows the rising trend in immigration over the past 160 years. Adapted from "How do we know? America's foreign born in the last 50 years." by U.S. Census Bureau (2013).

The countries of origin have shifted dramatically in the last 50 years as well, which can be seen in Figure 2. In 1960, the majority of the foreign-born population in the United States originated in Europe or Canada, which traditionally possess cultural features and educational systems similar to ours. In contrast, most of today's immigrants are coming into the United States from Mexico, Central America and Asia, a demographic change that is also reflected in educational background, with many children coming from backgrounds with less formal schooling and lower literacy (Capps et al., 2005). With a trend this pronounced and recent, it is no wonder that the research on SLIFE is in its nascent stage.

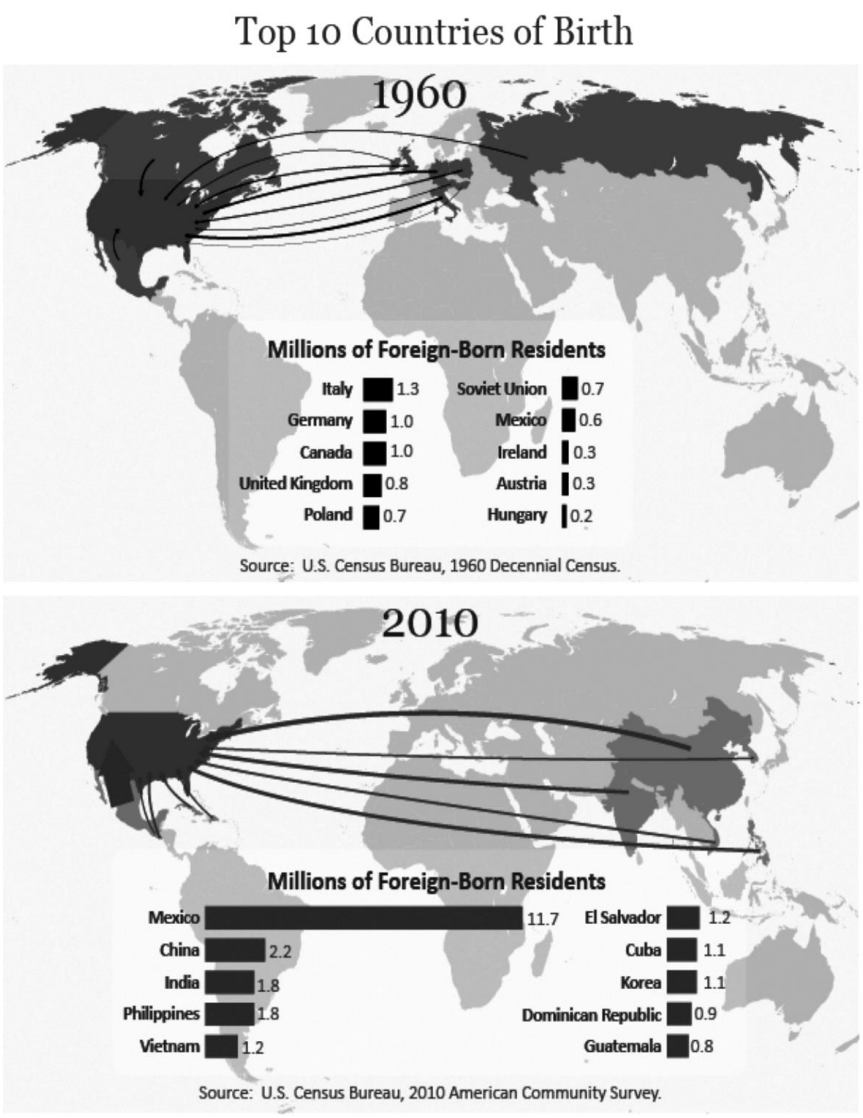


Figure 2: Top 10 Countries of Birth. Shows the change in nation of origin of American immigrants over the last 50 years. Adapted from “How do we know? America's foreign born in the last 50 years” by U.S. Census Bureau (2013).

Connection to Literacy

Perhaps one of the most important aspects of SLIFE regarding academic success is the link between SLIFE and low levels of literacy. As stated above, many recent immigrants are coming from areas with low literacy (Capps et al., 2005). Much evidence suggests that L1 literacy helps learners become literate in the L2 (Bialystok, 2002; Cummins, 1991). But as Bigelow and Tarone (2004) put forth, the majority of second language acquisition (SLA) research has studied learners who are highly literate in their L1. Specifically, they assert that the impact of L1 literacy level on a learner's acquisition process and ultimate success in acquiring oral L2 skills has been practically overlooked. In this regard, Bigelow and Tarone recommend further research be done into the impact lack of L1 literacy can have on language acquisition. Further, they state that it is important to establish a valid and reliable measure to determine L1 literacy levels.

As noted in Chapter One, acquiring literacy in L1 transforms how one thinks and processes L1 in all its modalities (Olson, 2002; Ong, 1988). Olson claims that literacy makes metalinguistic awareness possible, which can help with reading comprehension. Specifically, Olson states, the ability to correct other people's grammatical errors is fundamentally bound to literacy in that the concepts of prescriptive grammar that speakers use to correct themselves and others come from principles acquired in reading and writing.

In 2006, Bigelow, Delmas, Hansen, and Tarone performed an exploratory study in which they examined the role of literacy in the acquisition of L2 oral skills.

They sought to determine whether the ability to recall a recast is related to a learner's alphabetic print literacy level. They studied eight Somali SLIFE who were grouped according to scores on L1 and L2 literacy measures. Students engaged in interactive group tasks where they received and recalled recasts on their grammatically incorrect questions. Bigelow et al. found that the more literate group recalled all recasts significantly better than the less literate group when correct and modified recalls were combined. Their work done with adults with and without alphabetic print literacy suggests that literacy brings about phonemic awareness, not the reverse. Further, they suggest that basic alphabetic literacy offers adults a strategy for visualizing encoded oral language in order to manipulate it phonemically. One participant in particular favored processing strategies that relied much more on meaning, or semantics, than syntax, which aligns with Ong's (1982) point that print-based cultures prioritize intricate syntactics, compared to oral cultures who are more concerned with pragmatics, and tend to use "whatever works to communicate meaning in context" (p. 37–38). Implications from this study further underscore the notion that educators need to explicitly connect the oral proficiency of SLIFE to funds of knowledge in L1 and L2 to help them to obtain L2 literacy.

SLIFE Instruction

Now that the context and need have been established, instructional methods specifically relevant to SLIFE can be addressed. DeCapua, Smathers, and Tang (2009) put forth a range of field-tested approaches for maximizing the academic

success of SLIFE, finding that these students "need more than ELLs of everything . . . more time, more individual attention, more scaffolding, more differentiation, and more support in all areas" (2009, p. 42). At the program level, they recommend a mixture of push-in and pull-out models to meet learners where they are academically, along with newcomer programs for recent immigrant students. However, the question remains: What strategies and specific practices are effective to mitigate all of the challenges previously mentioned?

In 2012, Kahn examined and contrasted the planning and implementation of two Manitoba high school educational programs that were created specifically for ELLs from refugee backgrounds who had disrupted or limited formal schooling and who were at high risk of academic failure. Related to what has been outlined previously about SLIFE backgrounds, this research highlighted the importance of meeting SLIFE's sociocultural needs in order to maximize opportunities for academic growth, as well as the need to create age-appropriate resources and materials for adolescent literacy.

Freeman and Freeman (2002) suggest that there are four keys to success with this demographic. They put forth that teachers need to connect to and draw from newcomers' rich set of skills, backgrounds and funds of knowledge (Moll et al., 1992) and integrate them into students' learning environments and activities. They further express the need to engage this demographic with rigorous *theme-based program of study*. They also state that it is necessary to use *scaffolded instruction*, and to initiate and support *collaborative learning activities*. Lastly, they suggest that

developing confidence and self-value is a crucial component for students with LFS. Following this guide, I will explore each of these areas further.

Funds of Knowledge and Scaffolded Instruction Through Collaboration

DeCapua and Marshall (2011) agree with Freeman and Freeman (2002) that many academic activities are extremely difficult for SLIFE because they largely consist of tasks into which there is no real-world context to place the activity. Researchers therefore suggest using students' own stories and themes from their own lives to help them make connections to the content (Freeman & Freeman, 2002; DeCapua, Smathers, & Tang, 2009; Echevarria, Vogt, & Short, 2008; DeCapua & Marshall, 2011a).

One of the major funds of knowledge identified by DeCapua and Marshall (2011b) is the oral learning schema possessed by many SLIFE. In that vein, DeCapua, Smathers, and Tang (2009) state that small-group cooperative learning is essential for SLIFE because it allows them to engage in "community learning" (p. 56), taking on more complex learning tasks than they could by working in isolation because they can tap into each other's knowledge and strengths. Further, collaborative learning presents students with more time to clarify meaning, interact with the content, and practice language features. In short, this practice helps teachers provide more targeted instruction and greater scaffolding, all of which supports language learning, academic achievement and social/affective development. Building on this notion of learning in groups, DeCapua and Marshall (2010) also suggest implementing project-based learning because of its challenging, authentic, and motivating nature, which

encourages both collaborative and independent work in support of the development of cognitive skills.

As far as specific strategies that address contextualization and schema, DeCapua, Smathers, and Tang (2009) recommend that teachers begin with and embed new vocabulary, concepts, and content in a sensory environment—using pictures, videos, and realia—in order to make them more comprehensible through connecting to students' own schema. They also advise explicitly establishing links to previously learned vocabulary and concepts, as well as building schema by showing and eliciting relationships between concepts and content. Graphic organizers are a well-researched means of doing this and include semantic maps, sequence maps and Venn diagrams. Lastly, they encourage teachers to use reflective tools like journals, self-evaluations and oral/written reflections to increase SLIFE participation in metacognition, which subsequently develops discourse writing.

Rigor and Themes

DeCapua, Smathers and Tang (2009) further agree with Freeman and Freeman (2002) by stating that SLIFE are often presented with curriculum that is not cognitively challenging or age appropriate. To combat this trend, they suggest that teachers extend their questioning beyond the lower levels of Bloom's taxonomy (Bloom et al., 1956) so that SLIFE can develop higher-level thinking skills and more nuanced academic worldviews. WIDA (2015c) also supports the approach of employing the same high academic function for all students, but modifying the way

tasks are accomplished by providing more scaffolding to lower language proficiency students.

To help students continue to bridge explicit connections to L2 print and print-based learning it is suggested that educators provide rigor through a print-rich environment (DeCapua & Marshall, 2011; DeCapua, Smathers, & Tang, 2009; Freeman & Freeman, 2002). As established, since reading can be overwhelming for SLIFE, researchers recommend supplementing print with extensive use of visuals. Further, teachers should implement many types of reading to provide as much practice as possible, from whole class reading and shared reading to buddy reading and independent reading (DeCapua, Smathers, & Tang, 2009). While these practices align with ELL instruction, researchers state that they become even more necessary with SLIFE. In this same light, educators should have easy readers and picture books available for SLIFE to check out independently, which provides a sense of ownership in the process of reading development. It is also suggested that it is essential that phonics instruction be embedded in contextual, thematic instruction, as determined by student need. In regards to instruction, DeCapua, Smathers and Tang agree with Freeman and Freeman (2002) that grouping texts into thematic units that relate to SLIFE background is a key practice.

Another strategy for supporting SLIFE emergent literacy is guided reading. Montero, Newmaster, and Ledger (2014) tracked the progress of SLIFE ages 14-20 from four different countries across five English language development (ELD) courses. Over the course of the five-month study, the classroom teacher made a

concerted effort to integrate early reading instructional methods and teaching practices. The running record data showed that students' total gains ranged from three to 13 reading levels, with an average gain of 8.3 levels. In contrast, the control group only had an average gain of 1.2 reading levels. The researchers advise that educators direct their efforts towards literacy-focused programs that validate students' origins and life experiences instead of traditional language programs. These findings suggest that guided reading has the potential to address the print literacy gaps of non-literate and semi-literate adolescent refugee students while also engendering a sense of agency.

Regarding the written component of literacy, DeCapua and Marshall (2011b) suggest that teachers should have students perform writing tasks similar to what they are reading. In this sense, educators should ensure that there are numerous and varied visual elements in the reading texts to provide non-linguistic clues to meaning. During the reading that precedes writing, teachers should use graphics, graphic organizers, photos, pictures and realia to help convey information. They recommend that SLIFE start writing instruction with narrative skills in order to work on chronological sequencing, a skill that will be used across content areas and will help develop learner confidence. Together, a synthesis of these research-supported strategies is indicated to support SLIFE literacy and writing (DeCapua & Marshall, 2010; DeCapua & Marshall, 2011b; DeCapua, Smathers, & Tang, 2009).

A New SLIFE Paradigm

DeCapua and Marshall (2011a) formed the first comprehensive curriculum

model for SLIFE—*The Mutually Adaptive Learning Paradigm* (MALP)—from many of the pieces outlined above. One of the main goals of MALP is to address directly the cultural dissonance encountered by SLIFE laid out in Chapter One. It is considered mutually adaptive because it combines elements of the typical SLIFE learning paradigm with elements of the United States formal educational learning paradigm, thus facilitating the transition to formal educational settings. Figure 3 outlines the components of MALP. The second column displays what DeCapua and Marshall believe to be the core components of the paradigm with which most SLIFE approach learning. The third column shows what they believe to be the core components of the Western education paradigm in how they relate to their SLIFE learning paradigm. The first column outlines the goals/assumptions of MALP. Together, the figure acts a graphic representation of how teachers can align their instruction in a way that helps

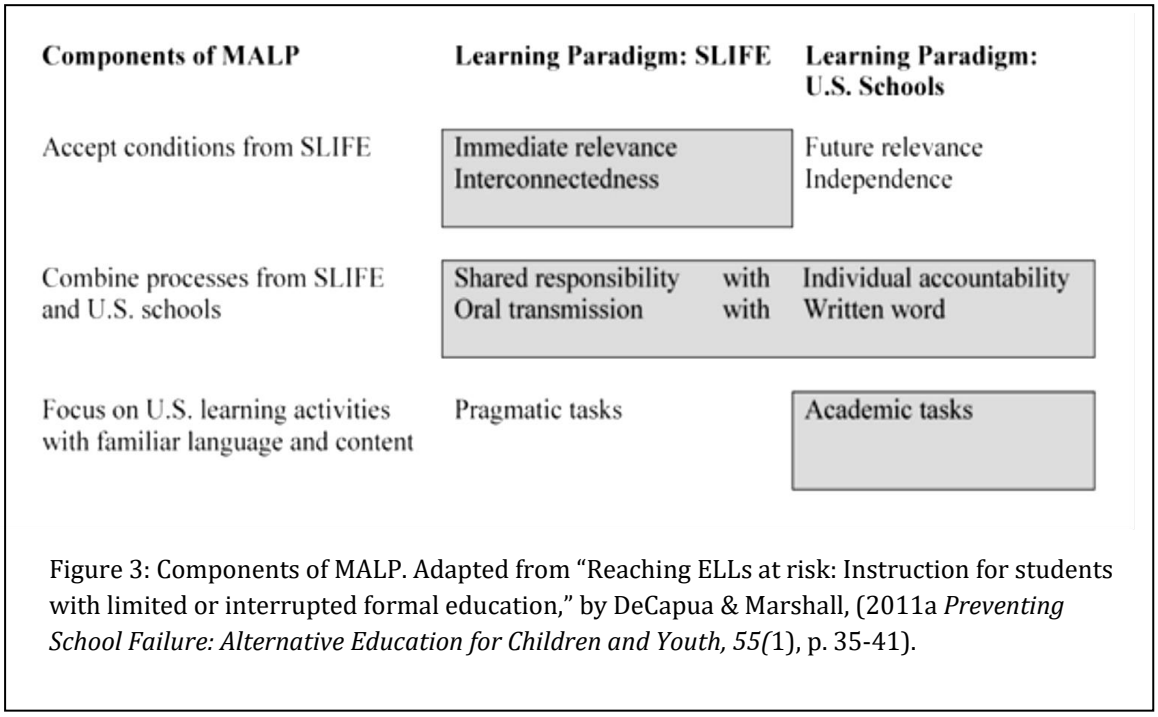


Figure 3: Components of MALP. Adapted from "Reaching ELLs at risk: Instruction for students with limited or interrupted formal education," by DeCapua & Marshall, (2011a *Preventing School Failure: Alternative Education for Children and Youth, 55(*1), p. 35-41).

bridge the gap between Western and SLIFE paradigms.

In their research and practice, DeCapua and Marshall (2011a) found that educators first need to acknowledge the circumstances surrounding SLIFE in the classroom. As explained in Chapter One, members of collectivistic cultures often look for interconnectedness in the classroom setting and for some immediate benefit from the lessons themselves (DeCapua, Smathers, & Tang, 2009). DeCapua and Marshall put forth that instructors need to accept these differences as "conditions for learning" (2011a, p. 54) and make every attempt to institute and preserve them in the classroom. This is reflected in the top middle column in Figure 3.

Next, to help SLIFE bridge the gap between their background schema and the requirements of Western school standards, teachers need to combine processes from the students' learning paradigm with those of the predominant United States paradigm. The United States educational system at bottom requires individual accountability, especially on assessments (DeCapua & Marshall, 2011a). In contrast, due the background described in Chapter One, SLIFE are apt to think in terms of shared responsibility and thus seek to collaborate and help each other learn. With this in mind, MALP states that teachers need to integrate both individual and shared responsibility into their class routines. Moreover, since SLIFE typically come from a background of orality, it is suggested that educators assist the transition from learning through oral transmission to learning via print. This is illustrated by the

middle shaded box in Figure 3. DeCapua and Marshall clarify that it is not enough simply to present content using the modalities of speaking and writing, but that teachers need to develop a process for encoding speech in a memorable way. This includes a certain amount of repetition, which can include the use of flash cards or iPad applications. Importantly, teachers must consistently develop and maintain the connection of oral production to written production in order for SLIFE to derive meaning from the written word. For example, in a study done in 2010, DeCapua and Marshall demonstrated the efficacy of having students use graphic organizers to help encode speech. In groups, some of the students discussed information from a set of scaffolded readings and worked together to fill out Venn diagrams regarding the similarities between soldiers' lives and their own. After discussing the diagrams as a class, students then worked independently to compose statements of comparison.

Gibbons (2009) refers to this transition from speech to writing as a *mode continuum*: moving back and forth between spoken and written communication and between everyday language and more technical or academic language. Gibbons notes that all students, as they progress through the educational system, learn to speak, read, and write about an escalating range of subjects (*fields*) in increasingly abstract and impersonal ways, which require a more formal *tenor*. On the oral end of the continuum, there tends to be more shared knowledge—the speakers are in the same physical situation and also share visual contact—which facilitates the use of less technical vocabulary and a more personal tenor. As speakers begin to refer to details that are not within the collective shared knowledge pool, and the visual context cues

are removed, it puts more and more of the burden on the language to carry meaning. Vocabulary tends to compensate by becoming more technical and specific to the field—which in turn causes the tenor of the texts to become more formal. This often corresponds with a shift in mode from speaking to writing, which replaces some of the missing visual cues that the listener depends on when listener and speaker are in the same situation. Put another way, "the less shared knowledge there is between speaker and listener (or writer and reader), the more explicit language must become" (p. 48).

Transitioning across this continuum can be additionally challenging for SLIFE given that they have passed through critical stages of development having been strongly influenced by environmental stimuli characteristic of oral cultures. As described in Chapter One, it can be said the cultural inheritance of SLIFE is an oral one, which broadens the distance of this spectrum compared to someone raised in a print-rich environment. Ong (1982) describes this distance as a gulf that is experiential, cultural, cognitive and existential in nature. Bigelow and Watson (p 64, 2013) describe this shift to literacy as an abyss:

> In cultural environments inundated with text of every imaginable type and format, massive libraries and databases, fantastical internet resources, and bookstores that in earlier ages would have looked like palaces, it would be difficult to overstate the enormity of the abyss that lies between the readers of this chapter and the preliterate L2 learners from oral cultures whose situation we are addressing. Indeed, our manner of address, made possible

> and academically necessary by the deeper legacies of the literate tradition, may be profoundly at odds with the values of the very people we are researching or teaching (2013, p 464).

Ong goes on to state that the shift from oral to written causes a shift in expression to analysis, distance, and abstraction, which transforms human consciousness. With this as context, it becomes more pressing to exercise care when designing interventions for this demographic.

Educators and researchers are attempting to bridge this gulf. Walsh (2011) performed action research that examined if the use of a SIOP (Sheltered Instruction Observation Protocol) model classroom or a SIOP + MALP (Mutually Adaptive Learning Paradigm) model classroom is more effective in meeting the literacy needs of SLIFE students. The study was conducted at a public middle school in New York with students ranging from sixth to ninth grade. Using a pre-test/post-test model with reading comprehension questions, she determined that the SIOP + MALP model was more effective in improving the literacy levels of the control group of general ELLs and that this blended model also was more effective than the SIOP model alone in improving the literacy levels of SLIFE. While this study had a very small sample size (three) and only ran for four weeks, it still supports the notion that striving to make content immediately relevant to students while developing and maintaining interconnectedness—incorporating both shared responsibility and individual accountability in student work, while scaffolding reading and writing through oral interaction, and explicitly making academic tasks accessible with

familiar language and content—helps SLIFE bridge some of the distance discussed above.

In a similar vein, as language moves from the familiar and everyday toward more abstract academic texts, Gibbons (2009) states that educators should help ELLs carry this increasingly heavy language load by planning short sequences of interrelated tasks. For example, in a math class students could be asked to define what they determined to be the key words in a word problem (such as *sum* or *product*). This activity would become a support structure for the next task, of solving the problem, which in turn would support the next activity of recording the steps in writing. The written record then becomes the scaffold for the final task of discussing the process in groups, where the teacher would have the opportunity to recast students' informal responses using more technical language. Similar sequences can then be used as the scaffolding for introducing a new unit.

While they do not reference the continuum explicitly, DeCapua and Marshall (2011a) suggest that SLIFE benefit from moving back and forth along the continuum. In short, speaking not only buttresses writing but can also help deconstruct and internalize it as well. My own teaching experience backs this up in that I have often seen SLIFE benefit from talking about their writing before and after the written production process.

Lastly, according to MALP, instructors need to focus on academic tasks in order to promote academic thinking. Specifically, it is suggested that teachers concentrate on academic tasks that help SLIFE develop their critical thinking skills.

This can be seen in the shaded box in the right-hand column in Figure 3. DeCapua and Marshall (2011a) specify that, since SLIFE often lack so much background knowledge and language proficiency, academic tasks should be scaffolded by using familiar language. They also state that these scaffolds should be removed as soon as realistically possible.

DeCapua and Marshall (2010) tested their emergent paradigm by conducting action research over a period of five months in a newcomer high school setting in New York. Their study addressed the following questions: How could the implementation of the MALP model assist this subpopulation of ELLs in the development of literacy and academic thinking? Would the implementation of the model improve the engagement and participation of these students? While the generalizability of the study is admittedly low, student work over the course of the intervention indicated an increased facility with print. Further, their findings showed that the SLIFE were developing academic thinking; DeCapua and Marshall found that they became more active learners who were engaged in the material and more committed to school. Finally, their findings also indicate that the SLIFE became more comfortable using Internet-based print as a resource.

In a study that aligns with MALP tenets, Porter (2013) conducted research in an urban high school Sheltered English Immersion (SEI) English Language Arts classroom during a unit on digital storytelling. The students were identified as SLIFE and ranged in age from 14 to 21. She collected data via digital storytelling, participant observation and field notes, classroom artifacts, and digital recordings.

Her study underscores the need for culturally responsive classroom elements to be present for culturally and linguistically diverse students. Specifically, she suggests a shift in focus from a paradigm of eliminating deficits to working with students' strengths in designing appropriate instruction. Her use of digital storytelling aligned clearly, if unintentionally, to the second part of the MALP paradigm (see Figure 3) by transitioning back and forth between both oral and written production.

To review, while there are many similarities between the pedagogy of teaching ELLs and teaching SLIFE, there are some core strategies that set SLIFE teaching apart (DeCapua & Marshall, 2011a). On a classroom level, SLIFE teachers need to create a learning environment that takes into account the collectivistic cultural background from which many SLIFE originate. This is best accomplished in classrooms that encourage the formation of strong relationships among teachers, students and their families, and that engages students in class work that they can clearly and quickly relate to their lives. Further, SLIFE instruction should provide opportunities for students to move between individual accountability and sharing of knowledge and responsibilities. This should be done via activities that integrate oral and written modes, and provide learners with the necessary scaffolding to develop literacy. Lastly, SLIFE instructors should explicitly teach the academic ways of thinking and the school-based tasks that are largely unfamiliar to newcomers by introducing these new concepts using familiar language and previously mastered content.

SLIFE Writing and ESL Discourse Writing

As previously mentioned, there is a dearth of research regarding SLIFE, (Bigelow & Tarone, 2004; Bigelow et al., 2006; DeCapua, Smathers, & Tang, 2009). This is more apparent when it comes to SLIFE writing, especially discourse writing. This paper will therefore explore the available literature regarding ESL discourse writing that is aligned with the SLIFE pedagogical principles outlined above. To start, I will overview the elements of discourse writing and how they can be measured. I will then move on to discuss effective ESL discourse strategies and scaffolds for teaching discourse writing that are relevant to SLIFE, which use visual support to help students move from sentence level to discourse level writing proficiency.

Discourse Writing

Discourse writing has a different meaning in different contexts. In today's landscape, the discourse proficiency of most ELLs and SLIFE is being measured by WIDA's ACCESS for ELLs or W-APT (WIDA, 2015e). *Linguistic complexity* is the term WIDA uses as its performance criteria at the discourse level (2015c), which it defines in the following manner:

> *Linguistic complexity* refers to the amount of discourse (oral or written), the types and variety of grammatical structures, the organization and cohesion of ideas and, at the higher levels of language proficiency, the use of text structures in specific genres. (WIDA, 2015c)

WIDA (2015c) measures written discourse proficiency using sentence length and complexity, textual organization, and cohesion. For a complete rubric describing how WIDA measures discourse writing, see Appendix C.

Where WIDA (2015c) and many practitioners use the term *discourse*, Derewianka (1991) and several others use the term *text* to refer to this level of writing. In a general sense, when most educators talk about discourse/text writing, they are referring to how the content is organized, which is broken down further by *genre/text types, coherence,* and *cohesion*. These organizational principles work together to help writers create unified bodies of work with greater impact than occurs from simply putting sentences together.

Discourse Writing Features

Since my research focuses on discourse features in argument texts, it bears outlining some of the elements that accompany this text type. Derewianka (1991) states that the purpose of argument texts is "to take a position on some issue and justify it" (p. 75). The structure tends to start with an opinion on a topic (thesis), then the presentation and analysis of the causal factors underlying the arguments for and against the position taken. The argument text usually ends with an element of reflection and subsequent re-statement of thesis. Derewianka further outlines the linguistic features as having generalized participants (actors), action and linking verbs, along with the use of simple present tense, descriptive language and technical vocabulary. Further analysis shows prominent use of result discourse connectors.

Discourse Connectors

Kalajahi, Abdullah, Mukundan, and Tannacito (2012) describe discourse connectors as the glue that holds a piece of writing together, making the different parts adhere cohesively (p. 1660). More specifically, as Biber (2006) puts it, "Discourse connectors are devices used to bridge between turns and sentences, indicating the logical relations among the parts of a discourse and providing an interpretive framework for the listener/reader" (p. 66).

Since my students' work has shown me that they struggle specifically with expressing and exemplifying logical relations and causality, a deeper analysis of this subset of discourse connectors is called for. Fraser (1999) categorizes these discourse connectors or discourse markers as *inferential markers* and states that *resultive discourse connectors* introduce information that is a direct consequence, reason or conclusion of preceding information. (1) highlights this pattern.

(1) *It was getting cold. As a result, they went inside.*

Resultive discourse connectors are also used to introduce an inferential consequence, reason or conclusion, such as in (2).

(2) *You have three, and I have three; thus, we have six.*

There is some debate around determining which subset of utterances comprises discourse connectors (Fraser, 1999). For example, *so* is typically viewed as a conjunction, and *because* as a subordinating conjunction, with neither as a rule considered a discourse connector in that they are distinguished by the sorts of structures they connect and are punctuated differently. From a semantic point of

view, however, Kalajahi et al. (2012) state that discourse relations can transcend grammatical structure via semantic relevance. They created a taxonomy entitled the Comprehensive List of Discourse Connectors and included *so* and *because* among their list of resultive discourse connectors along with terms such as *accordingly*, *consequently*, *hence, therefore, thus, as a consequence, as a result* (P. 1667). Similarly, Halliday, and Hasan (1976) classify *so, consequently, it follows, for, because, under the circumstances,* and *for this reason* as *causal conjunctions* (connective elements) due to the semantic relationships they foster. Since there is a variety of terms among linguists for the words used in this study, I shall refer to my students' use of *because, so, therefore* and *thus* as discourse connectors for simplicity's sake. The use of *so* and *because* can also be confusing for students since most of these discourse connectors are used in the beginning of sentences, whereas *so* and *because* can be used to connect clauses within a sentence. Also, the causal elements follow the term *because*, where they precede the other resultive discourse connectors listed above.

Lastly, Kalajahi et al. (2012) inform us that *exemplification discourse connectors* (categorized as *apposition discourse connectors*) often work in conjunction with resultive discourse connectors in that they generally follow within the same paragraph and expand on those causal relationships. In other words, exemplification discourse connectors signal that what follows in some way clarifies what precedes it. Common exemplification discourse connectors include *for example*, *for instance*, *namely*, and *specifically* (Kalajahi et al., 2012). This type of

discourse connector is often found in informative reports and in explanation and argument essays (Derewianka, 1991).

Practical Discourse Writing Strategies for SLIFE

With a working definition of and measurement for assessing discourse writing and discourse connectors in place, I will now move on to these questions: What strategies have been shown to be helpful to ELLs in moving from sentence level to discourse level writing proficiency? Do these strategies align with SLIFE and MALP pedagogy?

Language Experience Approach

One writing instructional strategy that clearly aligns with SLIFE teaching best practices is the Language Experience Approach (LEA) process, which The Center for Applied Linguistics (2000) describes in the following manner: First, learners and their instructor collaborate to choose a prompt or activity that can be discussed and written up in some form. This might include pictures, movies, videotapes, books or articles, class projects, field trips, or celebrations. Next, the instructor develops a plan of action with the class, which is subsequently written on the board, providing the first link between the activity itself and the written word. The experience can take place in the class, such as preparing food, engaging in simulations and skits, or creating bulletin boards. Alternately, it can be done in the larger community, such as taking field trips or mapping the school or the neighborhood.

Next, tapping into oral funds of knowledge, all learners join in a discussion of the experience, with key words and phrases being written on the board. For example,

the students might reconstruct the sequence of events that took place. To sow the seeds needed for using discourse features, teachers guide the discussion by asking *wh- questions* such as *Who was involved*? *When did this take place? What did we do first*? The class then works together to develop a written account of what was done or discussed. Before actually writing a text, the class engages in planning activities like brainstorming, webbing or mapping, listing, or sequencing ideas using visual support**.** Often students dictate a description or sequence of events in an activity while the teacher or aide writes it down. For more advanced learners, students may work together in groups to produce an account. This account should be easily visible to all learners via the board, flip chart pad, or overhead transparency. Language output is not corrected at this point, although learners may correct themselves or each other as they work together. Formal correction is generally done later, as part of the revising and editing stages. Then the co-constructed account is read aloud and analyzed, focusing on key words and phrases, after which learners can read it silently on their own. Of course, oral reading of the account does not need to occur only at this stage, but can be done at many different points during its production, thus promoting revision throughout its evolution. Discourse writing features are then addressed in the following extension activities:

- Using the texts to review cohesion and grammar points, such as sequence of tenses, word order, or pronoun reference
- Using the group-produced text as the basis for individual writing on the same topic, about a similar experience, or as a critique of this experience

- Revising and editing the texts and preparing them for publication
- Reading other texts related to the topic
- Generating comprehension questions for classmates to answer.

This practice addresses all three targets on the MALP Teacher Planning Checklist (MALP 2015), which are a) accept SLIFE conditions for learning, b) combine processes for learning, and c) focus on new academic activities for learning with familiar language and content. CAL states that as students view their personal experiences transcribed into the written word, they also gain a greater understanding of the processes of writing; thus, students are better prepared to make that step independently. This process also aligns with Derewianka's (1991) notion of teaching text genres, discussed below.

Explicit Teaching of Text Genre

To offset the writing instruction gaps associated with SLIFE, DeCapua, Smathers and Tang (2009) recommend that educators incorporate materials that have predictable linguistic elements, which aid SLIFE in developing an understanding of text organization. One best practice regarding recognizing and using predictable structures and text organization is the explicit teaching of text genre.

Hyland (2004a) informs us that norms of discourse vary across disciplines and that to be able to reproduce the types of discourse used in each discipline, students need to understand the conventions associated with each text genre. Derewianka (1991) has shown that that explicitly teaching the conventions that accompany each genre significantly increases students' comprehension of said text,

as well as their ability to create it proficiently. She identifies seven different text genres that account for the majority of academic texts. Although this genre analysis is aimed at primary grades, many of the same genres are used in middle school. For example, my seventh and eighth graders are required by the state standards to write narratives, information reports and argumentative essays. Derewianka also recommends teaching these genres with the aid of visual support such as graphic organizers, T-charts, character maps, and story sequencing. The purpose, examples, text organization, and language features associated with argument essays, which is the genre used in this research, can be seen in Table 1.

Table 1:

Features of Argument Essays

Genre	**Purpose**	**Examples**	**Text Organization**	**Language Features**
Argument	"To take a position on some issue and justify it" (Derewianka, p. 75).	position paper letter to the editor literary essay	Thesis Arguments Re-statement of thesis	Generalized participants (actors) Variety of verb types Variety of tenses Passives, Nominalizations Adverbials showing reasoning Modals

Note. Adapted from "Exploring How Texts Work" by Derewianka, B. (1991).

The practice of teaching text types supports the third MALP (2015) strategy by explicitly teaching the academic ways of processing that are largely unfamiliar to SLIFE. However, the instruction on genres would need to be introduced using previously mastered content and language that is already familiar to the students.

Text Modeling

Text modeling is another effective strategy regarding using and replicating predictable structures and text organization that aligns with Derewianka's recommendation to teach text genre explicitly. As Hyland (2004a) argues, using text modeling can help students learn how to structure their writing in keeping with the demands and constraints of target contexts. Barkaoui (2007) suggests this is best accomplished via explicit instruction about how and why texts are written as they are. In addition, he recommends integrating reading and writing tasks that are related to the texts and contexts that the learners will have to manage, along with modeling target texts.

Barkaoui goes on to explain that text modeling involves introducing, negotiating, researching, modeling, and practicing the target text types, moving gradually from a teacher-centered mode to joint negotiation and construction of texts by the entire class. Through peer discussion and the use of visual support, students proceed to independent work after attaining essential understanding. He encourages practitioners to ask their students to reflect on the writing practices of their target situations, and to use group analyses of authentic texts to elicit the language needed to interact with target texts. This use of authentic target texts and tasks can also help students learn the needed linguistic conventions and strategies, such as cohesion, information flow and appropriate tone. Further, teachers should provide a context for each model and underscore that genres are dynamic and varied.

This strategy certainly aligns with the second and third tenet of MALP (2015). Further, Derewianka (1991) and Gibbons (2009), in addition to Ferris and Hedgcock (1998), Hyland (2002), Myles (2002), and Yeh (1998) argue that explicit teaching of text genre and text modeling are more effective when combined (as cited in Barkaoui, 2007, p. 38).

Explicit Teaching of the Devices of Coherence and Cohesion

Similar to the situation with SLIFE and SLIFE writing, there exists a scarcity of research on teaching resultive and exemplification discourse connectors. That being the case, I will consider the teaching of discourse connectors in more general terms.

Since SLIFE are missing explicit understanding and automaticity in regards to structures and conventions used in academic writing, it makes sense to teach elements of coherence and cohesive devices overtly as well. Many educators view these two elements to be the heart of discourse writing. As stated earlier, cohesive devices are linguistically explicit signals that show semantic relationships between text elements. They express a range of relationships, including order, summing up, the addition of new information, exemplification and restatement, causality, contrast, and cognitive beliefs of authors.

Hinkel (2004) states that explicitly teaching these devices is best achieved through the process of text modeling using modified authentic texts that students will be reading in their content classes paired with visual support such as mind maps and timelines. While this strategy would need to be modified to include direct

connections to the lives of SLIFE, in addition to providing opportunities to move between individual accountability and sharing of knowledge and responsibilities, explicitly teaching the devices of cohesion does align with the second and third tenets of MALP (2015).

Lee's (2002) classroom inquiry investigating the teaching of coherence to 16 ESL university students in Hong Kong supports Hinkel's (2004) claim. Lee used explicit teaching of cohesive structures with small groups, in conjunction with modeling of authentic texts, plus graphic organizers to bolster student comprehension and use of cohesive features. Data was collected from pre- and post-revision drafts, think-aloud procedures during revisions, and post-study questionnaires and interviews. The findings suggest that at the end of the explicit teaching of coherence, students were able to focus their attention on the discourse level of texts while revising their drafts in a way they were not able to beforehand. Using a rubric, Lee determined that students did show improvement in the coherence elements of their writing. The interviews also revealed that students felt that the explicit teaching of coherence had enhanced their understanding of what is required of successful academic writing.

Using a case study model, Paquot (2008) examined the potential influence of L1 on learners' production of both correct and incorrect multi-word sequences that are typically used to create exemplification in academic writing. Her study focused on higher-intermediate to advanced EFL university students from five different L1 backgrounds (Dutch, French, German, Polish and Spanish). Paquot's results showed

that L1-related effects, such as transfer, contribute significantly to learners' use of multi-word units in L2 and that transfer of *form* often goes together with transfer of *function*. This supports the notion that explicit teaching needs to be done using authentic models and analyzing their use of discourse features.

Williams, Nubla-Kung, Pollini, Stafford, Garcia, and Snyder (2007) used a pretest–posttest design with 15 second-grade classroom teachers from three Title I elementary schools in New York City, where 93% of the students received state-funded free or reduced lunch. Lessons included read-alouds with discussion and an introduction to the relevant vocabulary. The students were introduced to the definition of *cause* and *effect* and developed their understanding of these concepts through picture cards, matching, and cloze activities. Students were introduced to four cause–effect discourse connectors: *because*, *since*, *therefore*, and *thus*. They also practiced identifying paragraphs as cause–effect paragraphs. After the lessons, the teachers did further read-aloud and analysis of the target paragraphs and the students completed a graphic organizer for the target paragraph. Finally, students were asked comprehension questions on the target paragraphs. On three of the four comprehension outcome measures that assessed transfer, students who had been taught via the text structure program "performed significantly better on questions that involved effects than did students who received the content-only program" (p. 119). While this not a writing study, one can infer that if explicit teaching of these cause–effect discourse connectors helps reading comprehension, that it will likely aid in writing proficiency as well.

Visual Support and SLIFE

It is clear there are several strategies that have the potential to help SLIFE improve their discourse writing proficiency. It is also apparent that visual support, such as thought webs and sequence mapping are used to some degree in each of these approaches. This leads to the question of whether these types of visual support help SLIFE students do some of the initial organizing of their thoughts necessary for discourse level writing.

Further analysis of DeCapua and Marshall's 2010 five-month study on SLIFE provides some answers to that question. During their interventions, they used visual Civil War texts that were age-appropriate with reduced lexical load. Students worked in communicative groups that required them to perform initial research tasks individually, then organize and synthesize information collectively. In short, students collaborated in both speaking and writing to derive meaning from print. The teacher established the students' schema and developed immediate relevance by having the SLIFE discover what they had in common with Civil War soldiers using a Venn diagram and oral discussion. The instruction followed the MALP guidelines of accounting for learning style, facilitating shared responsibility and individual accountability, and engaging in academic tasks using familiar, scaffolded language. Over the course of subsequent lessons, the students produced a variety of graphic organizers. At first, the SLIFE merely completed the organizers by looking at the pictures as cues and copying short phrases or sentences from the instructor's model. While the ensuing steps are not explicitly stated, it is evident that later in the

intervention, through repetition and slow removal of the graphic organizers, the SLIFE were able to work independently to construct their own sentences and compose their own responses from a series of guided questions. This shows that visually supported texts and oral processing, combined with graphic organization in certain contexts, can enable students to perform several of the preliminary steps of organizing their thoughts and moving toward discourse-level writing.

The Gap

While certainly there exists a tremendous overlap in instructional techniques for ELLs and SLIFE, as this chapter indicates, SLIFE possess some unique attributes that require specific attention. In that regard, it can also be said that there is a paucity of research regarding academic writing and SLIFE. As Bigelow and Tarone (2004) assert, most SLA research has studied learners who are highly literate in their native language and that, ultimately, is unclear the role literacy plays in language acquisition. They argue that SLA researchers should study L2 learners not literate in their L1, as it will contribute to SLA theory. Similarly, Bigelow and Watson state:

> We know little about how the variable of degree of formal schooling influences L2 learning processes because there is so little research in L2 studies on the phenomena of limited formal schooling among adults. (2013, p. 36)

In general terms, it has been found that some of the writing strategies for teaching ELLs—which also align with best practices for teaching SLIFE—can lead to increases in writing proficiency (Barkaoui, 2007; Derewianka, 1991; Hinkel, 2004;

The Center for Applied Linguistics, 2000). Further, DeCapua and Marshall (2010) showed that MALP can boost engagement, comprehension and sentence level writing. What remains unclear is how these strategies and principles specifically relate to measurable increases in discourse proficiency for ELLs or SLIFE. Further, while there is little question of the efficacy of using visual aids to support the writing of ELLs, the specific scaffolds that help SLIFE move beyond writing independently and composing their own sentences to developing academic discourses are largely unstudied (DeCapua & Marshall, 2010).

In the field of SLIFE, researchers have noted the dearth of studies regarding SLIFE in general (Bigelow et al., 2006; Bigelow & Tarone 2004; Bigelow & Watson, 2013; DeCapua & Marshall 2011b; DeCapua, Smathers, & Tang, 2009). DeCapua and Marshall (2011a) state that SLIFE are different enough from general language learners that more data is needed to fill in gaps concerning pedagogy. They further underscore a necessity for research regarding SLIFE writing practices. The need for further study on this topic can be viewed outside the realm of educational research as well. As referenced in the beginning of the chapter, this demographic is surging in numbers in the United States school system and teachers working with these students openly state the need for effective methods and materials to use with low education writers. There is an abundance of writing tools available for native speakers, but few of these specifically address discourse strategies beyond the 'hamburger model' and do not target the collectivistic schema often possessed by SLIFE.

Research Questions

The study's aim is to determine how writing instruction and practice with focused visual support can help preadolescent SLIFE writers build stronger discourse skills. To this end, I will pursue my research question: For Students with Limited or Interrupted Formal Education (SLIFE) in Grades 7-8, how can a series of integrated graphic organizers, implemented in an environment informed by the Mutually Adaptive Learning Paradigm (MALP), improve students' use of result and exemplification discourse connectors in developing written arguments?

Through this study, I will provide specific discourse writing instruction in the context of one Grade 7-8 classroom in which I facilitate a 30-minute pull-out writing intervention, using the MALP framework and a modified LEA approach with graphic organizers. While performing action research, I will measure the effects of the intervention on students' proficiency in using result and exemplification discourse connectors, then reflect and perform another iteration of interventions.

Preview

In the next chapter, the setting in which the research takes place is described. The research paradigm and methods used for data collection and analysis are also explained. Steps taken to address the established gap are outlined; specifically, I describe a series of interventions with my students using the principals of MALP and LEA as a foundation paired with explicit instruction on discourse writing elements through the use of oral processing, text modeling and the support of visual texts and

graphic organizers. In Chapter Four, the results of my study are disclosed, and in Chapter Five, insights revealed by the study are shared.

CHAPTER THREE: METHODOLOGY

This study was designed to investigate the use of visual support to help SLIFE improve their academic discourse writing skills—namely the use of graphic organizers paired with result and exemplification discourse connectors. In this study, I explored the following question: For Students with Limited or Interrupted Formal Education (SLIFE) in Grades 7-8, how can a series of integrated graphic organizers, implemented in an environment informed by the Mutually Adaptive Learning Paradigm (MALP), improve students' use of result and exemplification discourse connectors in developing written arguments?

Overview of the Chapter

This chapter describes the methodologies used in this study. First, the rationale and description of the research design is presented along with an overview of the qualitative paradigm. Second, the data collection protocols are presented and the procedure involved is described. Third, the method used for data analysis is explained and the verification of data is examined. Finally, the ethical considerations for this study are presented.

Qualitative Research Paradigm

My research used the model of a basic qualitative study, which places the emphasis on observational data rather than statistical data (quantitative research).

Mackey and Gass (2008) state that this observational data should be collected in a natural environment such as a classroom and not in a more controlled environment like a laboratory. To that end, I collected data from the class I co-teach. This type of observation is typically of a small number of participants who comprise the focus of the research, which matches up well with the groups to which I have access. Merriam (2009) elaborates that qualitative research enables the researcher to use a detailed approach, which in turn can facilitate a more complete understanding of the complexity of human behavior of the participants and their interactions within the context of the research environment. She concludes that the outcomes of such observations, through rich detail, allow an understanding of how certain aspects occurred and, specifically, an insight to the reason for the occurrence of nuanced variables. In short, qualitative research is well matched for research that is determining the "why" of a given scenario, and for studies that are attempting to lend insights for a particular problem. It is for these reasons that my research question was best suited for a qualitative study. Another purpose of my study was to interpret and contextualize student data using the kind of descriptive language that typifies qualitative research results (McKay, 2006).

One of the many types of qualitative research is *action research*. Merriam (2009) states that action research is "often conducted by people in the real world who are interested in practical solutions to problems and who are interested in social change" (p. 4). Action research starts with educators identifying an issue in their classroom. They then gather information to aid in resolving the problem,

analyze the data, and lastly undertake changes to solve the initial problem (McKay, 2006). Interpretations of action research should be based on measurable results and use scientific methods, which is to say that action research uses the typical research process of developing a research question, collecting data, analyzing the data, and determining the results. The findings of this type of research tend to be relevant to the immediate and local situation being studied. Projects often vary in length and exist on a continuum from simple and informal, to detailed and formal. Specifically, the results of action research are apt to be shared in a way that they can be understood by practitioners. Since the major aim of this study is to provide information about a specific day-to-day problem encountered by my students, and to inform fellow educators, the community, and administrators about possible solutions, I chose action research as my research model. I believe action research to be an appropriate context for my study because I investigated and described the efficacy of a technique for teaching writing that I used in my own classroom.

In the tradition of action research (Merriam, 2006), my role as researcher was interdependent with my role as a teacher. I believe that being an active participant in the research study is beneficial for two reasons. While an outside observer could certainly make some determinations regarding how my students react to my teaching of these new methods, they do not know my students nor the background and learning styles that influence their learning approaches and habits. I believe that this increased contextual knowledge of my students allowed me to make more effective adaptations of said instructional strategy. Further, the knowledge of

who my students are and where they have been certainly enriched and deepened the reflective component that accompanies my data analysis (Merriam, 2009). I used a descriptive approach to investigate a variety of elements, including classroom processes, instruction and interactions, and as a classroom researcher, I believe my descriptions will be more useful to other educators than the decontextualized data that tends to come out of quantitative research. To this end, the research design was flexible and emergent—as the study evolved, so did the data I gathered and my analysis and classification of that data.

Data Collection

Location and Setting

My study took place in a sheltered middle school language arts classroom in an urban school district in the Midwest, where I am one of six ESL teachers serving over 325 ELLs. The ESL model for the school is to pull out WIDA (2015e) Level 1s, and to push in and co-teach WIDA Level 2s and above—doing small, targeted pull-outs when deemed necessary. These students generally remain in the mainstream classroom for all academic areas so that they do not miss instruction with the exception of a handful of pull-out mini-lessons. Using both models, ESL teachers, mainstream teachers, and bilingual education assistants collaborate in this environment to provide differentiated instruction to all of the students as they work on similar academic themes and content. Language development lessons and opportunities to build background knowledge are integrated throughout the day in all content areas.

The school comprises a mostly homogenous East-African population. As previously stated, 97% of the school has been designated eligible for free and reduced lunch under federal Title I guidelines, and many students struggle with issues that typically accompany poverty. Ninety-five percent of the population is considered Limited English Proficient (LEP) using federal Title III guidelines. According to our family liaison, who has conducted interviews with all of our families, our school is composed of approximately 50% children of immigrants and 50% children of refugees, often themselves coming from refugee camps. The vast majority of our refugees come from a large camp in Ethiopia called Kebribeyah.

Participants

My research was done with a sample of convenience—12 seventh and eighth grade English language learners. For the purposes of this study, I focused on one group of seventh and eighth graders for which I facilitate a 30-minute pull-out writing intervention. These students have been initially assessed by our ESL coordinator and designated as SLIFE because they are at least two grade levels behind in reading and have been determined to have a lack of L1 literacy and limited or interrupted schooling during student and parent interviews conducted by our family liaison who has used the SLIFE checklist available in Appendix A along with the school definition used in Chapter Two. To assess student reading level, our team used the The Fountas & Pinnell Benchmark Assessment System (Heinemann, 2010). All 12 of the students in my study are L1 Somali speakers. Seven of the 12 students in the study are newcomers to the United States within the last three years. Most of the

students in the study have had three to four years of total formal education. All of the students in the study qualified for free and reduced lunch using federal Title I guidelines. Table 2 further describes the demographic information of the participants. I wanted to look for links between my students' L1 literacy and their writing, but even with fluent Somali speakers on staff, our school possesses no valid measurement of L1 literacy. Anecdotally, I know that most of my students can decode some Somali, but they would mostly not describe themselves as literate. At the time of this intervention, the WIDA scores for these students were one year old.

As previously mentioned, the students in this group have been leveled at emerging or developing using one of two of WIDA's tools for assessing language proficiency: the ACCESS for ELLs (WIDA, 2015e) or the W-APT (WIDA, 2015f). The primary emphasis of this pull-out class, set forth by our ELL coordinator, is building writing stamina and fluency. To this end, I typically collaborate with the students' mainstream language arts teacher and align scaffolded instruction to support the types of writing they are working in their standards-driven language arts class. Their teacher and I co-plan a handful of specific writing exercises weekly and assess student writing together. Most of the lessons are taught in this small group format to provide more differentiation, but we also team-teach a few lessons in a larger group setting. We use many of the writing prompts and models contained in the middle school language arts curriculum, *Making Meaning* (Developmental Studies Center Staff, 2003). The language arts teacher mostly focuses on narratives, argumentative essays, information reports and recounts. We do some writing

Table 2

Demographic Information of the Participants

ID#	Age	*Gender*	*Interrupted Education*	*Years in the United States*	*Years in formal school*	*WIDA ACCESS Composite Score*	*WIDA ACCESS Writing Score*
1	*13*	*M*	*Yes*	*3*	*4*	*2.7*	*3.2*
2	*14*	*M*	*Yes*	*3*	*4.5*	*2.4*	*2.2*
3	*14*	*M*	*Yes*	*6*	*6*	*3.6*	*2.6*
4	*13*	*M*	*Yes*	*4*	*4*	*3.5*	*2.6*
5	*13*	*M*	*Yes*	*2.5*	*4.5*	*2.9*	*3.1*
6	*13*	*M*	*Yes*	*5*	*4.5*	*4.1*	*3.9*
7	*14*	*M*	*Yes*	*2*	*2*	*2.2*	*2.7*
8	*14*	*F*	*Yes*	*2.5*	*2.5*	*2.1*	*3.1*
9	*15*	*F*	*Yes*	*2.5*	*2.5*	*2*	*2.2*
10	*13*	*F*	*Yes*	*1.5*	*1.5*	*2.2*	*2.1*
11	*14*	*F*	*Yes*	*6*	*2.5*	*2.7*	*2.4*
12	*13*	*F*	*Yes*	*5*	*3.5*	*2.5*	*2.2*

scaffolding, such as employing sentence frames and sentence starters for students to use during the in-class writing time as suggested by Feldman and Kinsella (2005). We have been using graphic organizers for brainstorming and for the general arranging of ideas. We do some analysis of models, but it is my belief that we need to do more of this in addition to providing more direct instruction on text genres and how they differ.

The L1 at home for most of the students is Somali, but there are two students whose families speak Swahili at home. Only one student of the 10 students in my group has literate parents at home, as determined by the intake interview, so most of the students do not have a background in literacy nor do they have much support to read at home. Additionally, only two of the students use English at home with their parents. Although home literacy is an issue for almost all of the students, my experience and understanding has been that Somali culture has a strong oral tradition with an emphasis on storytelling, so it is not surprising that many students in the class have a fairly high level of Basic Interpersonal Communication Skills (BICS), are chatty, and actively use what they know of English in informal speech (Cummins, 2003). In this vein, students in this group have scored higher on the ACCESS for ELLs/W-APT in speaking and listening (2-4), with speaking being their strongest skill. Students in this group tend to struggle with reading comprehension and score lowest in the writing domain of the ACCESS for ELLs (2015e) and W-APT (2015f).

Measurement

I wanted to determine for Students with Limited or Interrupted Formal Education (SLIFE) in Grades 7-8, how a series of integrated graphic organizers, implemented in an environment informed by the Mutually Adaptive Learning Paradigm (MALP), could improve students' use of result and exemplification discourse connectors in developing written arguments. To this end, I did two interventions, each consisting of 10 days of discourse writing lessons, analysis and

targeted writing practice. Argumentative writing samples were collected before, during and after the interventions to determine gains in discourse writing proficiency in the form of a pre-test essay, and similar essays in two post-tests.

The efficacy of any academic endeavor, of course, relies on determining what constitutes proficiency and how to measure it, and one of the preferred ways to achieve this currently is through a rubric. The Writing Rubric of the WIDA Consortium (WIDA, 2015c) is the dominant ESL writing assessment tool used to measure proficiency in writing for ELLs. It is used in an official capacity by 37 states and the District of Columbia (WIDA 2015d), though further inspection of the WIDA performance criteria for discourse level reveals some practical issues in terms of actual measurement. The Writing Rubric of the WIDA Consortium Grades 1-12 (WIDA, 2015c) defines their measurement for the top score of Level 6 Reaching for Discourse Level/Linguistic Complexity in the following way:

> A variety of sentence lengths of varying linguistic complexity in a single tightly organized paragraph or in well-organized extended text; tight cohesion and organization.

Upon reflection, it becomes clear that terms used within are very broad, and measuring any one of the items, except for sentence length, is very difficult. Hyland (2004b) addresses this issue by stating that both educators and students benefit from rubrics that contain a high degree of specificity, as it is through specific, targeted feedback that students actually make the leaps that are most beneficial to their writing. With this in mind, I have adapted Hyland's (2004b) Scoring Rubric for

an Argumentative Essay to focus more on discourse features of result and exemplification (see Appendix C).

After each iteration, I assessed the writing samples with my co-teacher using the adapted Scoring Rubric for an Argumentative Essay (Hyland, 2004b) and Collaborative Scoring Protocol (Solution Tree Press, 2014) and reflected on how effective the intervention had been so that I could make changes and modify instruction in the next round. As discussed in Chapter Two, I implemented several practices that align with MALP (2015) before the interventions began. I put these principles into practice in my day-to-day instruction for several months before attempting to do research in hopes of creating a MALP-informed environment. Specifically, I tried to adhere to the following:

- Striving to make content immediately relevant to students while developing and maintaining interconnectedness
- Incorporating both shared responsibility and individual accountability in student work, while scaffolding reading and writing through oral interaction
- Explicitly focusing on tasks requiring academic ways of thinking and making academic tasks accessible with familiar language and content.

Data Collection Technique 1: Writing Assessment

First, I collected student work samples of argumentative text writing done in the normal course of the students' language arts instruction before the intervention period began. I then performed a short series of writing interventions over the

course of two weeks and, at the end, collected samples of students' argumentative writing texts (Post-Test 1). I reflected on the process, made changes to the instruction, and did another two-week intervention with collected writing samples (Post-Test 2). All three sets of work samples were assessed and analyzed using a combination of the Collaborative Scoring Protocol (Solution Tree Press, 2014), which can be found in Appendix B, and an adapted Scoring Rubric for an Argumentative Essay (Hyland, 2004b), which can be found in Appendix C. The language arts teacher and I normed the process by looking at an initial writing sample to generate our own baseline of scoring and agreed upon principles using the adapted rubric shown in Appendix C. We then individually graded anonymous samples using the same rubric. Using the Collaborative Scoring Protocol (CSP), we came to consensus on how to apply the rubric to grade writing samples. Pre- and post-intervention scores are presented in Chapter Four. I compared scores and sought out identifiable trends and patterns that aligned with my field observations. A sample of student work can be found in Appendix D.

The Collaborative Scoring Protocol (Solution Tree Press, 2014) and the adapted Scoring Rubric for an Argumentative Essay (Hyland, 2004b) align with current best practices in education outlined in Chapter Two. The adapted Scoring Rubric for an Argumentative Essay further aligns with the work of Hyland (2004b) and the writing rubric used by WIDA (2015b), which is an important ESL writing assessment tool. Reeves (2010) states that collaborative scoring is one of the best and most practical methods available to educators for assessing student work. He

goes on to say that the calibration process at the core of the model makes scoring student work more consistent among a group of educators and better aligned to the standards upon which rubrics and scoring criteria are based. This process is particularly relevant for teachers of grade-level or content-alike teams of teachers using common assessments as evidence for student learning, which is why I chose to collaborate on the grading with the students' language arts teacher.

Data Collection Technique 2: Field Notes/Reflection Journal

The last data collection technique was field notes, which were collected during the course of the interventions in the form of a reflection journal. Burns (2010) states that field notes provide the educator with perceptive insight regarding their own classroom. Through repeated observation of students, instructors can obtain a considerable understanding of the participants and their interactions regarding a variety of contexts (Mackey & Gass, 2008). Further, the data generated by field notes can be considered stronger than other methods in that it is unobtrusive to the students (Macintyre, 2000). Notes should be concise and taken immediately or as soon as possible of observations and impressions as they occur. Another advantage of this method is that a researcher can collect student specific information and detailed information related to previous specific observations. Macintyre (2000) warns that field notes can be subjective due to all that goes on in the classroom, with only a small portion being recorded. Additionally, the researcher must record information immediately in order to recall details accurately. To address this, I recorded my observations and responses after each class and took some time to

thoroughly reflect on what happened and glean the most important information for documentation. As the researcher, I intended to use my field notes as one of the bases for reflection, which led to a deeper understanding of how to adjust the interventions in order to make them more effective. In my notes, I paid particular attention to a few key areas:

- What scaffolding methods worked and did not work?
- Which students were having trouble understanding tasks? What evidence did they show or not show?
- Indicators that students have mastered the lesson material
- The difference between the actual way the lesson was taught and original lesson plan
- Ideas for improvement in teaching the lesson at a later time

These notes took the form of reflective observation. The notes were written in two columns with the observation on the left side of the page and the significance of it on the right side (McKay, 2006).

Procedure

All of the participants for this study were chosen because they were reading at least two grade levels below the grade they were in as measured by The Fountas & Pinnell Benchmark Assessment System (Heinemann, 2010), and had experienced limited or interrupted formal schooling, which was determined via parent and student interviews. The participants were observed and assessed in the pull-out middle school classroom setting described above. They were carefully observed over

the course of two weeks of discourse writing lessons. After a break of one week, students were then carefully observed over the course of another two weeks of discourse writing lessons. Writing samples were collected before, during and after the interventions to determine gains in discourse writing proficiency. Field notes were taken throughout the process.

Pre-Test

In this case, the pre-test consisted of the students writing a short argumentative essay that related to content they had studied during their language arts block. They were instructed to write about whether technology was helpful to them as students, or whether it was a waste of their time; they were to pick a stance and defend it with examples. Students were given the majority of three class periods to organize, write, edit and re-write. They were allowed to consult a partner and were also given sentence frames to help them get started, which were typical practices in this classroom. Students were encouraged to include as many details as possible. Student work was assessed using the Collaborative Scoring Protocol (Solution Tree Press, 2014) and the adapted Scoring Rubric for an Argumentative Essay (Hyland, 2004b) outlined above.

Intervention

Based on the research discussed in the literature review, students began by reading and performing a detailed analysis of several argumentative essay text types using Derewianka's (1991) structure (thesis, arguments, re-statement of thesis) and language analysis focused on generalized participants (actors), variety of verb types,

variety of tenses, passives, nominalizations, adverbials showing reasoning, and modals. We specifically focused on the use of result and exemplification discourse connectors that show reasoning. We further concentrated on the relationship between cause and effect and the subset of signal word patterns seen below:

- CAUSE *therefore/thus/so* EFFECT
- EFFECT *because* CAUSE

As stated in Chapter Two, there are a variety of terms that linguists use for the words used in this study, I shall refer to my students' use of *because*, *so*, *therefore* and *thus* as discourse connectors. We also focused on the association between cause and effect discourse connectors while aligning them to the following subset of exemplification signal words: *for example; for instance;* and *an example of this is*.

One form of analysis we did together was deconstruction/reconstruction using graphic organizers. We looked at pieces of argumentative writing and identified the uses of *because/therefore/thus/so* and *For example; for instance; an example of this is*.

After identifying these elements, we used graphic organizer 1 (see Appendix E) to isolate the argumentative statements the author made. Next, we used graphic organizer 2 (see Appendix F) as a visual tool to identify the elements of causality in the author's arguments. We then used graphic organizer 3 (see Appendix G) as a linguistic tool to try to reconstruct some of the arguments in sentence format. All of these activities were done in teams.

This aligns with MALP in that the lesson was immediately relevant to my students by being a topic of interest. Students developed and maintained interconnectedness by being allowed to work in teams. Additionally, all material was presented in both oral and written forms consistently in order to bridge the gap between the two learning paradigms discussed in Chapter Two. I fostered this interconnectedness by holding short, light-hearted competitions. For example, each debate had a winner and the class chose the best group-generated model. These mini-competitions increased interdependency, which fostered sharing of responsibility and the building of trust.

After a week of analyzing models, students were given the following argumentative writing prompt, which was taken from the language arts curriculum (Developmental Studies Center Staff, 2003) and has been in the news locally: *Should Muslim girls be able to play sports*? Using a modified LEA, students engaged in a mini-debate on the topic. The students then engaged in cooperative learning tasks by brainstorming the main reasons for and against the arguments. Afterwards, we discussed and analyzed the experience, diagramming some of the main claims on the board using graphic organizer 1 (see Appendix E). Similar to the analysis portion, we also deconstructed the elements of causality of the debate using graphic organizer 2 (see Appendix F). Using the information gathered in the first two graphic organizers, in groups, we worked through graphic organizers 3-5 (see Appendix G-I) to build a class model together of an argumentative essay using this specific topic. These specific graphic organizers (4-5) served three purposes: They

allowed students to organize their writing ahead of time in a manner they were not doing in their typical language arts class; it provided actionable steps to take in a sequence; and it provided students with scaffolding regarding using specific discourse connectors of result and exemplification. I acted mainly as a facilitator and transcriber and modeled how to use the structure to co-create the class model by projecting the graphic organizers on the board, eliciting responses from students, and recording them. During the process, sample responses from students were projected on the board and analyzed for patterns and mistakes. We photographed each phase of the process, enlarged them onto 11 x 17 paper, and placed these around the room as examples of each step in the process. Discourse writing features were then addressed by employing the following extension activities.

After a class model was made, we worked through this same process in groups, using a new writing prompt from the writing curriculum: *Does technology help students or waste their time*? Students used graphic organizers 1-2 (see Appendixes E and F) to create arguments for a debate on the topic similar to how they recorded the arguments with the deconstructed models. We then held a mini-debate on this new topic. Afterwards, in teams students decided to keep the same side of the debate or choose a new side and then worked in teams using graphic organizers 3-5 to build their own student-generated models while I monitored and assisted. Sample responses from students were then projected on the board and analyzed for patterns and mistakes.

Lastly, a third prompt was given out based on student interest surveys: *Should our school serve Somali food for lunch?* This topic was chosen for its immediate relevance to the students. They engaged in another mini-debate on the subject using graphic organizer 1. After the debate, we analyzed some of the main points on the board and together placed them into graphic organizer 2. Then, they worked individually using graphic organizers 3-5 to create their own essay, which served as Post-Test 1.

After this stage, I collected the writing and assessed it with the language arts teacher using the Collaborative Scoring Protocol (Solution Tree Press, 2014) in Appendix B and the adapted Scoring Rubric for an Argumentative Essay (Hyland, 2004b) in Appendix C. I used my reflection journal along with informal discussions with the language arts teacher, who helped me with the scoring protocol. I reflected on the effectiveness of my instruction and together, we brainstormed ways to improve the next round. These reflections resulted in changes to the graphic organizers. The next iteration was performed largely in the same manner, but used graphic organizers 6-8 (see Appendixes J-L) instead of graphic organizers 3-5 (see Appendixes G-I).

This process aligns with MALP in that it incorporated both shared responsibility and individual accountability by asking teams to co-construct models, with students generating their own discourse over time. It further incorporated shared responsibility by using team debates and note-taking during analysis of writing models. In addition, I scaffolded the written document through oral

interaction and graphic organizers. Groups talked through every process as a class and in teams, and students were allowed to use L1 to support their learning. We also focused on tasks requiring academic ways of thinking in that argumentative essays go hand in hand with academic reasoning. I made these tasks accessible with familiar language and content and multiple examples. I targeted language that my students understood by pre-teaching signal words and combining them with terms they already use and know.

Data Analysis

There were two methods of data collection used to increase validity: field notes and student data. Field notes were typed up, reread, and expanded upon within a day of collection to determine if there were more effective ways scaffolding could be incorporated into the next lesson. I reviewed the notes about teaching with graphic organizers to get a sense of the likelihood of success, to anticipate any problems, to come up with possible solutions, and to determine the most effective grouping of students. Macintyre (2000) states that is useful to include some of the comments made regarding the changes in instruction as well as their results; a list of the lessons learned and insights gained over the two-week period that the lessons were taught is included in Chapter Four.

The student work was scored using the Collaborative Scoring Process Protocol (see Appendix B) and adapted Scoring Rubric for an Argumentative Essay (see Appendix C). Reeves (2010) states that collaborative scoring provides a more nuanced interpretation of a given rubric and also allows educators to come up with

agreed upon norms, which invariably increase reliability and consistency of scoring. After scores were agreed upon, student data was tabulated to better visualize and compare performance before and after the intervention. I analyzed these results to conclude in what ways using visual support paired with explicit instruction was effective. First, I compared the overall writing scores for each student on the Pre-Test, Post-Test 1 and Post-Test 2, and described both general and specific trends. I did the same for correct use of the discourse connectors of result and exemplification, as well as overall strength of argument. Next, I tallied the number of reasons versus number of examples used and commented on tendencies. My counts were based on what I determined to be logical reasons and examples, an evaluative task naturally influenced by my own background in Western modes of logic—meaning my determination very well may differ from what my students, coming from a background of orality, might consider valid, as discussed in Chapter One. After counting the number of reasons and examples, I measured the alignment of claims, reasons and examples by using the scores on the rubric (see Appendix C). Similarly, taking into account the work of Bigelow and Watson (2013), DeCapua and Marshall (2010), Flynn (2007), Olson, (2006), Olson and Torrance (1991), and Ong (1982), we have to acknowledge that many rubrics are submerged in Western logic with evaluative terms like *effective* and *improper* and are therefore, necessarily, culturally biased devices for measuring alignment quantitatively. Lastly, I counted the successful utterances of the specific target language *so, thus*, and *therefore* to measure the efficacy of an alteration I performed between iterations. Similar to

Walsh (2011), I contextualized the data in the pre- and post-tests by synthesizing elements of the field journal. This helped me to some degree ascertain why certain elements were not working.

McMillan (2004) suggests looking for keywords, phrases, and events in a small portion of the data and using these to generate categories. I thus looked over the data for frequently used words and ideas and then reviewed the data to see if there were other noteworthy comments.

Verification of Data

One of the important components of the qualitative research including action study is triangulation, which presupposes gaining the data from different sources. This allows the researcher to gather information from different angles and points of view and ultimately helps to create and more complete representation of the issue (Mackey & Gass, 2008). To that end, I worked to ensure internal validity by using two methods of data collection: observation and writing assessments. Further, I asked a peer to participate in the grading process for increased reliability. I acknowledge a research bias in that I believe explicit teaching of discourse writing features and graphic organizers are worthwhile teaching practices for students, or I would not have studied the best way to adapt them.

Ethics

This study employed several safeguards to protect informant rights. I shared the research objectives with the participants and parents. I obtained written permission of informed consent from the participants' parents or legal guardians

using their home language of Somali. Further, I provided the opportunity for all stakeholders to ask follow-up questions with the help of my school's family liaison. In addition, I obtained permission from Hamline University and Minnesota Transition Charter Schools concerning the human subject review policies. Participant identities were protected and remained anonymous. All student work was kept in a locked drawer and will be destroyed within a year of the study's completion.

Conclusion

In this chapter, I discussed the methods used in my action research study of the effectiveness of using visual support in teaching discourse writing features to English language learners, including the procedure followed and the collection and analysis of data. The next chapter presents the results of the writing assessments, student input and student engagement observations and identifies patterns therein.

CHAPTER FOUR: RESULTS

This study took place in an urban K-8 charter school with a predominantly East African student body in a Midwestern metropolitan area. I taught two series of interventions, each lasting two weeks, over a five-week period, focusing on the structure of argumentative essays and using the discourse connectors of result and exemplification to strengthen and connect arguments. A pre-test in the form of an argumentative essay was given before the interventions began. Each student wrote one post-test essay after each iteration (two in total). The pre- and post-tests were assessed by two teachers using the Collaborative Scoring Protocol *(*see Appendix B) and a Scoring Rubric for an Argumentative Essay (see Appendix C) that was adapted to place more focus on successful use of discourse connectors of result and exemplification. During the five-week period, field notes were taken to document my observations and insights. Through the collection of this data, I sought to determine for Students with Limited or Interrupted Formal Education (SLIFE) in Grades 7-8, how a series of integrated graphic organizers, implemented in an environment informed by the Mutually Adaptive Learning Paradigm (MALP), could improve students' use of result and exemplification discourse connectors in developing written arguments.

Field Note Results

Following is a synthesis of key observations from my field notes, with additional commentary. Highlighted are the most noteworthy 10 observations collected from my field notes during Iterations 1 and 2 of the action research, plus the insights derived from these observations into more effective use of graphic organizers in a MALP-inspired teaching environment, which is the topic of this research.

Pre-test Observation

One major observation emerged from the pre-test examination of students' argumentative essays.

Observation 1: In the pre-tests, students were omitting a good deal of reasoning language altogether, and were citing examples as a form of reasoning.

Significance: Many students wrote something similar to (3).

(3) *Our school should have more sports teams. Basketball is popular.*

While basketball is an example of a sport, it does not specifically provide a reason that our school should have more sports. Recognizing this pattern helped me to design graphic organizers that explicitly underscored the role that resultive discourse markers play in this text type (see Appendixes E, F and H, I). This further allowed me to highlight the relationship between causes and examples during our work with models. This also helped me be more explicit in my instruction on how claims relate to reasons and examples.

Iteration 1 Observations

Many aspects of the research in Iteration 1 confirmed what the research in Chapter Two describes, and thus was not surprising. Students responded very well to the adapted LEA approach. They were engaged by the higher levels of oral interaction in the debates. In fact, my two quietest students talked more during one debate than they typically do in a given class period. The majority of the students expressed that they liked the topics. As I had guessed, setting up positive, structured team dynamics was difficult in that many of our students are used to a localized school social culture of competition and combativeness. It took some time for them to settle into roles, and eventually to share power and responsibility. There were, however, a number of elements that I did not foresee, which became the issues of focus during the reflection period between iterations.

Observation 2: Many students forgot to move information from one part of the sequence of graphic organizers to the next. For example, many great language utterances were created on graphic organizer 4 (see Appendix H), but never made it to the students' drafts.

Significance: I did not foresee that students would see the sequenced organizers as separate tasks and omit information in final writing because they had already written it on previous graphic organizers. This undermined the whole purpose of the intervention. Just as scholars have noted (Bigelow & Watson, 2013; Olson, 2006; Olson & Torrance, 1991; Ong, 1982), students from oral backgrounds view and process tasks such as these differently. In this case, the graphic organizers

were taken as discrete, unrelated pieces that in Western academic terms were designed to be progressive steps in the same endeavor.

Observation 3: Many examples generated by students in the pre-test were weakly related or not related to reasons or claims they were making.

Significance: The cohesiveness of many of my students' arguments was often undermined by citing non-relevant examples. One student wrote the following (4) in his first pre-test, which typifies this weak alignment of reason and example.

(4) *Our school should serve Somali food. Students like Somali food. For example, Sambusas are spicy.*

While Sambusas are an example of a popular spicy food, they are not an example of why it is important for our school to have Somali food.

Observation 4: Using *so* and *thus/therefore* was much more difficult for students with lower levels of language acquisition.

Significance: Evidenced through the journal and exit tickets, my students with lower levels of English proficiency struggled to use *so*, *thus*, and *therefore* because they require reversing the cause and effect, as outlined in Chapter 3. Teachers might want to differentiate the number of discourse markers to language level. For example, Level 2s might use *because* and *so*, where Level 3s use *because*, *so*, *thus*, and *therefore*. That being said, by the end of the intervention, many of my low level students were using *so*, *thus*, and *therefore* with minimal errors, which was not a requirement of the assignment.

Observation 5: Writing space and overall length of graphic organizers was an issue.

Significance: In general, I did not leave enough room in the graphic organizers used in Iteration 1 for students to write (see Appendixes H-J). Also, the writing portion in Iteration 1 included the use of a sentence level graphic organizer (see Appendix G), which formative observation and journal notes showed me to be confusing and cognitively demanding for many students. Upon reflection, I concluded that teachers need to leave additional writing space for students who are still working on developing their penmanship. Teachers also need to consider the appropriate scope of the steps they are including in one intervention.

Reflection and Changes to Instruction

The following summarizes the changes I made to instruction after a week of reflection between Iteration 1 and 2. To address the length issue in Observation 5, I cut out the sentence-level verb activity and created more space for students to write (see Appendixes J-L). I also tried to allow more time for students to work with these tools in class. Students responded well to both changes; several verbally thanked me. The main result I witnessed was longer responses.

To attend to the issue of students leaving some pieces of information behind seen in Observation 2, I devoted more time to modeling the process. I also added arrows to remind students to move information to the next page (see Appendix K). This, coupled with extra reminders from the instructor and peers, seemed to largely

remedy the problem. This aligns with Barkaoui's (2007) suggestions that instructors should do extensive modeling in all elements of the writing process.

Observation 3 addresses the problem that many students did not align their claims, reasons and examples. Identifying this pattern helped me to design a graphic organizer that explicitly called for the identification and separation of both causes and examples (see Appendixes H and I). It also helped me design the "align" graphic seen in graphic organizer 6. Isolating this issue helped me to spend more time providing explicit instruction on aligning claims to reasons and examples, using said graphic. I also made this a part of the checklist as a reminder, which did not solve the problem entirely, but students did show an improvement in alignment of causes and examples, which is expanded upon in the next chapter.

I also wanted to address the issue revealed in Observation 4—using *so*, *thus,* and *therefore* was much more difficult for students who with lower levels of language acquisition, to the point that many students were omitting the use of them altogether even though we had studied them in Iteration 1. To increase the scaffolding for the use of *so/thus/therefore* discourse connectors, I turned to research. Studies have shown that adults without formal schooling may perceive or interpret visual materials often used in classrooms, such as line drawings and two-dimensional information, differently as compared with schooled adults (Bramão et al., 2007; Reis et al., 2001; Rosselli & Ardila, 2003). Keeping this in mind along with Ong's (1982) theories discussed in Chapter One and Flynn's (2007) suggestion to use graphics to concrete elements when possible, I implemented two changes. First,

I used a student-generated example as a touchstone for the rest of my instruction, seen in (5).

(5) *Tajudin is fast because he has long legs. Tajudin has long legs, thus he is fast. For example, he always wins races at recess.*

Tajudin (pseudonym) is a well-liked tall student in our class who created this example that the students all related to.

Secondly, I color coded and numbered this sentence-level exemplar (see Appendix J-L). My thinking was that rainbows are a universal concrete phenomenon that might help my students visualize sequence in a slightly less linear manner. *Tajudin is fast* became red because it is first in the spectrum. I numbered this assertion with the numeral 1 and labeled it the student friendly term *what*. *Because* and *so/thus/therefore* became orange because orange segues to green (yellow being difficult to see on white backgrounds). I numbered *result/why* with the numeral 2 and labeled it the student friendly term *why*. *For example, he always wins races at recess* became blue because that is next in the spectrum. I numbered *exemplification* with the numeral 3 and labeled it the student friendly term *example*. Thus, all results going forward were labeled *what* in red; reasons were labeled *why* in green; and examples were labeled *examples* in blue. Additional examples became purple as the final color in the spectrum. This gave my students a common and simple set of referents to talk about this issue. Additionally, a series of arrows was added to specifically show that the why and what switch. We paired this use of arrows with the oral chant "switch" and a hand signal. This seemed to really help the students

over time with this structure. Anecdotally, it also seemed to help them move their ideas through each graphic organizer in the 6-8 sequence (see Appendixes J-L).

Lastly, with the sentiments of Gibbons (2009) and Freeman and Freeman (2002) in mind, I wanted the whole process to be more interrelated, with topics of the student model phase serving as additional scaffolding for the group and independent writing. To this end, my co-teacher and I designed a series of inter-related prompts that had high relevancy to students. The topic we used for our class model was an adapted version of the very first topic students wrote about. Instead of simply addressing whether Muslim girls should be able to play sports in general, students were asked whether or not our school should organize sports for girls (currently it does not). The topic for the group writing was similarly related: Should our school have more sports teams? We currently have one. The final prompt built on many of these themes: Choose one club, team, or improvement you would like to make at our school. This series of prompts was designed with MALP in mind. Specifically, it focused on A1 and A2 of the MALP checklist (2015):

> A1. I am making this lesson/project immediately relevant to my students. A2. I am helping students develop and maintain interconnectedness.

One particular choice that I made at this point was worth noting. Three of my boys on one team expressed the desire to argue for a martial arts team. Despite hesitation surrounding an activity that has a potential for violence, in keeping with A1 and in an attempt increase relevancy, I allowed the students write on this topic. I will discuss insights that came from this decision in the next section.

Iteration 2 Observations

In a general sense, the changes made to instruction were helpful to most of the students. There were some attendance issues that seemed to affect a few students' performance—specifically students 5 and 12. This will be discussed further in the Pre- and Post-Tests section. Some additional observations that were made are discussed below, many of which address the study as a whole.

Observation 6: Group dynamics were difficult to set up and manage, but ultimately peer checking happened in a way that it had not been happening before.

Significance: We had attempted to do peer editing before this, but the relationships formed in the team environment for this action research seemed to, over time, help students extend their peer editing and be more consistent. With all the cognitive and emotional struggles outlined in Chapter 2, it becomes more important to foster environments that feel safe and successful for students. Incorporating both shared responsibility and individual accountability seemed to accomplish two things during this action research. It appeared to lower the affective anxiety level of the students the longer we did the iterations and also helped students to become more thoughtful and effective peer editors. This seems to align with the findings of DeCapua and Marshall (2010), Freeman and Freeman (2002) and Montero, Newmaster and Ledger (2014).

Observation 7: An editing checklist helped some students, especially the ones who had richer peer review relationships.

Significance: I created an editing checklist for students to use after they wrote their final draft. The students who had higher levels of language acquisition and better relationships with their editing team seemed to really benefit from this, while others seemed exhausted by this extra step. The takeaway is that checklists are a good thing, but they require a lot of time to be modeled well. Teachers might want to consider making these optional until students get more comfortable with the writing steps.

Observation 8: Students liked the more concrete tasks. Specifically, I asked the students to create a list of the most helpful and enjoyable activities of the whole process, and they ranked "analyzing the models" and "discovering target language in an authentic context" in the top 10.

Significance: While I had thought the debates would be the highlight, I think most students were most engaged when we were projecting models onto the board and dissecting them through short, concrete tasks, such as "Underline *because*, *so*, *therefore* and *thus*." As noted before, "good writing" can be elusive at best for even proficient speakers of English. Getting better at writing is a daunting task; thus, it makes sense that students would cling to safer, easier to quantify tasks, such as identifying and underlining. Bearing in mind what researchers have put forth regarding differences in cognitive orientation of students who come from non-literate backgrounds (Bigelow & Watson, 2013; DeCapua, Smathers, & Tang, 2009; Flynn, 2007; Gutierrez & Rogoff, 2003; Olson, 2002; Ong, 1988; Scribner & Cole,

1978), teachers might want to consider mixing in many smaller, concrete tasks as scaffolding to larger analytical tasks.

Observation 9: Relevancy to students was not always easy to determine.

Significance: Relevancy is a core component to MALP. Before attempting the intervention, I assumed it would be easy to find material that students would find relevant. I had done interest inventories and felt like I knew my students well. But upon application, I found that much of the material that I thought would be relevant to all was only relevant to some. Fostering relevancy for all students must necessarily be a work in progress and is best served by trial and error and reflection.

Observation 10: The effectiveness of interrelated prompts seemed to be negatively influenced by too much choice in Iteration 2.

Significance: The three students referenced above who chose to write about the martial arts club were all on the same team. This team dynamic generated a lot of enthusiasm for their specific topic, which resulted in each of them spending most of their writing time describing the club versus arguing for its inception. Their scores in Post-Test *2* support this observation. I believe at this stage in their development with these language features, that restricted choice would have helped them focus.

To contextualize the results of the post-tests, which will be discussed later, I turned to the students. When I showed students their before and after scores, most of them were quite happy. During an informal post-intervention series of

discussions, I asked them what helped them increase their scores. Many students stated the 1-2-3 mnemonic device paired with the colors. All of the students said that said having steps helped make the process clearer because they knew what to do next. Most of the students said the graphic organizers were a helpful way to break apart the complicated process into smaller action items. Most of them said that the increased group interaction and reliance on their teammates were some of the most helpful parts of the study. All of the students stated that the most beneficial element was the increased level of direct instruction and repetition.

Pre- and Post-Tests

The pre- and post-study tests consisted of three argumentative writing prompts and were given before, between and after each intervention. The results can be seen in Figures 4, 5 and 6, which precede a synthesis of some patterns that emerge from this data.

Overall Writing Scores

Figure 4 gives a broad view of students' overall discourse level writing improvement as measured by the Collaborative Scoring Protocol (Solution Tree Press, 2014) and an adapted Scoring Rubric for an Argumentative Essay (Hyland, 2004b) using the process outlined in Chapter Three. The rubric (see Appendix C) measured student use of tense, use of transitions, and sentence construction, but was heavily weighted toward three elements of discourse level cohesion, namely use of claims and evidence, use of result connectors, and use of exemplification connectors. The rubric intentionally does not emphasize mechanics; instead, it

focuses on more meaning-rich elements of discourse level writing. All students involved showed some degree of improvement across the two interventions. Half of the students increased their scores substantially in each iteration.

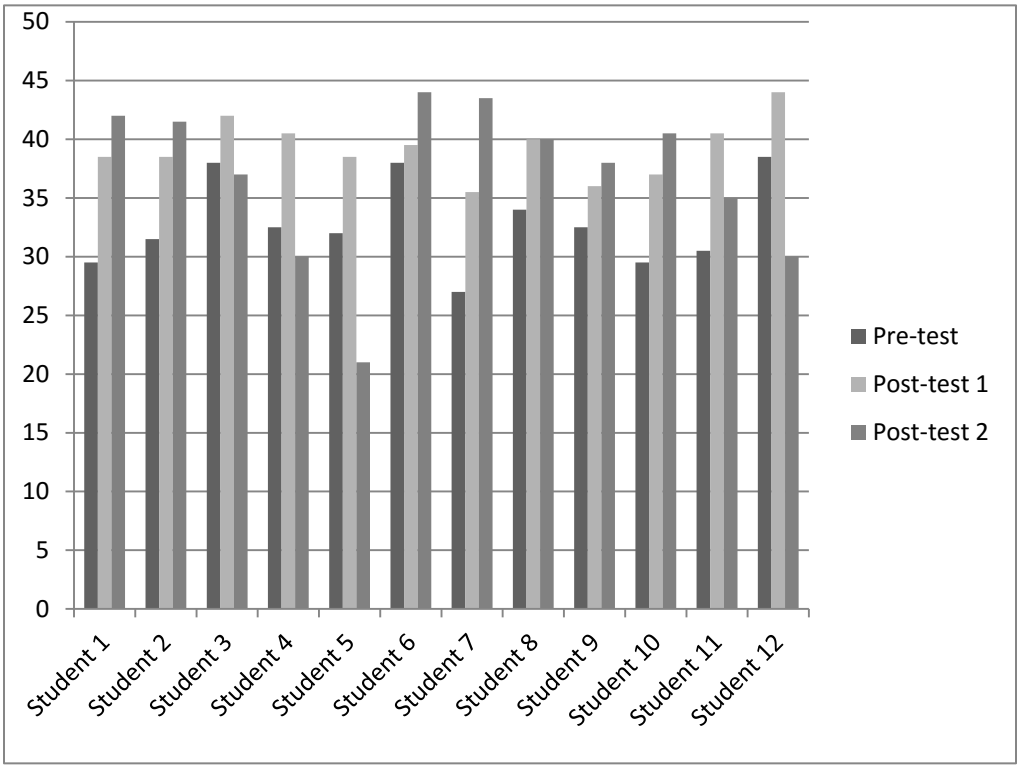


Figure 4: Overall Paper Scores. Shows the change in overall essay scores of the Pre-Test, Post-Test 1 and Post-Test 2. Essays were scored on a 50-point scale.

Four students performed noticeably worse on Post-Test 2. Two of those students had attendance issues during the second iteration. Three of those students were the ones who had the additional choice of writing about the martial arts club. As noted in the journal, I believe this extra freedom worked against the students as they spent more of their allotted time for this project describing their activity versus defending it. I believe that this could be corrected in subsequent interventions.

Result Discourse Connector Scores

Figure 5 narrows the focus and measures the growth specifically of students' successful use of discourse connectors of result. Eleven of 12 students showed growth of at least 1.5 points on a 10-point scale between the first iteration and the second. Seven of 12 students showed growth of at least 2.5 points in use of discourse connectors of result from the pre-test to Post-test 2. Similar to the overall test scores, the two students with attendance issues showed no growth or a drop in their effective use of resultive discourse connectors.

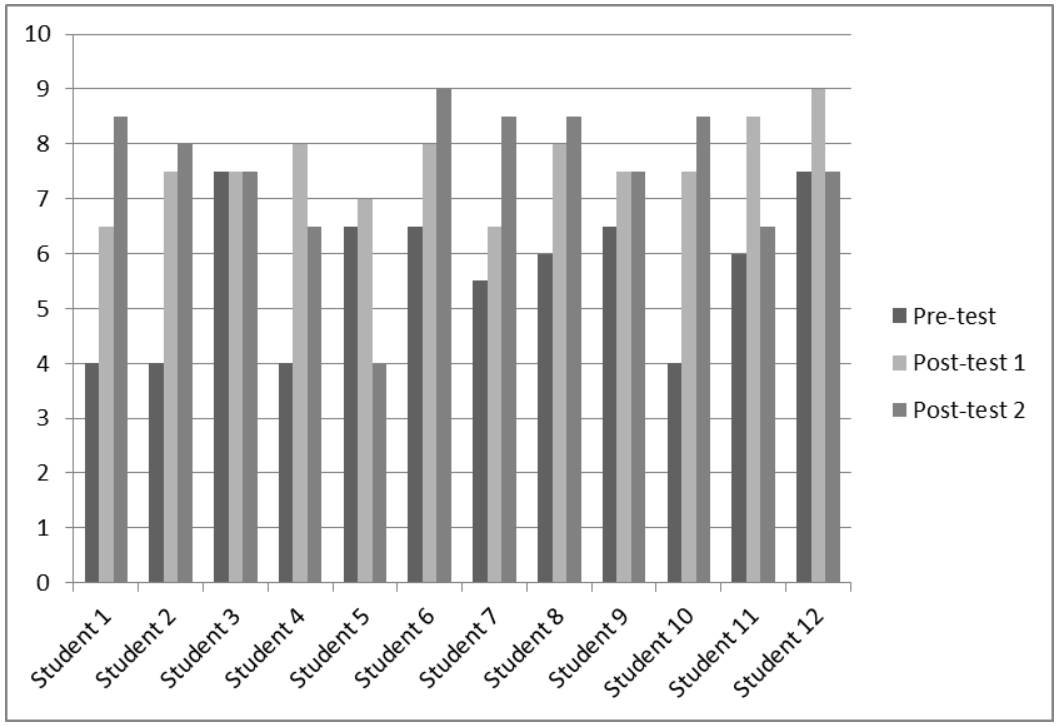


Figure 5: Result Discourse Connector Scores. Shows the change in student use of discourse connectors of result for the Pre-Test, Post-Test 1 and Post-Test 2. Discourse connectors were scored on a 10-point scale.

Exemplification Discourse Connector Scores

Similarly, Figure 6 measures the growth of students' successful use of discourse connectors of exemplification in particular. All students showed at least some growth in their use of exemplification through the research. Six of twelve students showed growth of at least 2 points in use of discourse connectors of result from the Pre-Test to Post-Test *2*. Interestingly, six of 12 showed a drop in exemplification between Pre-Test and Post-Test *2*. This tells me that something did not work in the changes that I made between the two iterations. Three of these

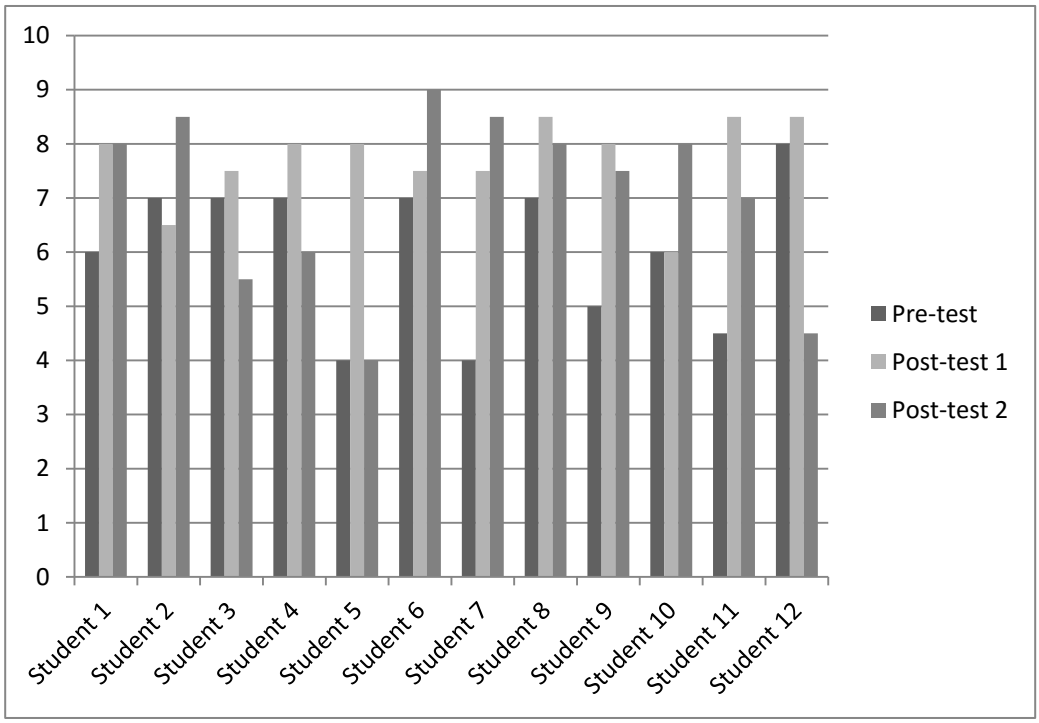


Figure 6: Exemplification Discourse Connector Scores. Shows the change in student use of discourse connectors of exemplification for the Pre-Test, Post-Test 1 and Post-Test 2. Discourse connectors were scored on a 10-point scale.

students were the same team who got caught up in describing their martial arts club. This will be addressed further in the discussion section. That being said, four students showed growth in use of exemplification between these two phases.

Effect of Discourse Connectors on Overall Argument Strength

With Merriam's (2009) advocating of action research as a source of determining "why" in my mind, I decided to dig into some of the factors in Observations 1 and 4 above. Before the study, students were largely omitting a lot of the language related to causality or using examples not relevant to the point they were making. Together, these contributed to an overall perception of weak reasoning on the part of my co-teacher and me.

Before doing this research, I postulated that a focus on the language of result and exemplification would correspond with an increase in overall strength of arguments. Figure 7 bears that theory out. In the pre-test, the average score for strength of argument was 6.9 on a 10-point scale. By the end of the Iteration 2, the average score had risen to 7.7. Eleven of the 12 students showed growth in overall strength of argument. While not being definitive due to a small sample size, I think this does lend credence to the notion that language and reasoning are related and that increases in one relate to increases in the other.

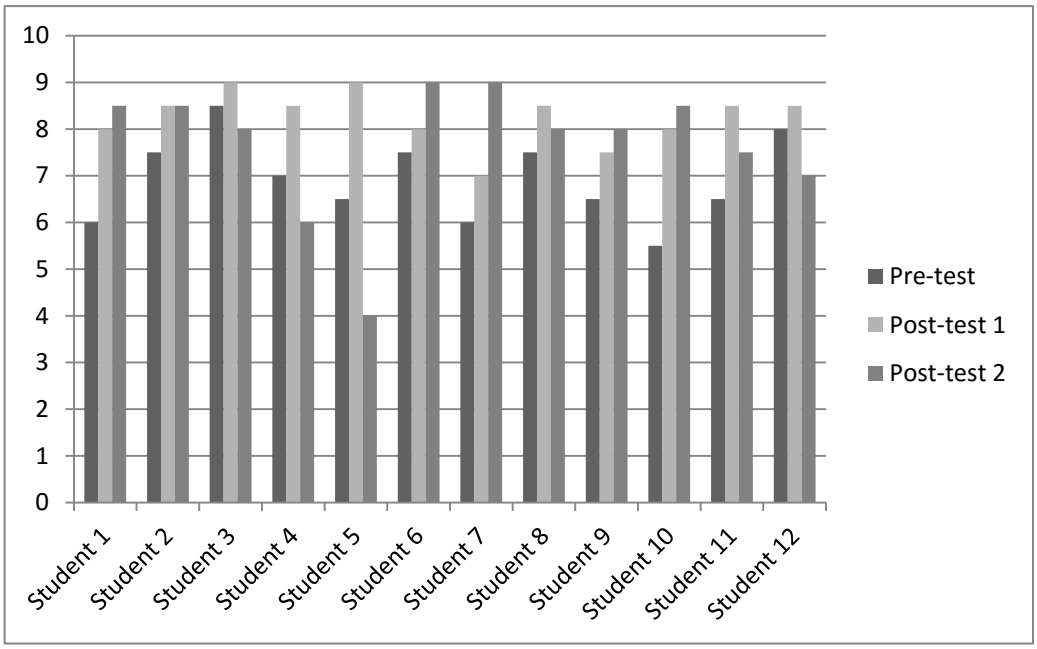


Figure 7: Overall Strength of Arguments. Shows the change in score regarding the overall strength of claims and evidence based on strength of argument and relevancy of support for the Pre-Test, Post-Test 1 and Post-Test 2. Strength of Argument was scored on a 10-point scale.

Number of Claims, Reasons and Examples

As mentioned in Chapter Three, Merriam (2009) believes that action research is better suited for determining the "why" of a given scenario; bearing this in mind, I realized that, unfortunately, the increases shown in Figures 4-7 did not answer my question of why the graphic organizers were helpful. I wanted to quantify at least some of what I was seeing in my reflection journal regarding the reasoning issues in Observation 1. To answer these questions, my co-teacher and I examined the data more closely. We counted the uses of discourse connectors of result and exemplification in the given iterations. The first thing that we noticed was

that the number of discourse connectors of result rose for most students, which can be seen in Figure 8. In a general sense, it can be said that students were generating more reasons for their claims by using discourse connectors of result. Put another way, I noticed in the reflection journal that simply having discourse connectors of result in the graphic organizers encouraged students to cite more reasons. It is worth noting that eight of the 12 students used one or fewer reasons to back up their claims in the pre-test. This provides at least a partial reason that the claim strength for many of those students was in the 5-6 range (see Figure 7).

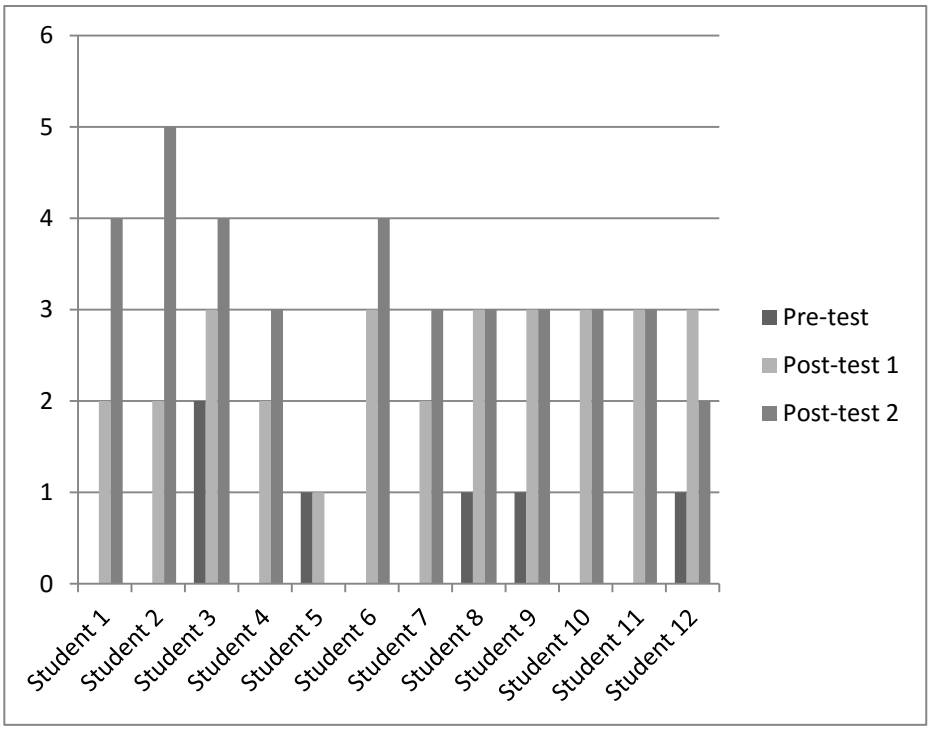


Figure 8: Frequency of Use of Discourse Connectors of Result. Shows the change in frequency of successful use of discourse connectors of result for the Pre-Test, Post-Test 1 and Post-Test 2. Discourse connectors were scored on a 10-point scale.

Ten of the twelve students used three or more reasons in their subsequent writing samples. To a certain extent, simply providing more reasons can strengthen student arguments. At the same time, it should be noted, as before, that determining the validity and relevance of reasons and examples is based on notions of Western logic embedded in our scholastic context, in this case in the rubric and scoring protocol my co-teacher and I used.

Another interesting observation to come out of this analysis of student data is that, in the Pre-test, students were often citing reasons and examples without using discourse connectors. Half of the students cited reasons in their pre-test without using a discourse connector. A common instance of this is (6).

(6) *Apps waste time. You don't learn anything on games.*

While it may or may not be true that one does not learn much while playing games, not having a discourse connector there weakens that claim compared to the comparable phrase in (7).

(7) *Apps waste time* ***because*** *you don't learn anything while you are playing games.*

Similarly, two thirds of the students listed examples in their pre-test without any use of a discourse marker. In fact, in one pre-test, a student cited nine examples for one reason and used only one discourse marker of exemplification. This has the effect of making the examples seem like an arbitrary list. Furthermore, as referenced in Observation 1, many students were citing examples as reasons. (8) shows this pattern.

(8) *Websites are helpful to me. I use Facebook, Mobymax and Reading A-Z.*

While these are certainly examples of sites that can help students, it does not provide any explanation of how the sites are helpful to the student.

Alignment of Claims, Reasons and Examples

Keeping in mind Examples 6 and 8, as well as Observation 3, I set about to try to further determine why the strength of argument scores rose so much. Looking at the number of discourse connectors of result and exemplification in the pre- and post-tests, I was able to determine the number of reasons and examples became more balanced in the student writing. Digging further into the Cohesion 2 and 3 scores in the rubric (see Appendix C) while performing linguistic analysis on the students' work, I was able to determine that one third of the students had examples that were not aligned at all to their reasons in the pre-test. Five more students had examples that poorly aligned with, or were not explicitly connected with, their reasons in the pre-test. In a general sense, it can be said that many of the students had weak alignment of claim, reason and examples. In contrast, both Post-Test 1 and Post-Test 2 showed noticeable progress in aligning reasons and examples. The alignment of claims to reasons also showed a large increase. While I cannot say with absolute certainty, my field notes support the proposition that having specific steps modeled and the use of graphic organizers did help students create arguments that were more cohesively aligned. Additionally, one can infer that the extra repetition of the process combined with the color-coding and numbering of what (1), why (2),

and example (3) outlined above did have a positive effect on the use of these discourse markers and the overall alignment of claim, reasons and examples.

Use of Target Language

The general frequency of use of discourse connectors of result and exemplification rose for students, but student work also showed gains in specific target language. As noted in Observation 4 in the reflection journal, using *so*, *thus,* and *therefore* was much more difficult for students with lower levels of language proficiency. As previously stated, many students were omitting them altogether. Looking through the Pre-Test, I discovered that all 12 students were relying exclusively on *because* and *if* to express causality, which limited their discourse. I wanted to see if the change in Iteration 2 helped students use *so*, *thus,* and *therefore* more effectively, so I went back through the pre-test and post-tests and simply counted the successful uses of *so*, *thus,* and *therefore*. The results of this calculation can be seen in Figure 9. In the Pre-Test, no students used *so*, *thus,* or *therefore* at all. In Post-Test 1, five students attempted to use *so*, *thus,* or *therefore* and collectively generated seven successful language utterances. In Post-Test 2, nine students attempted to use *so*, *thus,* or *therefore* and collectively generated 15 successful language utterances, which represents an increase of over 200 percent.

While it is certainly true that increased repetition and instruction helped to highlight the use of these terms, the observations in my reflection journal lead me to believe that the color coding in graphic organizers 7-8 (see Appendixes K-L) had a

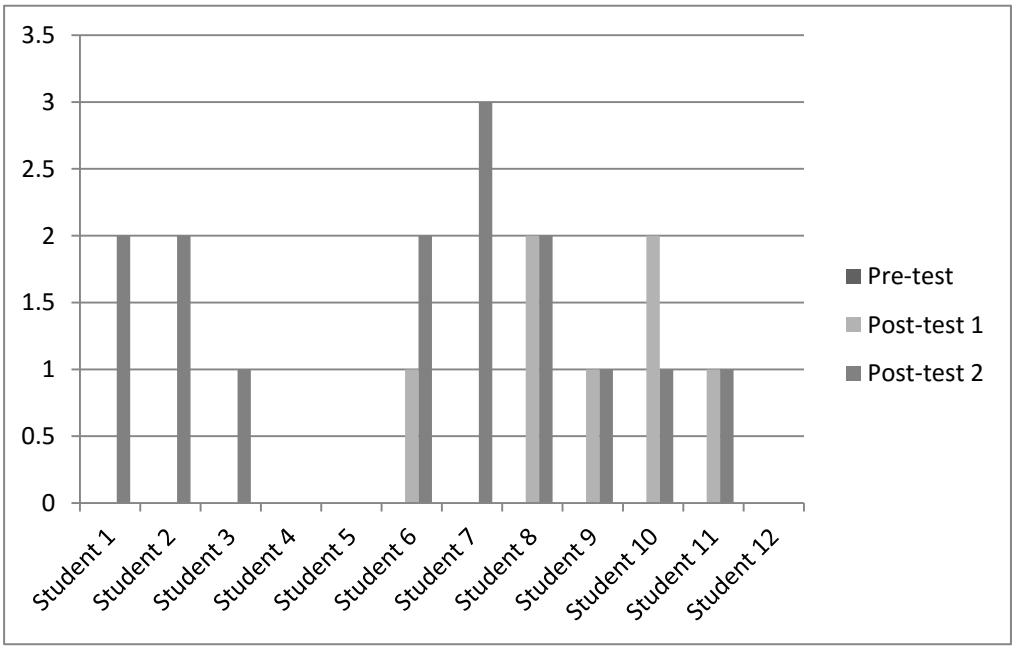


Figure 9: Successful uses of Target Language: So/Thus/Therefore. Shows the number of successful uses of the specific discourse markers of result: *so*, *thus*, and *therefore*.

positive effect on students' ability to generate successful language utterance of the specific discourse connectors *so*, *thus,* and *therefore.*

Discussion

This study sought to answer the research question: For Students with Limited or Interrupted Formal Education (SLIFE) in Grades 7-8, how can a series of integrated graphic organizers, implemented in an environment informed by the Mutually Adaptive Learning Paradigm (MALP), improve students' use of result and exemplification discourse connectors in developing written arguments? Synthesizing data from the Pre-and Post-Tests with the insights gained from my

reflection journal and informal discussions with students following the study, I can say that the series of integrated graphic organizers was helpful in the following ways. Qualitatively, they allowed students to organize their writing ahead of time in a manner they were not doing in their typical language arts class; they provided actionable steps to take in a sequence; and they provided students with scaffolding regarding using specific discourse connectors of result and exemplification.

The frequency of usage of discourse connectors of both result and exemplification generally rose for all students across the five-week study. Further, the correct usage of these discourse connectors also generally went up, which can be seen in Figures 5 and 6. The biggest gain was in the correct use of the discourse markers of result. The average score for using discourse markers of result in the pre-test was 5.3 on a 10-point scale. In contrast, the average scores for using discourse markers of result in Post-Tests 1 and 2 were 7.1 and 6.8, respectively (see Figure 5). In addition, students were able to get more of their meaning across and build stronger arguments, which can be seen in Figure 7. The successful use of graphic organizers aligns with the work of Barkaoui (2007), DeCapua and Marshall (2011), DeCapua, Smathers and Tang (2009) Derewianka (1991), Freeman and Freeman (2002), Gibbons (2009), and Porter (2013). The use of MALP in this research incorporated elements from the theories and studies put forth by Bigelow and Watson (2013), DeCapua and Marshall, (2010), Montero, Newmaster, and Ledger (2014), and Walsh (2011).

Preview of Next Chapter

The synthesis of field notes and pre-test and post-test data produced six significant insights, which will be discussed in Chapter Five. Further reflection on how these findings might inform classroom practice is also found in Chapter Five, which concludes with a summary of the study, limitations, suggestions for further research, and some final comments, including a discussion of the ways in which this study might influence my future instructional strategies.

CHAPTER FIVE: CONCLUSION

In this research project, I attempted to answer the question: For Students with Limited or Interrupted Formal Education (SLIFE) in Grades 7-8, how can a series of integrated graphic organizers, implemented in an environment informed by the Mutually Adaptive Learning Paradigm (MALP), improve students' use of result and exemplification discourse connectors in developing written arguments? I chose to try to answer this question through action research in an ESL pullout writing intervention class in an urban K-8 charter school with a predominantly East African student body in a Midwestern metropolitan area. The study grew out of my desire to help students increase their discourse writing proficiency in the classroom with the flexibility and the ability to evolve strategies that this model affords (Merriam, 1998). Other factors that played a role in the selection of this research method included the variations in students' levels, attendance, educational backgrounds, and literacy levels. The students all had limited formal education and had been in the United States between two and six years. Over a five-week period, students were taught how to use discourse connectors of result and exemplification within argumentative essays using a series of interrelated graphic organizers in order to strengthen and connect arguments. One source of data was field notes taken after each class during the three weeks of the research; the other source of

data was student essays in the form of one pre-test and two post-tests. Students took a pre-test in the form of an argumentative essay before the interventions, and wrote one post-test essay after each iteration. The pre- and post-tests were assessed by two teachers using the Collaborative Scoring Protocol *(*see Appendix B) and a Scoring Rubric for an Argumentative Essay (see Appendix C) that was adapted to emphasize successful use of discourse connectors of result and exemplification. Discourse writing features of result and exemplification were selected due to the observed difficulties in SLIFE making the jump from sentence level proficiency to discourse level, along with an observed weakness in formulating academic arguments. Though it is difficult to draw broad generalizations due to the specific setting and subjects, the study should be relevant to other classrooms with similar demographics. Chapter Five discusses the major findings of the research, implications for ESL and mainstream teachers, limitations, and suggestions for further research.

Major Findings

In general terms, I found that some of the writing strategies for teaching ELLs—such as analyzing text types through the use of authentic models (Barkaoui, 2007; Derewianka, 1991; Hinkel, 2004; The Center for Applied Linguistics, 2000)—also aligned with best practices for teaching SLIFE and can lead to increases in writing proficiency. The success of scaffolding writing through oral interaction seen in this study supports the work of Bigelow and Watson (2013) DeCapua, Smathers and Tang (2009), Freeman and Freeman (2002), and Flynn (2007), which has

helped determine and contextualize many of the specific differences in SLIFE compared to the larger group of ELLs which they belong, including experiences with trauma and possessing an oral-based cultural inheritance and mode of processing that does not always align with the goals of academic proficiency.

Further, my research showed that the visual support through interrelated and sequenced graphic organizers can help students organize their thoughts and increase their use of use of target language. This supports research that has shown the efficacy of graphic organizer in supporting targeted tasks, such as brainstorming and reading comprehension in ELLs (Barkaoui, 2007; DeCapua & Marshall, 2011; DeCapua, Smathers and Tang, 2009; Derewianka, 1991; Freeman & Freeman, 2002; Gibbons, 2009; Porter, 2013). It further supports the claim that graphic organizers can help encode speech, which correlated with improvements in writing (DeCapua & Marshall, 2010).

Qualitatively, the study found that the group dynamics facilitated by the MALP-inspired environment allowed students to organize their writing in a manner they were not doing in their typical language arts class. The study's use of sequenced graphic organizers provided actionable steps in a short, useable sequence. This process supports the notion from Gibbon's (2009) mode continuum that students need extra support to mitigate the increasing linguistic and cognitive burden that comes with the transition from speech to writing. I believe that my graphic organizers, paired with scaffolded lessons, helped students cope with that transition. Further, the use of sequenced graphic organizers scaffolded students in

their use of specific discourse connectors of result and exemplification, which students seemed to appreciate. Quantitatively, the frequency of usage of discourse connectors of both result and exemplification generally rose for all students across the five-week study. Moreover, the correct usage of these discourse connectors also generally went up. The biggest increase witnessed in the study was in the correct use of the discourse markers of result. The average score for using discourse markers of result rose almost two points on a ten point scale from the Pre-Test to Post-Test 2. Qualitatively, the additional context supplied through this set of strategies took students beyond simply organizing their thoughts, as they were able to convey more meaning and build stronger arguments.

In addition to these general findings, this research project led to the following five main insights. These insights can be used to adjust the process used to teach writing using graphic organizers, which leads to a partial answer of the research question of whether a series or connected graphic organizers in a MALP-informed environment can help students make measurable strides in discourse writing.

Insight 1

In their initial uses of these discourse connectors, students generated errors and sounded prescribed, but their ability to convey meaning went up.

The most common error in Post-Tests 1 and 2 is seen in (9).

(9) *For an example of this is*

Instead, students should have used one of the two structures shown in (10).

(10) *An example of this is* or *For example,*

Yet meaning is not lost in the utterance in (9). The results cited above also underscore this point as students made measurable strides in their scores for the overall essay, as well as for strength of their arguments.

My co-teacher stated that she was very impressed by the increases in meaning communicated by the students (shown in Chapter Four), but she felt that the students were not sounding natural. While I agree that the responses were more formulaic than the pre-test, I think this is common for all ELs, but especially for SLIFE. Moreover, research supports the idea that it is normal to initially implement new structures in L2 in a formulaic manner. Schmidt (1990) stated that L2 learning requires that the learner consciously notice L2 features before they are able to incorporate them, and I believe my students were still engaged in this process. McLaughlin further explains that this noticing gap facilitates restructuring—a fundamental reorganization of one's grammatical knowledge—which takes place "when qualitative changes occur in a learner's internal representation of the second language or in the change in the use of procedures—generally from inefficient to efficient" (as cited in Gass & Selinker, 2008, p. 234). Further, scholars of orality have shown that learners from oral backgrounds exhibit a reliance on formulaic expressions, proverbs, and idioms, and are more likely to use redundancy as a built-in maintainer of meaning (Olson, 2006; Olson & Torrance, 1991; Ong, 1982). Lastly, I think the formulaic or over use of the discourse connectors in this particular case can be offset to some degree by the gains the students made I think the formulaic or

over use of the discourse connectors can be offset to some degree by the gains in strength of argument and alignment of claims, reasons and examples. Anecdotally, my co-teacher stated that the essays from Post-Test 2 sounded better. Regardless, ESL teachers may want to coach their mainstream co-teachers on the likely occurrence of these initial formulaic usages of target language.

Insight 2

The interventions did not work well for all students. A quarter of the students had worse overall scores for Post-Test 2 compared to the Pre-Test, and half fared worse on Post-Test 2 compared to the Pre-Test regarding overall use of discourse connectors of exemplification. The reflection journal helps contextualize this somewhat, as in the case of absences; however, it underscores the point that there are many variables in a classroom for which teachers must account. Extra time may be needed for students who have been absent, or, as in the case with the three boys who got caught up in the creative side of describing their martial arts club, some students may benefit from topic constraints to maintain an academic focus and alignment with the given models. Additionally, I believe this type of error-through-exuberance could be addressed through active monitoring; though I always strive to monitor actively, further reflection has shown me that I could have done more in this case. Implementing this type of intervention, and teaching SLIFE in general, clearly demand careful, thoughtful planning and constant reflection.

Insight 3

Maximizing the time students spent working in groups was beneficial all

around. While group work comes with plenty of management issues, such as setting up communication norms, and balancing active monitoring with targeted instruction, the students seemed to learn more actively with this increased time in groups and teams. This aligns with Vygotsky's (1978) theory that learning occurs primarily through social interaction with others, and that this interaction is key for a person to acquire skills that lie beyond his or her *zone of proximal development*. While it is true that Vygotsky's work focused on interaction with an engaged mentor, I think it can be said in this case that the instructor's careful pairing of higher- with lower-level peers, and the use of pedagogically based graphic scaffolding, together fulfill the role of mentor interaction. As students began to trust each other with their writing, combativeness subsided and they found greater success in tasks like collective note-taking. Students slowly started to build an editing culture where they were catching more of their own mistakes via the eyes of their peers. Students fluidly switched between L1 and L2 and oftentimes, more proficient students helped less proficient students in ways that I could not. For example, student 7 had been struggling with excessive repetition of verb phrases in his writing, as shown in an utterance of his from the Pre-Test in (11).

(11) *Waste time some apps would not help you because if you just play some games is waste you time and you not learn anything. If you are in some apps doesn't learn you just waste time.*

I had been trying to communicate to this student the nature of this issue for months, but he did not recognize the repetition. In peer editing sessions, I witnessed student

2 explaining the issue to him in Somali. Student 7's eyes lit up and he looked at me knowingly. He did not show any of this repetitiveness in Post-Test 2. Interestingly, student 7's use of repetition may be a reflection of Ong's (1982) finding that learners from oral traditions tend to rely heavily upon formulaic structures. The successful negotiation of meaning through L1 and social interaction between student 2 and 7 strongly reinforces the findings of DeCapua and Marshall's (2010) study regarding MALP and Civil War writing which was cited in Chapter Two.

As a result of this finding, I will incorporate more group-centered learning in my classroom in the future. If I could repeat this study, I would add a presentation element to build on these group dynamics. For example, students could present their essays to the whole class to share their learning, and to celebrate completion of this mini-unit.

Insight 4

The completion of a complicated, abstract process like arguing an opinion in writing is aided by dividing that process into concrete, actionable steps, with explicit instruction, modeling, repetition, and scaffolding. I believe this is perhaps the crux of this study. The scaffolding would be insufficient without the direct teaching, and the direct instruction would not go very far without the repetition and specific steps. Much research has been done about scaffolding and ELLs (Barkaoui, 2007; DeCapua and Marshall, 2011; Derewianka, 1991; Gibbons, 2009; Hyland, 2004a) and many researchers, including Hinkel (2004) have discussed the efficacy of using steps in

writing, but I have not encountered research that advocates joining the steps and the scaffolding in the way this study has done.

As discussed in the reflection journal, using graphic organizers that included steps and the scaffold of color coding and sentence frames (see Appendixes J-L) seemed to help students effectively use the new target language of *so, thus* and *therefore*.

Insight 5

The insight that stays with me most vividly is that SLIFE need more time. After reviewing the pre-tests and post-tests and the reflection journal, it seems clear to me that many of the issues faced would have been diminished through more time and more repetition. This was a very complicated series of lessons and students ultimately received only 15 hours of instruction and two chances to write entire discourses on their own using what they had learned. I am confident they would have become even more proficient with additional practice. This finding aligns with the sentiment put forth by DeCapua, Smathers, and Tang (2009) that SLIFE students need more of everything, especially time. While I was not able to determine clearly the L1 literacy of my students, this reminds me to keep in mind that language learners who are not literate in their L1 often take seven to ten years to learn literacy-related, context-reduced, and cognitively demanding L2 academic language skills depending on age of literacy/schooling onset (Collier, 1989). For example, immigrants at the elementary age range, with at least 2 years of L1 schooling in their home country, take 5 to 7 years to reach the level of average performance by

native speakers on L2 standardized tests when they have received education exclusively in L2 after arrival in the host country. In contrast, young arrivals with no schooling in their first language in either their home country or the host country generally take as long as 7 to 10 years reach the level of average performance by native speakers on L2 standardized tests. Many in this demographic never reach native-level proficiency.

Implications

This study has implications for those working with SLIFE, given the high stakes that education, literacy and writing play in the lives of SLIFE as discussed in Chapter One. The synthesis of strategies unearthed in this project certainly has changed my approach to teaching, and the reflective process has further benefited my teaching as well. Most of these ideas could also be incorporated in teaching other communicative/productive activities, as well as teaching general writing. These insights will lead to changes in my pedagogy, such as encouraging peer helping and peer reviewing, blending concrete and abstract tasks, examining student writing for patterns, and adjusting how I scaffold activities. Moving forward, I will try to leave my students more time to notice patterns using social interaction, and to draw on topics that connect to my students' cultural heritage. I will try to break down complex tasks into actionable steps and incorporate specific scaffolding in the form of graphic organizers, and continue to refine this entire strategy.

In a larger sense, this study has reminded me that what many teachers consider "common sense" is actually a culturally shaped system of thinking and

viewing the world. We may not recognize the assumptions we make in the classroom, such as the universality of logic, but since our students often come from backgrounds with different cognitive orientations, we must endeavor to seek out and exteriorize these assumptions. In both language and logic, direct teaching is crucial to success. After all, "Academic language is no one's first language" (J. Watson, personal communication, May 3, 2016).

To these ends, I will present the findings of this study in the form of a series of professional development sessions for the staff at my school. I will publish my graphic organizers on our school's in-house online knowledge base, and will compile a list of recommended readings and make it available to my district.

Limitations

Firstly, the findings in this research may not be representative of SLIFE in other language arts classes with high numbers of SLIFE. Furthermore, this study included only 12 participants; a larger sample would be needed to be truly representative of all SLIFE. Additionally, there may be variables unique to my class that affected the results, one being the homogeneity of students in terms of country of origin and L1. In this research, the participants came from three different countries, but all spoke Somali as L1 and identified as culturally Somali. Results might differ in a group more heterogeneous cultural and linguistic backgrounds. A second possible variable is the education level of the students. The participants in this study varied in educational backgrounds; the results might differ in a group where students have more similar educational backgrounds. Similarly, the study

might yield different results with students who have been in the country for a more similar period.

The study was conducted for four weeks, with a total of 15 hours of direct instruction and practice, as this was the window of time that was available. This was a good start, but in order to determine more fully the helpfulness of the series of strategies put forth in this study, extended time would be preferable. Lastly, as is typical in any classroom, there are so many variables that it is not possible to determine whether the effects witnessed in this study were due to one particular factor or an interaction of factors.

Further Research

I believe the research conducted here presents a valid beginning for determining how a series of integrated graphic organizers, implemented in an environment informed by the Mutually Adaptive Learning Paradigm (MALP, 2015), can improve students' use of result and exemplification discourse connectors in developing written arguments. This study answered many of my questions; however, many areas remain unexplored. A few are suggested below and all are written with SLIFE in mind.

Since MALP lends itself so well to oral processing and sharing, final presentations of students' essays would have been a good way to build on oral group dynamics, and as a form of celebration for completing this mini-unit. The use of a control group in an identical or similar study for greater comparison would increase the validity of the study. Since the reflection journal showed some potential

in this regard, I think more thematically linked prompts with fewer choices might help students keep a tighter focus with so many other factors at play. Additionally, I would isolate the type of discourse connectors addressed at a given time. For example, I believe students would have made more progress if we had focused only on the discourse connectors of result. Once mastery was shown, we could have then moved on to exemplification. Lastly, I believe this research would further advance instructional practices if a valid connection to L1 literacy could be established. I would suggest, in particular, that further action research and study in the field is needed to better identify and characterize patterns of language use that first appear to be non-standard (such as the overuse of formulaic structures) but actually arise out of L1 reasoning structures based in orality or non-Western epistemological systems.

Conclusion

This study started with a question on using MALP principles combined with specific visual support for SLIFE in hopes of improving their discourse writing proficiency. After conducting my research, I believe that SLIFE at emergent and developing levels (WIDA, 2015e) have the ability to participate successfully in complex writing activities when appropriately supported. This encourages me to continue to use interconnected graphic organizers and MALP principles with SLIFE. Most importantly, I believe that I have found a student-centered, communicative way of structuring lessons that will progress from guided activities of exploration, to more advanced, less supported activities that allows students to manage much of

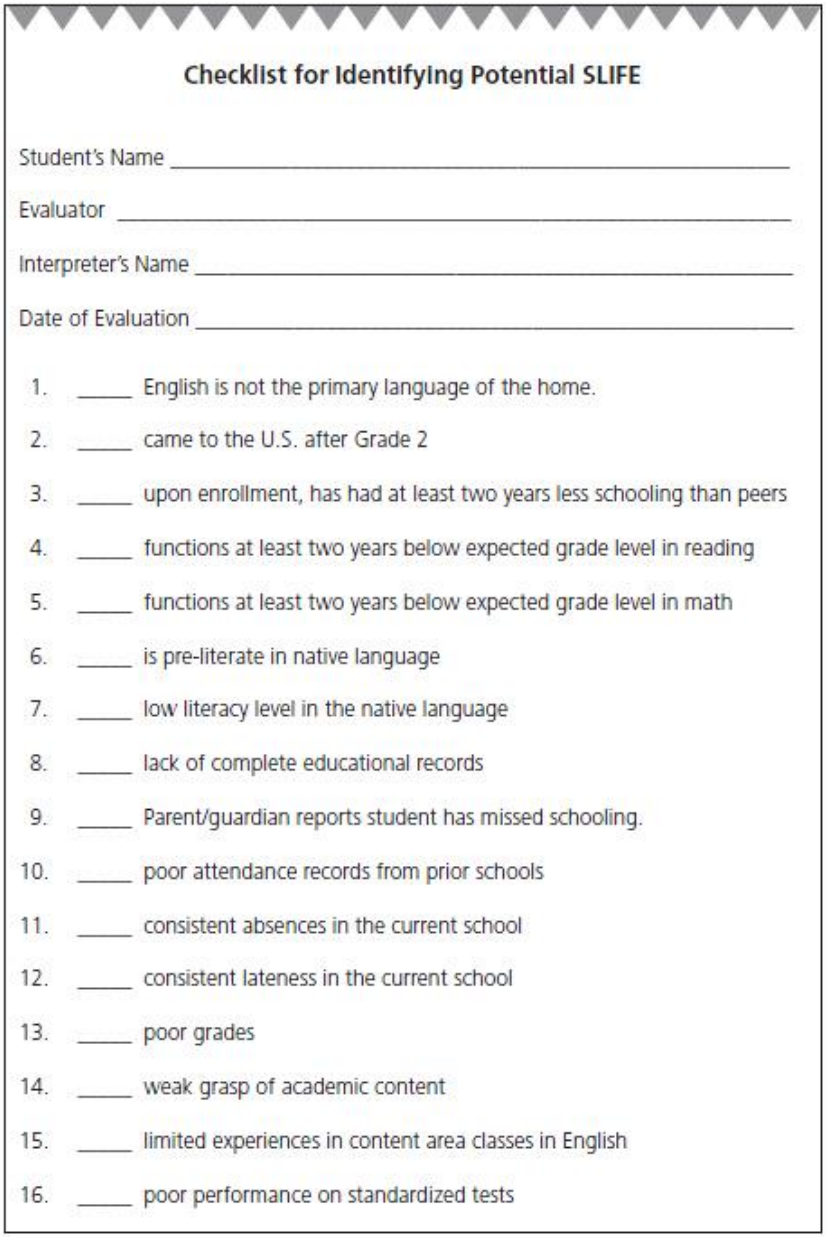
their language on their own. I also feel that I have gained a number of insights that will allow me to scaffold activities, including establishing group norms and processes and increasing the emphasis on peer reviewing.

The researching and writing of this research has been a challenging process, but it has helped me view my students through a new lens, linked to a larger set of oral dynamics and thinking styles. This, in turn, has prompted me to draw upon their oral proficiencies as a foundational skill, upon which to build other skills. I have also gained an understanding of the life factors that affect the academic success of SLIFE, and thus will continue to use teaching practices that are more in accordance with those factors, such as incorporating the MALP approach. I will share with other teachers what I have learned by having informal conversations about visual scaffolding, the efficacy of MALP, and tapping into students' oral funds of knowledge. I plan also to do a short series of professional development sessions at my school to share some of the highlights of this research.

Finally, this process has further reinforced my belief that learning to write well is a critical endeavor, especially in an age where the ability to express oneself proficiently in professional manner can open many doors to employment, further education, and the greater potential to effect change in communities that need it most. With this is mind, I can say that exploring new ways to empower emergent ELL writers with effective tools is an invaluable pursuit.

APPENDIX A

SLIFE Checklist



Checklist for Identifying Potential SLIFE

Student's Name _____

Evaluator _____

Interpreter's Name _____

Date of Evaluation _____

1. _____ English is not the primary language of the home.
2. _____ came to the U.S. after Grade 2
3. _____ upon enrollment, has had at least two years less schooling than peers
4. _____ functions at least two years below expected grade level in reading
5. _____ functions at least two years below expected grade level in math
6. _____ is pre-literate in native language
7. _____ low literacy level in the native language
8. _____ lack of complete educational records
9. _____ Parent/guardian reports student has missed schooling.
10. _____ poor attendance records from prior schools
11. _____ consistent absences in the current school
12. _____ consistent lateness in the current school
13. _____ poor grades
14. _____ weak grasp of academic content
15. _____ limited experiences in content area classes in English
16. _____ poor performance on standardized tests

DeCapua, A., Smathers, W. and Tang, L.F. (2009).

APPENDIX B

Collaborative Scoring Protocol

Collaborative Scoring Protocol

In order to ensure that all members of your collaborative team are scoring student work consistently, your team should practice collaborative scoring. This protocol provides a step-by-step process to guide you through that activity.

Materials: Copies of the rubric, sticky notes, one or more pieces of unscored student work from each teacher's classroom

Step	Procedure	Time Allotment
1	Team reviews the student assignment and the rubric and discusses any scoring procedures that apply to the task.	Five minutes
2	Each team member scores one piece of student work without discussion and puts the rubric score he or she believes is appropriate on a sticky note on the back of the work.	Five minutes, depending on the length of the task
3	The team members pass the pieces of student work to a new team member who also scores the work and puts another sticky note on the back. This process continues until everyone on the team has scored all pieces of student work.	Up to twenty minutes
4	The team turns over a piece of student work to reveal the teachers' scores. The team members discuss the differences in the scores and explain why they each scored it the way they did. This continues until the team has discussed all pieces of student work or until the team feels confident teachers are applying the rubric in the same way.	Varies by the amount of discussion
5	The team makes any needed changes to the rubric to reflect new understanding.	Five minutes
6	The team discusses implications for future instruction and how to respond when students need more time and support.	Ten minutes

Adapted from Solution Tree Press (2014).

APPENDIX C

Scoring Rubric for an Argumentative Essay

Score	Sentence construction (10pts)	Cohesion 1: Claims and evidence (10pts)	Cohesion 2: Use of result connectors (10pts)	Cohesion 3: Use of exemplification connectors (10pts)	Tense (5pts)	Use of transitions (5pts)
10 or 5 excellent to very good	Effective use of a wide variety of correct sentences; variety of sentence length. Almost no sentence fragments or run-ons.	Claims are relevant and possess convincing supporting details	Effective use of the discourse connectors of **result** (because, thus, so , therefore) varied use of **result** connectors correct semantic use of **cause and effect,**	Varied use of **exemplification** connectors (For example, For instance, An example of this is) correct semantic use of **exemplification**	No significant errors in agreement in verb tense	Effective use of transitions— especially first, moreover also, in addition (previously studied)
9-8 or 4 good to average	Effective use of a variety of correct sentences; some variety of length Almost no sentence fragments or run-ons.	Claims are mostly relevant and generally possess convincing supporting details	Use of result connectors with only slight errors; some repetition in use of **result** connectors; **cause and effect** mostly aligned	Use of **exemplification** connectors with only slight errors; some repetition in use of **exemplification** connectors; **claims and examples** mostly aligned	No serious recurring errors in agreement in verb tense	Use of transitions with only slight errors
7-6 or 3 fair to poor	A limited variety of mostly correct sentences; little variety of sentence length Sentence fragments or run-ons evident	Many claims are not relevant to the topic. There are gaps in supporting details And/or Some supporting details are not relevant or convincing	Improper use of or missing result connectors; excessive repetition in use of **result** connectors **cause and effect** not aligned	Improper use of or missing exemplification connectors; excessive repetition in use of **exemplification** connectors **claims and examples** not aligned	Recurring grammar errors are intrusive- inconsistent agreement in verb tenses	Use of transitions with only several errors that begin to impede meaning Or **Missing transitions** in a manner that weakens cohesion
5-4 or 2 inadequate	A limited variety of sentences requiring considerable effort to understand Correctness only on simple short sentences Frequent incomplete or run-on sentences	Most claims are not relevant to the topic. There are few supporting details And/or Supporting details are not relevant or convincing	Improper use of or missing **result** connectors **cause and effect** not aligned	Improper use of or missing **exemplification** connectors **claims and examples** not aligned	Many grammar errors and comprehension problems – inconsistent agreement in verb tenses	Improper use of or **missing** transitions that begin to impede meaning or interfere with comprehension Or **Missing** transitions altogether

Adapted from Hyland (2004b).

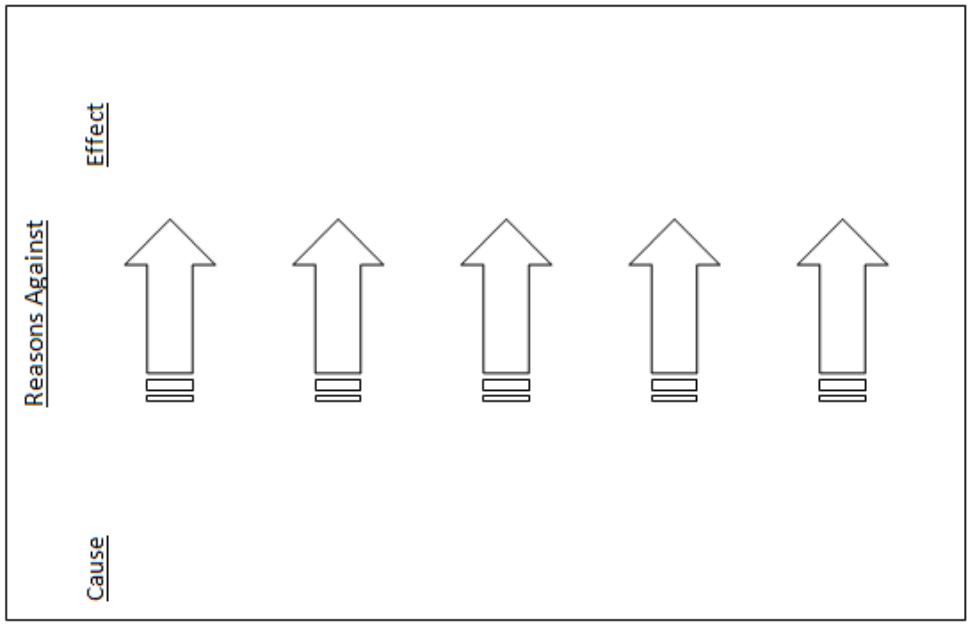
APPENDIX D

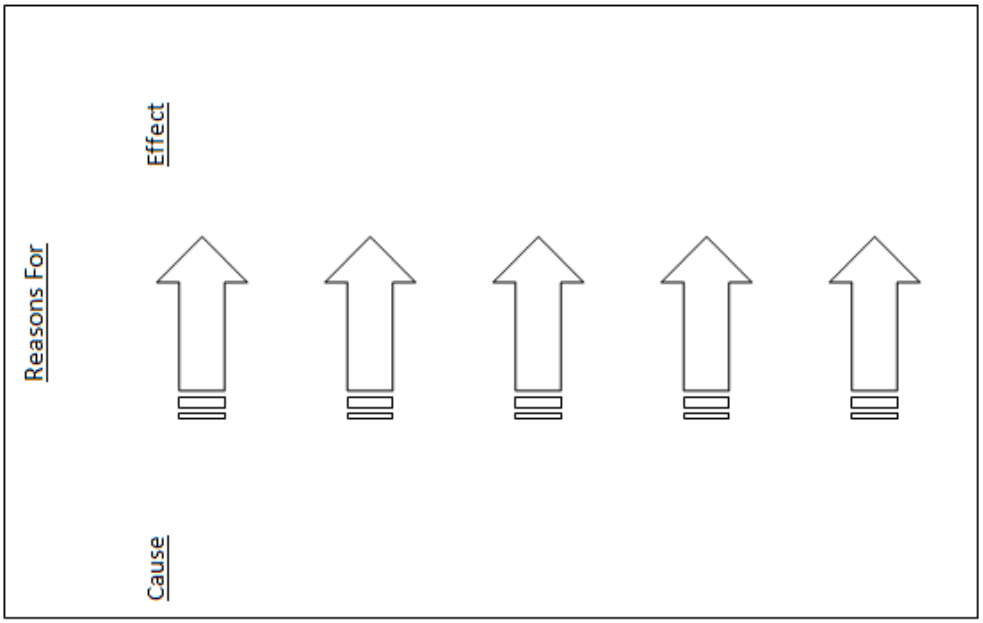
A Sample of Student Work

first, watch movie help me because you can see the mean of Picture. Next, use computer does't help me, because if I just use computer all the time it can't help me I can't even. Learning something, if I all alway use computer. Last, I alway read book at home, my mom alway said read book 40 min, I alway read when I go home 40 mn read book it's help me because if I read it help my brain

APPENDIX E

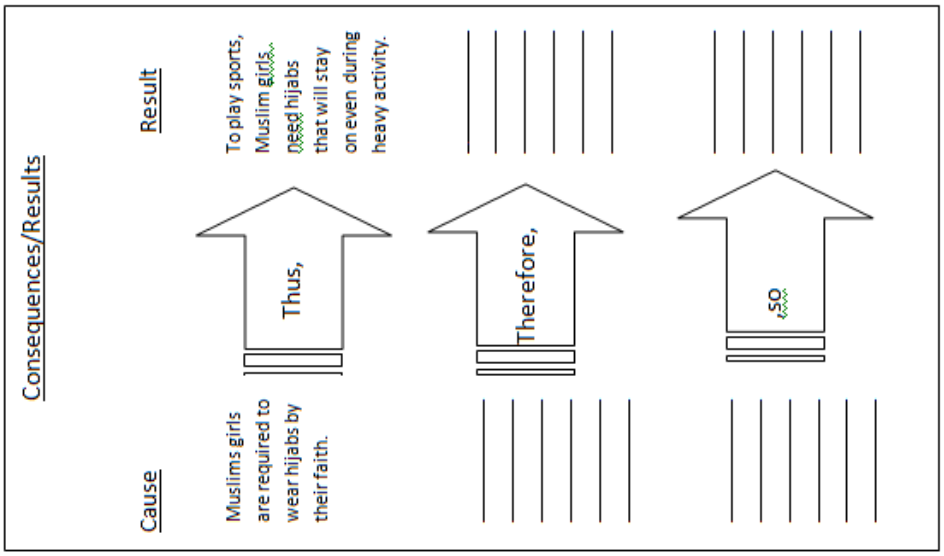
Graphic Organizer 1

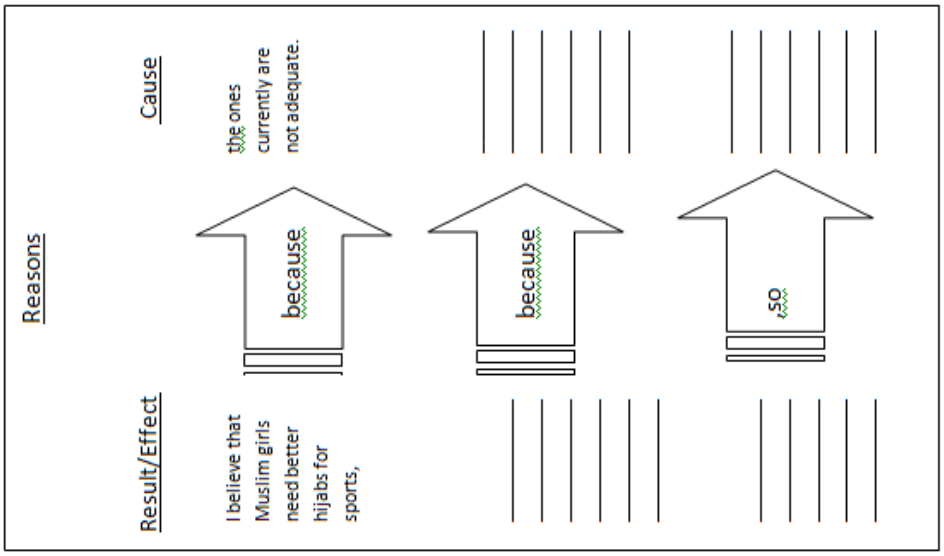

Reasons Against
Effect
Cause


Reasons For
Effect
Cause

APPENDIX F

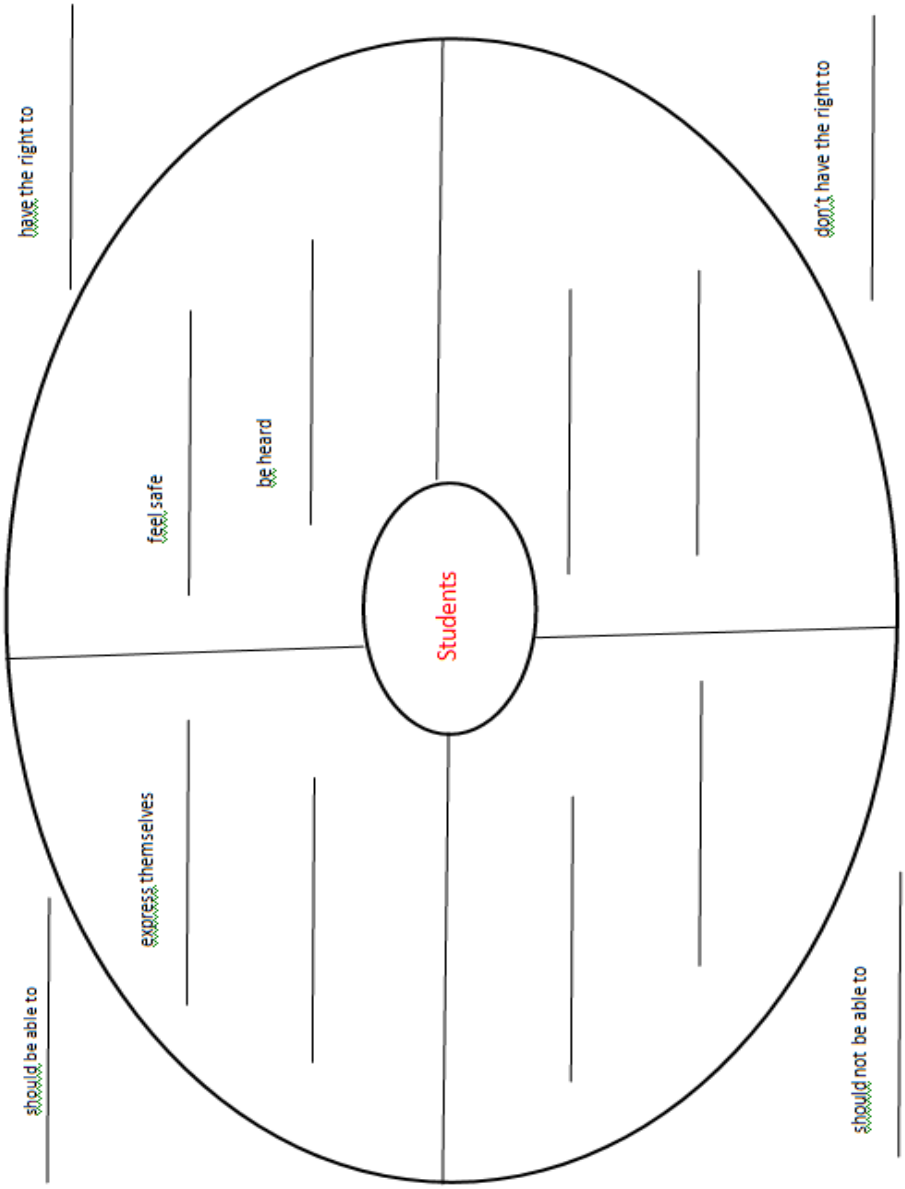
Graphic Organizer 2


Consequences/Results
Cause
Result
Muslims girls are required to wear hijabs by their faith.
Thus,
To play sports, Muslim girls need hijabs that will stay on even during heavy activity.
Therefore,
so


Reasons
Result/Effect
Cause
I believe that Muslim girls need better hijabs for sports,
because
the ones currently are not adequate.
because
so

APPENDIX G

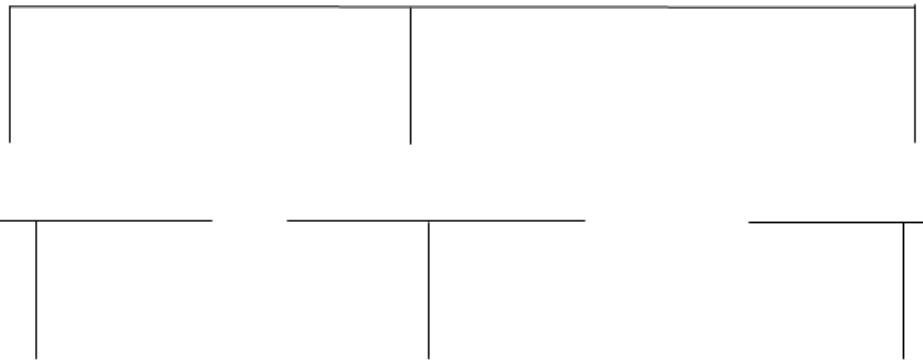
Graphic Organizer 3


have the right to
don't have the right to
feel safe
be heard
Students
express themselves
should be able to
should not be able to

APPENDIX H

Graphic Organizer 4

Topic Sentence: _____-
_____



_____ _____ _____

because (effect >cause) *Therefore/Thus/So* (cause >effect) *Therefore/Thus/So* (cause >effect)

_____ _____ _____

For example, For instance, An example of this is

_____ _____ _____

_____ _____ _____

Closing Sentence: _____-
_____

APPENDIX I

Graphic Organizer 5

Topic Sentence: _____-

_____

First,	In addition,	Lastly,
_____ _____ _____	_____ _____ _____	_____ _____ _____
CAUSE *Therefore/Thus/So* **EFFECT** or **EFFECT** *because* **CAUSE**	**CAUSE** *Therefore/Thus/So* **EFFECT** or **EFFECT** *because* **CAUSE**	**CAUSE** *Therefore/Thus/So* **EFFECT** or **EFFECT** *because* **CAUSE**
_____ _____ _____	_____ _____ _____	_____ _____ _____
For example,	**For instance,**	**An example of this is**
_____ _____ _____	_____ _____ _____	_____ _____ _____

Closing Sentence: _____-

_____

APPENDIX J

Graphic Organizer 6

Part 1

Claim (believe) = _____

Align

Tajudin is fast **because** he has long legs.

For example, he always wins races at recess.

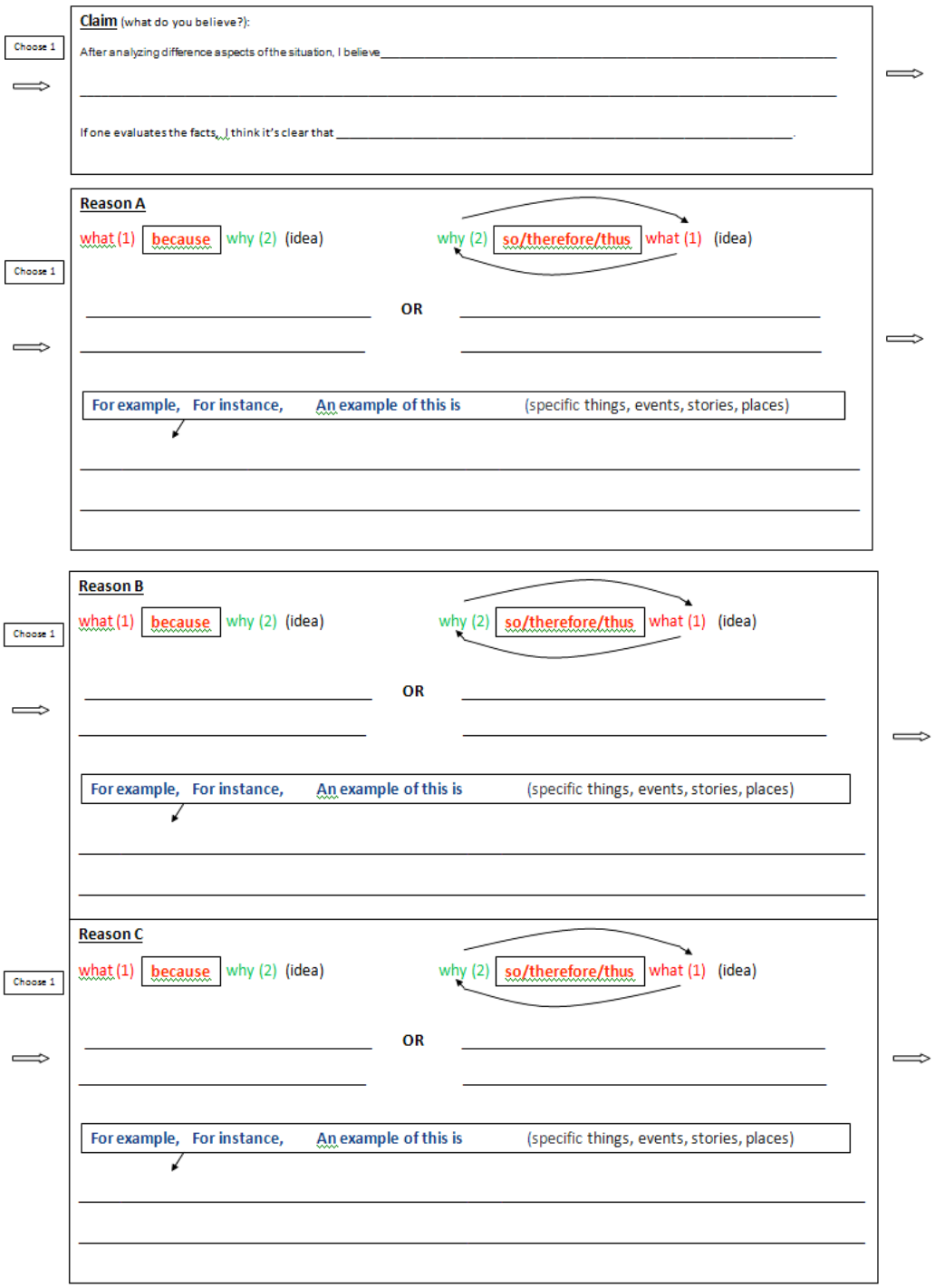
Why idea, belief, **general** situation	Example **specific** things, events, stories, places
Reason A	

Why idea, belief, **general** situation	Example **specific** things, events, stories, places
Reason B	
Reason C	

APPENDIX K

Graphic Organizer 7

Part 2


Claim (what do you believe?):
Choose 1
After analyzing difference aspects of the situation, I believe
If one evaluates the facts, I think it's clear that
Reason A
what (1) because why (2) (idea)
why (2) so/therefore/thus what (1) (idea)
OR
For example, For instance, An example of this is (specific things, events, stories, places)
Reason B
what (1) because why (2) (idea)
why (2) so/therefore/thus what (1) (idea)
OR
For example, For instance, An example of this is (specific things, events, stories, places)
Reason C
what (1) because why (2) (idea)
why (2) so/therefore/thus what (1) (idea)
OR
For example, For instance, An example of this is (specific things, events, stories, places)

APPENDIX L

Graphic Organizer 8

Part 3

CLAIM_____

_____

_____

First, / To start with,

Reason A **1 2 3... or 2 1 3...**

_____

_____

_____

_____

_____

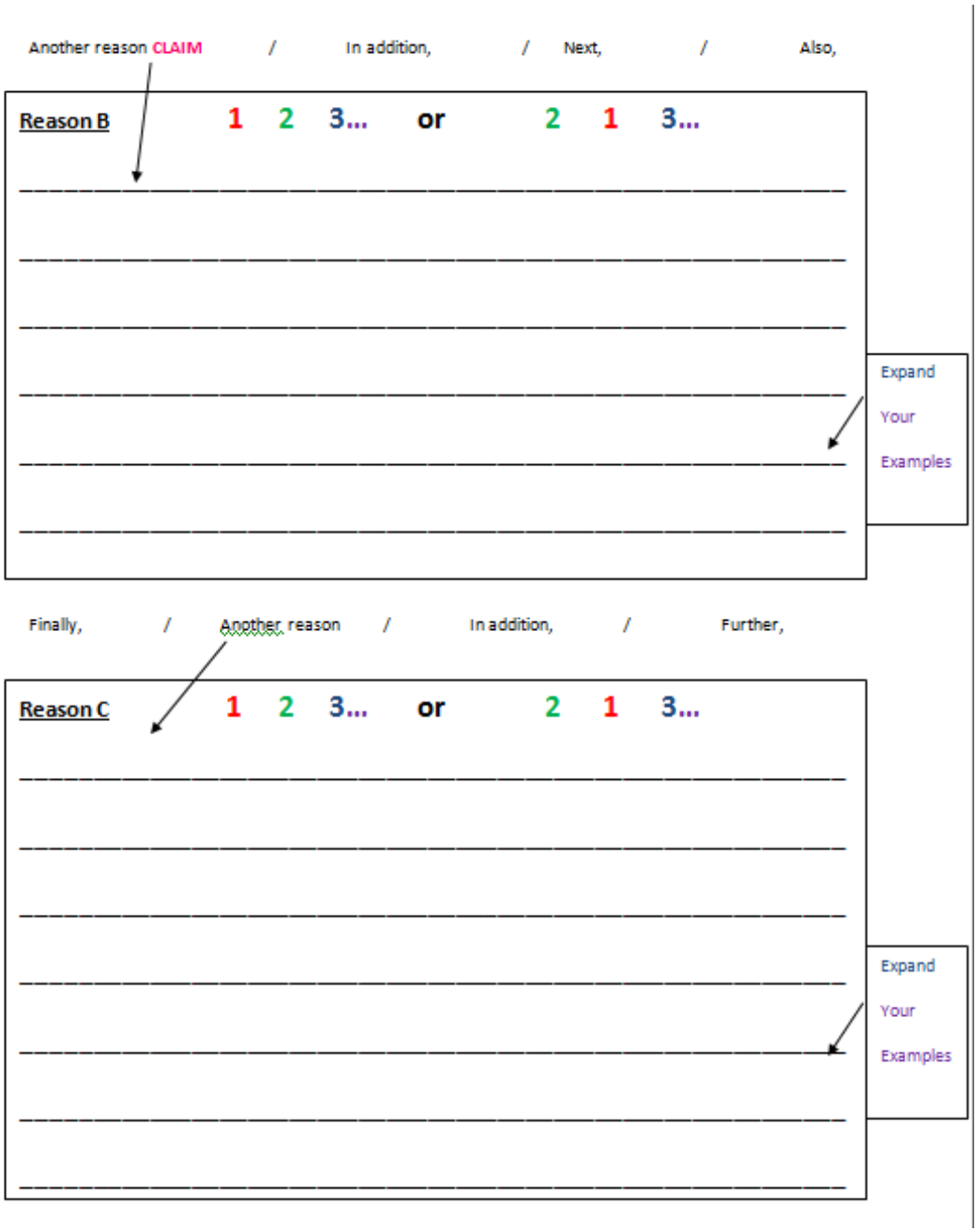
_____

_____

_____

_____

Expand Your Examples


Another reason CLAIM / In addition, / Next, / Also,
Reason B 1 2 3... or 2 1 3...
Expand Your Examples
Finally, / Another reason / In addition, / Further,
Reason C 1 2 3... or 2 1 3...
Expand Your Examples

REFERENCES

Arroyo, W., & Eth, S. (1996). *Post-traumatic stress disorder and other stress reactions.* New Haven, CT: Yale University Press.

Barkaoui, K. (2007). Teaching writing to second language learners: Insights from theory and research. *TESL Reporter*, *40*(1), 35-48.

Bialystok, E. (2002). Acquisition of literacy in bilingual children: A framework for research. *Language Learning 5*, 2, 159-199.

Biber, D., 2006. *University Language: A corpus based study of spoken and written registers* (Studies in Corpus Linguistics). Amsterdam: John Benjamins B.W. Retrieved from Linguistics and Language Behavior Abstracts database.

Bigelow, M., Delmas, R., Hansen, K., & Tarone, E. (2006). Literacy and the processing of oral recasts in SLA. *TESOL Quarterly*, 665-689. Retrieved from Linguistics and Language Behavior Abstracts database.

Bigelow, M., & Tarone, E. (2004). The role of literacy level in second language acquisition: Doesn't who we study determine what we know? *TESOL quarterly, 38*(4), 689-700. Retrieved from Linguistics and Language Behavior Abstracts database.

Bigelow, M., & Watson, J. (2013). The role of educational level, literacy, and orality in L2 learning. *The Routledge Handbook of Second Language Acquisition,* 461-

475.

Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain*. New York: David McKay Company.

Bramão, I., Mendonça, A., Faísca, L., Ingvar, M., Petersson, K. M., and Reis, A. J. (2007). The impact of reading and writing skills on a visuo-motor integration task: A comparison between illiterate and literate subjects. *International Neuropsychological Society, 13*, 359–364. Retrieved from Linguistics and Language Behavior Abstracts database.

Burns, A. (2010). *Doing action research in English language teaching: A guide for practitioners.* New York, NY: Routledge.

Capps, R., Fix, M., Murray, J., Ost, J., Passel, J. S., & Herwantoro, S. (2005). The new demography of America's schools: Immigration and the No Child Left Behind Act. *Urban Institute* [serial online]. Retrieved from the ERIC database.

Castro-Olivo, S. M. (2014). Promoting social-emotional learning in adolescent Latino ELLs: A study of the culturally adapted Strong Teens program. *School Psychology Quarterly*, *29*(4), 567. Doi 10.1080/09362835.2011.579846

Center for Applied Linguistics (2000). The Language Experience Approach and adult learners. *ESL Resources*. Retrieved from http://www.cal.org/caela/esl_resources/digests/LEA.html

Collier, V. (1989). How long? A synthesis of research on academic achievement in a second language. *TESOL Quarterly, 23,* 509-531.

Constantino, R., & Lavadenz, M. (1993). Newcomer schools: First impressions. *Peabody Journal of Education*, *69*(1), 82-101.

Cummins J, (1991). Conversational and academic language proficiency in bilingual contexts. *Reading in two languages*. *AILA review, 8*, 75-89.

Cummins, J. (2003). Basic interpersonal communicative skills and cognitive academic language Proficiency. J. Cummins Bilingual Education Web. Retrieved from http://www.iteachilearn.com/cummins/bicscalp.html.

Cummins, J., Bismilla, V., Chow, P., Cohen, S., Giampapa, F., Leoni, L., Sandhu, P., & Sastri, P., (2005). Affirming identity in multilingual classrooms. *Educational leadership, 63*(1), 38.

De Beaugrande, R. (1981). *Introduction to text linguistics*. New York, NY: Longman.

DeCapua, A., & Marshall, H. W. (2010). Serving ELLs with limited or interrupted education: Intervention that works. *TESOL Journal, 1*(1), 49-70. Retrieved from the ERIC database.

DeCapua, A., & Marshall, H. W. (2011a). *Breaking new ground: Teaching students with limited or interrupted formal education in secondary schools.* Ann Arbor, MI: University of Michigan Press.

DeCapua, A., & Marshall, H. W. (2011b). Reaching ELLs at risk: Instruction for students with limited or interrupted formal education. *Preventing School Failure: Alternative Education for Children and Youth*, *55*(1), 35-41. Retrieved from the ERIC database.

DeCapua, A., Smathers, W., & Tang, F. (2007). Addressing the challenges and needs

of students with interrupted formal education (SIFE). *Educational Policy and Leadership, 65*, 40-46. Retrieved from the ERIC database.

DeCapua, A., Smathers, W., & Tang, L. F. (2009). *Meeting the needs of students with limited or interrupted schooling: A guide for educators*. Ann Arbor, MI: University of Michigan Press.

Derewianka, B. (1991). *Exploring How Texts Work.* Newtown, NSW, Australia: Primary English Teaching Association.

Developmental Studies Center Staff (2003). *Making meaning, volume 1 making meaning series*. Emeryville, CA: Developmental Studies Center.

Echevarria, J., Vogt, M., & Short, D. (2008). *Making content comprehensible for English learners: The SIOP model*. Boston, MA: Allyn & Bacon.

Ellis, R. (2005). *Instructed second language acquisition: A literature review*. Research Division, Ministry of Education.

Feldman, K., & Kinsella, K. (2005). *Narrowing the language gap: The case for explicit vocabulary instruction.* New York, NY: Scholastic.

Fenner, D. S. (2013). Advocating for English Learners. Thousand Oaks, CA: Corwin Press.

Flynn, J. R. (2007). *What is intelligence?: Beyond the Flynn effect*. Cambridge, UK: Cambridge University Press.

Fraser, B., 1999. What are discourse markers? *Journal of Pragmatics, 31*: 931-952. Retrieved from Linguistics and Language Behavior Abstracts database.

Freeman, Y. S., Freeman, D. E., & Mercuri, S. (2002). *Closing the achievement gap:*

How to reach limited-formal-schooling and long-term English learners. Portsmouth, NH: Heinemann

Fry, R. (2005). *The higher dropout rate of foreign-born teens: The role of schooling abroad*. Washington, DC: Pew Hispanic Center.

Gass, S. M., & Selinker, L. (2008). *Second language acquisition: An introductory course*. New York: Routledge.

Gass, S. M., & Varonis, E. (1994). Input, interaction, and second language production. *Studies in second language acquisition*, 16, 283-283. Retrieved from Linguistics and Language Behavior Abstracts database.

Gibbons, P. (2009). *English learners, academic literacy, and thinking. Learning in the challenge zone.* Portsmouth, NH: Heinemann.

Green, E. G., Deschamps, J. C., & Paez, D. (2005). Variation of individualism and collectivism within and between 20 countries a typological analysis. *Journal of Cross-Cultural Psychology, 36(*3), 321-339. Retrieved from the ERIC database.

Gutierrez, K. D., & Rogoff, B. (2003). Cultural ways of learning: Individual traits or repertoires of practice. Educational researcher, 32(5), 19-25. Retrieved from Linguistics and Language Behavior Abstracts database.

Halliday, M. A. K., & Hasan, R. (1976). *Cohesion in English*. London, U.K.: Longman

Halliday, M. A., & Hasan, R. (1985). *Language, context, and text.* Geelong, Victoria: Deakin University.

Heinemann (2010). *The Fountas & Pinnell benchmark assessment system*.

Portsmouth, NH: Heinemann

Hinkel, E. (2004). *Teaching academic ESL writing*. New Jersey: Lawrence Erlbaum Associates.

Humphrey, S., Droga, L., & Feez, S. (2012). *Grammar and meaning*. Sydney, Australia: Primary English Teaching Association Australia.

Hyland, K. (2004a). *Disciplinary discourses: Social interactions in academic writing*. University of Michigan Press.

Hyland, K. (2004b). *Genre and second language writing*. University of Michigan Press.

Kalajahi, S. A. R., Abdullah, A. N., Mukundan, J., & Tannacito, D. J. (2012). Discourse Connectors: An Overview of the History, Definition and Classification of the Term. *World Applied Sciences Journal, 19*(11), 1659-1673. Retrieved from Linguistics and Language Behavior Abstracts database. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.389.9618&rep=rep1&type=pdf

Kasper, L. F. (1999). Print, film, and hypertexts: A multimedia model for discipline-based ESL instruction. *Teaching English in the Two Year College, 26,* 406-414. Retrieved from http://lkasper.tripod.com/print.pdf

Khan, R. A. (2012). *Meeting the needs of English language learners with interruptions in their formal schooling: a comparative case study of two teachers' classrooms* (Unpublished doctoral dissertation) University of Toronto, Toronto ON. Retrieved from ProQuest Dissertations & Theses Global Full Text database.

Khoii, R. (2011). A solution to the dilemma of writing in a foreign language: Adaptive mentorship. I*nternational Journal for Cross-Disciplinary Subjects in Education (IJCDSE),* 2, (4). Retrieved from http://www.infonomics-society.org/IJCDSE/A%20Solution%20to%20the%20Dilemma%20of%20Writing%20in%20a%20Foreign%20Language_Adaptive%20Mentorship.pdf

Kim, W., & Linan-Thompson, S. (2013). The effects of self-regulation on science vocabulary acquisition of English language learners with learning difficulties. *Remedial and Special Education,* Doi 10.1177/0741932513476956

MK Montero, M., Newmaster, S., & Ledger, S. (2014). Exploring early reading instructional strategies to advance the print literacy development of adolescent SLIFE. *Journal of Adolescent & Adult Literacy, 58*(1), 59-69.

LEAPS Act (2014). *2014 MN learning for English academic proficiency and Success (LEAPS) act*. Retrieved from http://mneep.org/wp-content/uploads/2015/03/LEAPS-Act-final-description.pdf

Lee, I. (2002). Teaching coherence to ESL students: A classroom inquiry. *Journal of second language writing, 11*(2), 135-159. Retrieved from ERIC database.

Literary Devices (2015). Discourse definition*. Definition and Examples of Literary Terms.* Retrieved from http://literarydevices.net/discourse/

Long, M. H. (1996). The role of the linguistic environment in second language acquisition. *Handbook of Second Language Acquisition*, *2*, 413-468.

Macintyre, C. (2000). *The art of action research in the classroom*. London, UK: David Fulton Publishers.

Mackey, A., & Gass, S. (2008). *Second language research: Methodology and design*. New York, NY: Routledge Taylor & Francis Group

MALP (2015). *Mutually adaptive learning paradigm – MALP teacher planning checklist*. Retrieved from http://malpeducation.com/resources/

McKay, S. L. (2006). *Researching second language classrooms*. Mahwah, NJ: Routledge.

McMillan, J. H. (2004). *Educational research: Fundamentals for the consumer.* Boston, MA: Pearson Education, Inc.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: John Wiley & Sons.

Minnesota Department of Education (2014). *Minnesota K-12 academic standards in English language arts.* Retrieved from http://education.state.mn.us/mdeprod/idcplg?IdcService=GET_FILE&dDocName=005238&RevisionSelectionMethod=latestReleased&Rendition=primary

Minnesota Statutes (2015). 124D.59 definitions. *The Office of the Revisor of Statutes.* Retrieved from https://www.revisor.mn.gov/statutes?id=124D.59&year=2015

Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory Into Practice*, *31*(2), 132-141. Retrieved from the ERIC database.

Morse, S. C. (1997). *Unschooled migrant youth: Characteristics and strategies to serve them.* Charleston, WV: Office of Educational Research and Improvement (ED).

Retrieved from the ERIC database.

The National Clearinghouse for English Language Acquisition (NCELA). (2011). *The growing number of English learner students*. Retrieved from http://www.ncela.us/files/uploads/9/growing_EL_0910.pdf

Nieto, S. (2000). Placing equity front and center some thoughts on transforming teacher education for a new century. *Journal of Teacher Education*, *51*(3), 180-187. Retrieved from Education Full Text database.

Olson, D. R. (2006). Oral discourse in a world of literacy. *Research in the Teaching of English, 41*, 136–143.

Olson, D. R., & Torrance, N. (1991). *Literacy and orality.* Cambridge, UK: Cambridge University Press.

Ong, W. (1982). *Orality and literacy. The technologizing of the word*. London, UK: TJ Press.

Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: evaluation of theoretical assumptions and meta-analyses. *Psychological bulletin, 128*(1), 3. Retrieved from Education Full Text database.

Paquot, M. (2008). Exemplification in learner writing: A cross-linguistic perspective. *Phraseology in Foreign Language Learning and Teaching*, 101-119. Retrieved from Education Full Text database.

Philp, J. (2003). Constraints on "noticing the gap". *Studies in Second Language Acquisition, 25*(01), 99-126.

Piaget, J. (1952). *The origins of intelligence in children*. Oxford, UK: International Universities Press.

Porter, C. M. (2013). *Honoring counterstories: Utilizing digital storytelling in the culturally responsive classroom to investigate the community cultural wealth and resiliency of students with limited or interrupted formal education* (SLIFE). University of Massachusetts Boston. Retrieved from the Linguistics and Language Behavior Abstracts database.

Reeves, D. (2010). *Elements of grading: A guide to effective practice*. Bloomington, IN: Solution Tree Press.

Reis, A., Petersson, K. M., Castro-Caldas, A., & Ingvar, M. (2001). Formal schooling influences two- but not three-dimensional naming skills. *Brain and Cognition, 47, 397*–411. Retrieved from Education Full Text database.

Rogoff, B. (2003). *The cultural nature of human development*. Oxford University Press.

Rosselli, M., & Ardila, A. (2003). The impact of culture and education on non-verbal neuropsychological measurements: A critical review. *Brain and Cognition, 52*, 326–333. Retrieved from the Linguistics and Language Behavior Abstracts database

Scribner, S., & Cole, M. (1978). Literacy without schooling: Testing for intellectual effects. *Harvard Educational Review, 48(*4), 448-461. TABE Journal, 9(1), 1-22. Retrieved from Education Full Text database.

Smith, D. G. (1999). *Pedagon: Interdisciplinary essays in the human sciences,*

pedagogy and culture. New York: Peter Lang.

Solution Tree Press (2014). Collaborative scoring protocol - solution tree. *Collaborating for Success with the Common Core*. Retrieved from http://soltreemrls3.s3-website-us-west-2.amazonaws.com/solution-tree.com/media/pdfs/Reproducibles_CFSWCC/collaborativescoringprotocol.pdf

Sum, A., Kirsch, I., & Yamamoto, K. (2004). *A Human Capital Concern: The Literacy Proficiency of US Immigrants*. Policy Information Report. Educational Testing Service.

Swales, J. (1990). *Genre analysis: English in academic and research settings*. Cambridge, UK: Cambridge University Press.

TESOL (2013). Making the transition: culturally responsive teaching for adolescent and adult English learners with limited or interrupted formal education (M-3). Retrieved July 2015.

United States Census Bureau (2013). *How do we know? America's foreign born in the last 50 years*. Retrieved from http://www.census.gov/library/infographics/foreign_born.html

Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press.

Walsh, K. (2011). Will *teachers effectively meet the literacy needs of middle school students with limited or interrupted formal education* (SLIFE)? (Unpublished master's thesis) Molloy College, Long Island NY.

Watson, J. (2015). Essential program components for meeting the learning needs of students with limited or interrupted formal education [PowerPoint slides]. *Closer Connections Conference.* Retrieved from http://www.slideshare.net/JillWatsonPhD/dakota-tesl-closer-connections-conference-2015-watson-keynote

Web Center of Social Research Methods (2006). *Likert scaling*. Retrieved from http://www.socialresearchmethods.net/kb/scallik.php

Weber, N (2000). Sink or Swim? A Look into an English Immersion Class. Retrieved from http://ldt.stanford.edu/~ninaweb/Sink%20or%20swim.pdf

WIDA (2015a). Focus on SLIFE: students with limited or interrupted formal education. Retrieved July 2015 from https://www.wida.us/get.aspx?id=848

WIDA (2015b). Performance definitions speaking and writing, grades k–12. Retrieved July 2015 from https://www.wida.us/get.aspx?id=543

WIDA (2015c). *English language proficiency standards and resource guide.* Retrieved from https://www.wida.us/get.aspx?id=4

WIDA (2015d). *Consortium Members.* Retrieved from https://www.wida.us/membership/states/

WIDA (2015e). *ACCESS for ELLs English language proficiency test.* Retrieved from https://www.wida.us/assessment/access/

WIDA (2015f). *WIDA-ACCESS Placement Test.* Retrieved from https://www.wida.us/assessment/W-APT/

WIDA (2015g). ACCESS for ELLs English language proficiency test*. School Frequency*

Report –2015.

Williams, J. P., Nubla-Kung, A. M., Pollini, S., Stafford, K. B., Garcia, A., & Snyder, A. E. (2007). Teaching cause—effect text structure through social studies content to at-risk second graders. *Journal of Learning* Disabilities, 40(2), 111-120. Retrieved from Education Full Text Database

Wooffitt, R. (2005). Conversation analysis and discourse analysis: A comparative and critical introduction. London, U.K.: Sage.

Wright, W. E., & Li, X. (2006). Catching up in math? The case of newly-arrived Cambodian students in a Texas intermediate school. *TABE Journal, 9*(1), 1-22. Retrieved from Education Full Text Database

Wright, W. E. (2010). *Foundations for teaching English language learners: Research, theory, and practice*. Philadelphia, PA: Caslon.