MAKING THE CONTENT OF A LANGUAGE ARTS BENCHMARK TEST ACCESSIBLE FOR LOW LEVEL READERS: A FUNCTIONAL LINGUISTICS APPROACH

by

Bridget Erickson

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 2014

Primary Advisor: Cynthia Lundgren
Secondary Advisor: Deirdre Kramer
Peer Reviewer: Ann Fehrenbach

To my students, past and present, who inspire me to seek and find answers.

ACKNOWLEDGEMENTS

Thank you to Cynthia Lundgren for your mentorship. Your endless passion to make education accessible to all children inspires me to learn more and be more for my students. Thank you to Deidre and Ann. I am indebted to you both for your selfless commitment and work on this project. A final thank you to my family - to my parents for instilling a respect for learning and education, to my husband for your unvarying support that made earning this degree possible, and to my children for all that you are and all that you will grow to be. I love you.

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION

Background and Role of the Researcher.....1

Summary.....6

CHAPTER TWO: LITERATURE REVIEW

Existence of an Achievement Gap in Reading: The Matthew Effects.....8

Academic Language.....10

Origins of the Theory of Academic Language.....10

The Language and Culture of Schooling.....11

An Academic Language Gap for Non-Mainstream Students.....12

Systemic Functional Linguistics.....14

Overview of Systemic Functional Linguistics.....15

Reading Pedagogies of Functional Language Analysis and Genre-Theory.....17

The Research Gap.....20

Research Question.....21

Summary.....21

CHAPTER THREE: METHODS

Chapter Overview.....23

Research Paradigm.....23

Mixed Methods Study.....23

Data Collection.....24

Participants.....24

Location.....28

Technique 1: Text Analysis of End of Unit Benchmark Test..... 24

Technique 2: Student Test Scores from Weekly and End of Unit

Comprehension Tests 29

Technique 3: Student-Teacher Interaction in Doing Text Analysis.....29

Technique 4: Teacher Journal.....29

Procedure.....29

Data Analysis.....29

Technique 1: Text Analysis of End of Unit Benchmark Test..... 29

Technique 2: Student Test Scores from Weekly and End of Unit

Comprehension Tests 30

Technique 3: Student-Teacher Interaction in Doing Text Analysis.....32

Technique 4: Teacher Journal.....32

Verification of Data.....32

Ethics.....32

Conclusion.....33

CHAPTER FOUR: RESULTS.....34

Text Analysis Data.....34

Teacher journal data - SFL lesson objectives, pedagogical tools, and SFL guiding

questions.....38

Aggregate and Individual Student Test Scores and Teacher Journal Data, Including Teacher Reflections, Examples of Teacher Scaffolds....47

CHAPTER FIVE: CONCLUSION....97

Major Findings....97

Limitations....102

Implications....104

Further Research....105

Conclusion....105

APPENDICES

Appendix A: Guiding Principles of Functional Language Analysis....108

Appendix B: A Guide to Functional Language Analysis....110

Appendix C: Basic Education Genres and their Sub-Genres....112

Appendix D: Outline: Genre-Theory - Lesson Plan Structure....114

Appendix E: Functional Language Analysis of Test Questions....116

Appendix F: Sample Questions: Language Arts Benchmark Test: Third Grade....118

Appendix G: Sample Questions: Language Arts Benchmark Test: Fourth Grade....120

Appendix H: Sample Questions: Language Arts Benchmark Test: Fifth Grade....122

Appendix I: Template: SFL Guided Reading Lesson Plan Template....124

REFERENCES....125

CHAPTER ONE: INTRODUCTION

Background and Role of Researcher

Growing up in a working class home, I was not financially privileged, but my parents were, through a variety of means, able to send me to a college preparatory private high school. It was here that I met classmates who did come from very privileged, highly educated family backgrounds with generations representing the upper echelon of society. The language of these homes mirrored that of the school making their access to the academic language seamless. One day this accessibility was made personally clear as I stood in the ornate vestibule of my friend Kelly's[1] home waiting for my mother to pick me up. I was relating a story to Kelly about our friend Caty, who was also there sharing in our conversation. Rather than use Caty's name or *you,* I continually referred to her as *she* to recount the story. A few minutes passed when I was interrupted by Kelly's first grade sister, who was carefully listening in on the conversation, to tell me it how rude it was to use pronouns when referring to a person present in the conversation. This six year old told me it would be more polite to use Caty's name when continuing my story. Never had I heard such, a rule, and I was struck then and now that this small child barely into her own schooling was socialized to easily catch a prescriptive language error I did not even know existed. And so began my first introduction to language, knowledge, and

[1]All names have been changed to pseudonyms.

societal codes. A few years later, as an undergraduate education major doing clinicals and student teaching in an urban school district in a Midwestern minority-majority city, I worked with students whose families' hierarchy of needs were that of basic physical needs - food, housing, clothing, far from that of proper pronoun use in conversation. A good college friend of mine, DeMarcus, grew up in a family like that of the students I worked with sharing with me stories of completing homework on the floor of his living room to avoid stray gunfire from the neighborhood, maintaining a cultural code to never call the police which forced him for days to step over a slain gang member's body dropped on his back step. DeMarcus, knowing my educational background and frustrated by his perception of having received a modified curriculum as a student in an impoverished school, encouraged me to teach my students with the same high standards the prep school expected, regardless of the students' socioeconomic conditions. Along with my own experiences, I heeded his advice and built a teaching philosophy based on a belief that a child's socioeconomic background should not determine her full access to the best education available.

This belief of educational equality is rooted in our nation's history. When, in 1954, the 1896 *Plessey v. Ferguson* court ruling of separate but equal was overturned by *Brown v. Board of Education*, a mandate for true educational equality was established. Yet in the fifty years since, students are still not receiving education that is equal as the achievement gap widens for varying socioeconomic groups. What causes this? What are the best teaching methods to achieve equality and close this gap? Is it simply high standards for all as my friend suggested?

As a fourth grade classroom teacher, I held true to this belief of high standards for all and, along with sound pedagogy, it produced satisfying results as students typically made, or exceeded, expected growth goals; however, I was continually frustrated with my struggle to scaffold low level readers who scored below the twentieth percentile on standardized tests to achieve grade level proficiency. I began a new role two years ago as a third to fifth grade literacy specialist with great confidence I would easily find the solution to my frustrations by concentrating on one content area, having the luxury of providing highly differentiated lessons to very small groups of low level readers, being free of most distractions experienced as a mainstream teacher, and quickly bring the students to grade level. I knew others before me had not been able to accomplish this, but that was because their standards were not high enough, their methods not skilled enough. With this ego, I even had the gall to seriously ask my principal what would happen to my position in January once all of the students reached grade level (he told me I could take the rest of the year off). Reality, of course, soon sunk in two months later when I received the results from the first language arts benchmark assessment of the year, a district-mandated test of comprehension and vocabulary: all of my students failed; not one reached the proficiency threshold of correctly answering eighty percent of the questions. As teachers do, I responded to this by strengthening my pedagogy with an incorporation of research-based methods such as Question Answer Response (Raphael, Highfield, & Au, 2006), cognitive strategy lessons (Harvey & Goudvis, 2007), and reciprocal teaching (Palinscar & Brown, 1984); yet, the outcome did not substantially change. Students simply could not pass the benchmark assessment.

In addition to changing my pedagogical practices, I also placed a greater emphasis on creating a more reliable and valid set of data. By triangulating the benchmark data with more consistent daily progress monitoring and adding additional pre and post tests beyond the benchmark, such as an informal reading inventory (IRI) and fluency measure, the results indicated growth for students, even indicating grade level proficiency for some based on these measures, but a continued general failure on the benchmark remained as nearly all the low level readers I worked with could not pass the proficiency threshold. My reflections continued. Why are these students able to show significant growth on measures such as an IRI or fluency measure, but not on the benchmark? Is the benchmark assessment linguistically denser than the other measures?

While the majority of my students are not English as a Second Language (ESL) learners, many do have backgrounds that do not reflect the mainstream. Sociolinguist Shirley Brice Heath (1983) states that mainstream sects of society are found throughout the world and are "literate, school-oriented, aspiring to upward mobility through success in formal institutions, and looking beyond the primary networks of family and community for behavioral models and value orientations" (p.392). While non-mainstream students arrive to school with rich oral backgrounds (Cazden, John, & Hymes, 1972; Heath, 1983; Wells, 1989), Schleppegrell (2004) states that knowledge in schools is not measured in spoken form but rather in written form, and consequently, a strong link between social class and linguistic skills arises. Furthermore, Fang and Schleppegrell (2010) say the cognitive comprehension strategies, such as those I had incorporated into my teaching, are "oriented more toward demonstrating comprehension than learning to

comprehend" (p.588). Considering this information, an explanation as to why my students were not demonstrating grade level growth on the benchmark assessments despite intensive instruction in the cognitive comprehension strategies might lie in complex academic language that may be embedded in the texts and questions of the benchmark assessment.

Cummins (1980) popularized the idea of academic language being distinct from social language with his development of Basic Interpersonal Communication Skills (BICS). Here, educators learn there is a distinct language of school, and ESL learners need, in addition to social language, explicit instruction in academic language.

Further study (Mehan, 1979; Heath, 1983; Wells, 1989; Schleppegrell, 2004), shows the gap is one of language between the students of the powerful mainstream and students not of the mainstream. Those whose parents are familiar with the academic structures of the mainstream pass that familiarity on to their children through socialization; whereas, others, not having those same experiences, cannot. Thus, on the first day of school, a linguistic gap exists, and consequently, a knowledge gap of the content does as well. This gap in the knowledge of the content grows and continues to widen as the language becomes denser and more complex in the later elementary, middle and high school years.

Systemic functional language (SFL) researchers, such as Halliday, Christie, Schleppegrell, and Derewianka, advocate the necessity to teach academic language not just to second language learners but all students who represent the non-mainstream, monolingual and bilingual alike. Functional language analysis along with genre-based

approaches are pedagogical techniques, developed from the SFL framework, that teachers have successfully implemented in classrooms to explicitly teach the language of the content. History, science, mathematics are all areas in which these methods have been successfully applied (Achugar, Schleppegrell, & Oteiza, 2007; Fang & Schleppegrell, 2008; Schleppegrell, Achugar, & Oteíza, 2004). However, despite education being in an era of high stakes testing, no published research is known to be available in regards to functional language analysis of test questions (M. Schleppegrell (personal communication, September 4, 2013)). Thus, this research is an effort to answer the following question:

1. How does a functional linguistics approach enhance low level readers understanding of text and enable them to answer test questions on a benchmark test?

Summary

In my experience, many low level readers, receiving literacy intervention services, show growth on assessments such as IRIs and fluency measures but continue to struggle to demonstrate proficiency on language arts benchmark assessments. Considering these students often struggle with the academic language of schooling, I want to understand if the academic language structures of the language arts benchmark test need to be explicitly taught to students in order for the test to accurately assess their comprehension level. The following chapters will review literature, specify methods used, report the results, and conclude with suggestions for best practice. In the literature review, the existence of an achievement gap in reading, academic language, systemic functional linguistics, the research gap and the research question will be presented. The

methods chapter will include the mixed methods paradigm, background on study participants, data collection procedures, verification of data, and ethics of the study. Chapter four will include results from the data collected, and chapter five will discuss conclusions, limitation and implications of the findings.

CHAPTER TWO: LITERATURE REVIEW

The purpose of this study is to determine how does a functional linguistics approach enhance low level readers understanding of text and enable them to answer test questions on a benchmark test. In the pull-out intermediate elementary level reading program in which I teach, many students typically demonstrate little or no overall reading progress on the district required benchmark test but do show progress on other literacy growth measures such as an IRI and fluency measure. Through this study, I will do a functional language analysis of the benchmark test, teach the students how to analyze text themselves, and measure the effect of an SFL approach on student performance as measured by the benchmark test.

This chapter presents the existence of an achievement gap in reading among students, an overview of the academic language of schooling and the difficulties it presents to non-mainstream students. SFL will be reviewed along with the research that explains how the pedagogies of functional language analysis and genre-theory have been implemented in schools to raise success rates for students who do not have experience with academic language. Finally, a description of the gap in the research is presented.

Existence of an Achievement Gap in Reading: The Matthew Effects

All of the low level third, fourth and fifth grade readers I work with have received previous reading intervention services, many since first grade; yet, they continue to significantly lag behind their peers. The Matthew Effect confirms an achievement gap

can exist among readers that is evident the first day of school and quickly accumulates as the years pass. "For to everyone who has, more will be given and he will grow rich; but from the one who has not, even what he has will be taken away" (Matthew 25:29 New American Bible). The allegory of this gospel has been applied to sociological contexts, including education, to suggest a Matthew hypothesis, also known as the cumulative-advantage hypothesis (Walberg & Tsai, 1983).

Drawing upon a theory of production introduced by the economists Cobb and Douglas (1928), Walberg and Tsai (1983) explain how multiple factors in education can affect "wealth," or learning. Cobb and Douglas's production function (1928), $O = aL^bK^c$, teaches us that the factors of labor and capital multiplied together equals output; however, the relative weights of the input of labor will differ from the relative weights of the input of capital as denoted by the coefficient and exponents of the equation. For example, doubling the labor on a farm that primarily uses the technologies of farm equipment won't be efficient in increasing the output as it is not useful in that context.

The same concept can be applied to education according to Walberg and Tsai (1983). They suggest that the independent variable applicable to educational output in Cobb & Douglas's production function is motivation, and the dependent variables are prior educational experiences and current school activity. For children to learn, all factors need to be present. While students may come to school for the first time with rich backgrounds, since there has been no current teaching, no learning can occur even for students whose prior experiences match closely with the academic language of school. However, a "cumulative advantage" soon takes effect once the teaching begins. The

previous learning of a child that is valued in schools may make the current learning easier, faster, more efficient; thus, more learning occurs for this child as compared to the child who started school with little prior academic experience (Walberg & Tasai, 1983).

Matthew Stanovich (1986) takes Walberg and Tasai's findings of reciprocal relationships in education and uses it as a way to explain the vast individual differences in reading achievement. With large discrepancies between the vocabularies (Allington, 1984) and reading speeds (Perfetti, 1985) of skilled versus unskilled readers, he purports not only are the rich getting richer but there is a "poor-get-poorer" effect as well in regards to academic achievement.

Academic Language

Understanding that a gap in reading achievement as measured by schools exists among students upon entrance to school leads one to seek out the cause of such a gap. While Stanovich references vocabulary knowledge and reading speed, this may be too specific so the focus broadens to the concept of academic language.

Origins of the Theory of Academic Language

Nearly forty years ago, Jim Cummins (1979, 1980) introduced his influential idea of Basic Interpersonal Communication Skills (BICS) and Cognitive/Academic Language Proficiency (CALP). Through the work of Cummins, it is realized that while CALP is not independent of interpersonal communication, there are distinct developmental differences made between the two areas (1980). As native speaking children age, BICS will plateau around five or six years, but CALP will not do so until around 15 years of age; thus it is

easier for language minority students' social language to catch up than it is for their academic language to do so (2000).

To support non-mainstream students' academic language development, Stoller (2004) emphasizes teaching academic language through the content as a way for students to build the content knowledge while also building academic language proficiency. However, Cummins (2000) cautions that while it is necessary to integrate cognitively challenging content with the language of the classroom in order to develop the unique registers of each subject area, it is important to not ignore the social language a student brings to the classroom. Comparing and contrasting a student's first language (L1) in the community with her second language (L2) develops critical language awareness.

The Language and Culture of Schooling

For over thirty years, this notion of academic language has been common educational knowledge, yet the language of the classroom still remains implicit, hidden, and invisible to many students (Edwards & Mercer, 1993; Schleppegrell, 2004). Halliday (1989) emphasizes the political nature of language:

> Language is a political institution: those who are wise in its ways, capable of using it to shape and serve important personal and social goals, will be the ones who are “empowered” (to use a fashionable word): able, that is, not merely participate effectively in the world, but able also to act upon it, in the sense that they can strive for significant social change." (p. x)

Language is power, and the power in schools does not lie with the students. Rather, it is found in the institution, which, as Christie (1985) says, has a hidden curriculum of

language patterns. To understand the culture of schooling, one must understand that schooling is a linguistic process that has not been made explicit because content is the focus in schools, not the language that interprets the content (Schleppegrell, 2004). The literacy tasks become more advanced as one progresses through the school years because the content becomes more condensed through lexical choices and clause structures (Schleppegrell, 2004).

Furthermore, from his analysis of ethnographic data, Mehan (1979) finds there is an implicit form that students are expected to integrate with the content in order to gain proficiency in the task of schooling. Students need to know with whom, when, and where to speak and act while using speech and behavior appropriate for the context. When content and form are separated as in content without form (e.g. blurting out a correct answer) or form without content (e.g. forgetting an answer once called upon), a negative evaluation of the student from the teacher may occur.

An Academic Language Gap for Non-Mainstream Students

While the linguistic process is not made explicit, mainstream students often arrive at school familiar with such processes even though others do not. The above subheading defines this as a gap, which is a common term in educational and popular circles when referencing the push to close the achievement gap, but caution is advised in its interpretation as some may mistakenly conclude this indicates students' linguistic experiences are lacking in some way, or even deprived. Dell Hymes (Cazden, John, & Hymes, 1972) warns of the inappropriateness of labeling children in this way. Instead, Hymes (1972, p. xx) strongly asserts, "if the contexts that elicit or permit use of that

competence are absent in school; if the purposes to which they put language, and the ways in which they do so are absent or prohibited in school," it very well may be more appropriate to say the child is *repressed* rather than deprived, placing the onus on the school rather than the child's background. Furthermore, research supports any difficulty with content may well have nothing to do with the child's cognitive processes but more with the linguistic properties of school (Clark, 1969; Donaldson, 1963).

In Heath's decade-long ethnographic study (1983) set in two Pennsylvania towns, she describes the language socialization patterns of three different socioeconomic groups of preschool children: black working class, white working class, and black and white middle class also referred to as the "townspeople" or "mainstreamers." The middle class, mainstream preschool children, entered kindergarten having had linguistic, cognitive, and social experiences closely aligned with those of the school such as running narratives, linking items in one setting to another, individual achievement, strong links between school and home (Heath, 1983). Consequently, these children showed the greatest success throughout their school experiences. The white, working class preschool children arrived to school with many of the basic cognitive, linguistic, and social patterns expected of school. Like the middle class parents, these families interacted with their children, taught them to label items and events, describe the features of the events, read books, and offered play with educational toys. Their experience with limits on space and time blocks represented the "structuring, lessoning, and boundedness of knowledge " (Heath, 1983, p.347), and this allowed for an easy transition to the structure of school. However, this was not enough to sustain this group of children for the skills necessary for

academic success in the later years of schooling (Heath, 1983). While the black, working class preschoolers' social linguistic patterns included learning a sequence of habits through storytelling, making metaphors, and identifying patterns across items and events, these did not fit the developmental pattern of linguistic or cognitive growth found in mainstream children (Heath, 1983). It was observed that their home social experiences significantly differed from what they encountered at school: ". . .the school is a flood of discontinuities in the ways people talk, the values they hold, and the consistency with which the rewards go to some and not others" (p.348).

Whereas Heath's data does indicate linguistic differences of preschool children, Wells' (1989) longitudinal study may qualify these differences. His data found a statistically insignificant relationship between oral language achievement of children of varying socioeconomic backgrounds at ages two and three and half years, but once students were in school, the relationship strengthened between oral language achievement and socioeconomic backgrounds and remained so as they aged. When the assessments were spontaneous conversation in the children's own homes, there was no difference among the children; however, when the assessment took place in school and required writing and reading skills, a disadvantage was shown between socioeconomic groups (Wells, 1989). Schleppegrell (2004) states the reason for this is that knowledge in schools is not measured in spoken form but rather in written form, and consequently, a strong link between social class and linguistic skills arise (Schleppegrell, 2004).

Systemic Functional Linguistics

In order to be taught successfully, it is necessary to know how to use language to

> learn; and also, how to use language to participate *as an individual* in the learning situation. These requirements are probably not a feature of any particular school system, but rather are inherent in the very concept of education. The ability to operate effectively in the personal and heuristic modes is, however, something that has to be learnt; it does not follow automatically from the acquisition of the grammar and vocabulary of the mother tongue (Halliday, 1969, p. 35).

As Halliday suggests, a linguistic gap between mainstream and non-mainstream children causes disparity in knowledge of the content that accumulates over time if the academic language structures of school are not explicitly taught. What, then, is the most effective approach to do this explicit teaching? Systemic Functional Linguistics helps answer this question.

Overview of the Theory of Systemic Functional Linguistics

In the last half of the twentieth century, linguists were searching for answers to questions such as the one presented here: how can language mean different things to different people, and how do text and culture interact (Eggins, 2004)? Influenced by the work of anthropologists Raymond Firth and Bronislaw Malinowski, who found that the environment in which language is used to be a necessary dimension of understanding its meaning, that language is a form of action as the acting out of social relationships and social processes (Coffin & Donohue, 2012), Halliday introduced his ideas in the 1960s that speakers/listeners, readers/writers are continually making linguistic choices. These linguistic choices have a social connection embedded in them, and this social connection explains why language varies from person to person, why language means different

things to different people, and why our registers vary from context to context (Schleppegrell, 2004). Thus, language is a strategic, meaning-making resource we use nearly every moment of our lives (Eggins, 2004). As we move through varying situations, we make different linguistic choices, and SFL creates a framework that analyzes these linguistic choices by emphasizing the meaning that is embedded in the choices (Schleppegrell, 2004). As Eggins (2004) and Coffin and Donohue (2012) lay out, four major tenets are advanced by SFL:

1. language is functional
2. the function of language is to make meaning
3. context and language choices are interconnected
4. the process of using language is a semiotic process (i.e. makes meaning through choices).

Halliday's major contribution is his development of a functional grammar that emphasizes three types of meaning that occur simultaneously at the clause level: ideational (split into experiential and logical), interpersonal, and textual (1985). Fang and Schleppegrell (2008) describe how Halliday's functional grammar relates to traditional grammar. Every language use involves saying something about the text. The ideational meaning of a clause tells us what the text is about. Metalanguage for analyzing ideational meaning involves process (typically realized in a verb group in traditional grammar), participant (noun group), circumstance (prepositional phrase/adverb), conjunction (link clause), and lexical and referential chains. Interpersonal meaning includes the interactions, interpretations, attitudes, and judgments embedded in the text.

Mood and modality are primarily analyzed when uncovering interpersonal meaning; however, process types and meanings in particular participants and circumstances can reveal how an author interprets value and interpretation. Finally, textual meaning is how the text is organized into a coherent message. Tracing the theme/rheme structure can be a tool to demonstrate how each clause is organized as it begins from a departure point and moves to present something new. Cohesive devices (reference, substitution, ellipses, and conjunction) can be used as well along with recognizing how information has been condensed through the use of nominalizations and noun groups (Halliday & Hasan, 1976).

SFL is a tool for seeing how context and language are integrated; the context of the language is determined through the linguistic patterns of the text (Eggins, 2004). Two levels of context are register (i.e. language choice) and genre (i.e. text structure as impacted by culture). There are three features that define the register of a text: field (what is talked about), tenor (the relationship between the speaker/listener, writer/reader), and mode (the role language is playing) (Eggins, 2004; Derewianka, 2003). Genre theory involves a focus on text (create meaning at the text level), purpose (language is goal oriented), and meaning and choice (meaning is being created at each stage, or move, of the text).

The Reading Pedagogies of Functional Language Analysis and Genre-Theory

SFL is the theoretical framework, but pedagogy applies the theory. Frances Christie (1985) urges teachers to develop SFL-inspired pedagogies to uncover the patterns of school language that middle class teachers take for granted:

> If we do in the future see a generation of teachers emerge with a lively and critical understanding of the role of language in the ways we mean, and hence in the ways children work and think in schools, we will witness considerable change in the ways teachers and children work together. . . . Language will become no longer the hidden curriculum of schooling. Instead, its essential role in the structuring and organising of experience and information will be properly acknowledged. Whatever the age group taught, whatever the "content" of concern, whatever the mental skills to be developed, teachers will be able to consider and answer the question: What is it that my students need to be able to *do* in language order to be successful in this learning activity. (p.39)

One such pedagogy adapted to the context of U.S. schools that grew out of the work done in Australia in the 1980s and 1990s has been functional language analysis. This approach, developed by Mary Schleppegrell and her colleagues, is a way for teachers and students to understand the context of text at the register level, to make the content accessible for the struggling reader as well as to provide a method to explore text more deeply even for the most successful students. It raises students' consciousness to the power different language choices have on meaning by uncovering how each clause presents experiences, creates a social relationship, and links with previous clauses to carry the information onto succeeding clauses (Schleppegrell, 2004). A list of guiding principles of the functional approach is provided in Appendix A.

Achugar, Schleppegrell, and Oteiza (September 01, 2007) first began the application of functional language analysis with the California History Project in which

they provided extensive teacher training in functional language analysis to deconstruct historical text using specific SFL-related metalanguage concepts that explain the choices authors use to convey meaning in text. They found that students of the teachers who received the training made "significantly greater gains" (Achugar, Schleppegrell & Oteiza, p.12) on the California History Social Science test than those whose teachers did not go through this training.

Since that time, the researchers have continued their teacher training in other parts of the country in the areas of history as well as writing (Achugar, Schleppegrell & Oteiza, 2007). Schleppegrell joined with Fang in 2008 to write the pedagogical text *Reading in Secondary Content Areas*. Here, the researchers have broadened their scope beyond history to include the content areas of social studies, math, language arts and writing by providing general functional language analysis tools to apply to any text found in school, including test items (Fang & Schleppegrell, 2008). A synthesis of their guiding text questions and the corresponding strategies teacher use to incorporate functional language analysis in the classroom is found in Appendix B.

As functional language analysis makes the context of the situation (i.e. the register) clear, it is important to understand that register is directly affected by the genre of the text which is born out of the context of the culture surrounding the text. In other words, it is impossible to understand the tenor, field, and mode of language without analyzing the structure of the text. With the premise that language is goal-oriented, every genre has a social purpose (Derewianka, 2003). For example, if one is writing a grocery list of food items, her social purpose most likely was needing food to eat. Within

education, there are basic genre types such as recount, story genre, and procedure. A complete list of Derewianka's (2003) genre types along with their social purposes is included in Appendix C.

In addition to purpose, genre analysis also focuses on meaning and choice. Meaning is being created in each stage, or move, as meaning is created through the lexical and grammatical choices made by the speaker or writer. Derewianka (2003) provides a very detailed explanation as to how to teach genre theory. An adaptation of an outline of this lesson plan is included in Appendix D.

The Research Gap

The research shows academic language must be explicitly taught through the content in order for non-mainstream students to access the power and language of schooling and to narrow the cumulative advantage between mainstream and non-mainstream students. SFL has been studied extensively with documented applications in a variety of content areas (math, science, history, language arts), functional language analysis and a genre-based approach are well-defined methods for practitioners to implement in the classroom to accomplish the above goals. However, the one very important part of schooling, particularly today, that SFL does not seem to have addressed is assessment. While applying SFL in *creating* assessment tasks exists (Hughes, 2006), no published research is known to be available in regards to functional language analysis of test questions (M. Schleppegrell (personal communication, September 4, 2013)). With a carefully aligned curriculum, the assessment will measure the lesson's objectives. Yet, a linguistically dense assessment may not be an accurate measure of a student's knowledge

of those objectives. Thus, I want to determine if applying an SFL approach to tests will improve students' ability to understand and demonstrate their comprehension skills.

Research Question

The aim of this study is to determine how a functional linguistics analysis will enhance teaching low level readers to understand and correctly answer questions on a language arts benchmark assessment in order for their knowledge to be accurately measured by the benchmark assessment.

1. How does a functional linguistics approach enhance low level readers understanding of text and enable them to answer test questions on a benchmark test?

Summary

Matthew Effects, or what many might term the achievement gap, is well-documented in education. Over thirty years of research have demonstrated that schooling has its own distinct language, academic language, that is separate from the social language of home. For many students, exposure to the structures of academic language has not occurred prior to schooling and, thus, the language gap, and consequently, the achievement gap is born. One way to narrow the gap, to provide access to the content of schooling, is to teach students the linguistic structures of academic language. Based on the principles of SFL, functional language analysis and genre theory are two pedagogies in which to accomplish this. These two methods have been applied to a variety of content areas, but a direct application to test questions is missing from the research. In the following chapter, a description of the five data collection techniques the researcher will use in this action research to study the application of SFL to test questions is provided.

This study looks into applying functional language analysis to a language arts benchmark test in order to determine the academic language structures found in test questions. The identified problem is that low level elementary grade readers may demonstrate growth on IRIs and fluency measures but little or no progress on a language arts benchmark test required by the school district. The next chapter describes the methodology for this study.

CHAPTER THREE: METHODOLOGY

Chapter Overview

This study looked at applying functional language analysis to a language arts benchmark assessment in order to determine the academic language structures found in test questions. The identified problem was that low level elementary grade readers may demonstrate growth on IRIs and fluency measures but little or no progress on a language arts benchmark assessment required by the school district. Considering this problem, this research was an effort to answer the following question:

1. How does a functional linguistics approach enhance low level readers understanding of text and enable them to answer test questions on a benchmark test?

Research Paradigm

Mixed Methods Study

This study used inductive along with deductive methods to measure whether or not students can apply text analysis techniques when answering test questions. By using both qualitative and quantitative methods, the study's goal was to understand how students were able to make sense of their reading experiences but also to analyze variables of the study (Merriam, 1998). In addition, the mixed methods study allowed for a triangulation of the data by using four different techniques:

1. Text analysis of end of unit language arts benchmark test

2. Student test scores from weekly and end of unit comprehension tests
3. Student-teacher interaction in doing text analysis
4. Teacher journal

The study's three qualitative methods, text analysis, student-teacher interaction, and the teacher journal, all allowed for a rich, thick description of student progress through the use of words and pictures to explain what was learned about language and test taking (Merriam, 1998). The quantitative method used student test scores from school district approved and developed comprehension tests.

Data Collection

Participants

This study included twelve 3rd, 4th, and 5th graders, ranging in age from eight to eleven years old who receive reading intervention support that is provided by the researcher, a licensed teacher, outside of the mainstream setting. The students were identified for the intervention based on cut scores from district and school assessments as well as classroom teacher recommendation. Forty-six percent of the students were non-white. Fifty percent of the study's participants qualified for free or reduced priced (FRP) lunch. The English learner participants in this study represent World Class Instructional Design and Assessment (WIDA) cumulative levels of 2.7 to 3.9 and reading levels of 1.8 to 4.0. The student reading grade levels as measured by the Qualitative Reading Inventory (QRI) ranged between 1.7 and 4.4.

All students in the study participated in the SFL guided reading lessons. The researcher, as a practitioner-participant, delivered the lessons for the study participants in

lesson groups ranging in size from one to three. All participants scored below the twenty-first percentile on the Northwest Evaluation Association (NWEA) Measures of Academic Progress (MAP) reading test that measured comprehension and vocabulary skills. All students who took the reading Minnesota Comprehensive Assessment (MCA) last spring scored a Does Not Meet or a Partially Meets. Some students achieve grade level proficiency on the Qualitative Reading Inventory (QRI) that measured literal and inferential comprehension of text. The majority of the study's participants started the year as disfluent readers, reading below grade level proficiencies of correct words per minute (cwpm). In the fall, the minimum fluency score for third graders was 80 cwpm, 95 cwpm for fourth, and 105 cwpm for fifth. A description of specific student lesson groups follows that provides background information as to students' reading fluency and comprehension levels.

Lesson group 1 included third graders, Students A and B. Student A has received reading intervention services since first grade. He started the year comprehending text at a 1.7 on the QRI, reading 23 cwpm, and scoring in the 1st percentile on the MAP. At the end of this study in January, he scored between a 2nd and 3rd grade level on the QRI, in the 17th percentile on the MAP, and read 50 cwpm. Student B is a third grade girl who is a newcomer from Gambia. She entered third grade comprehending text at a 1.7 level, reading 13 cwpm, and scoring in the 1st percentile on the MAP. Her cumulative WIDA level was 2.7 with a reading level of 1.8 on the model. In January, her QRI comprehension scored remained the same at 1.7, her fluency score was 30 cwpm, and she scored in the 3rd percentile on the MAP.

Lesson group 2 included two third graders, Students C and D. Both students have received reading intervention services in previous grades. Student C started this fall at a comprehension reading level of 2.1, reading 46 cwpm, and scoring in the 21st percentile on the MAP test. In January, he comprehended text at a level 3.8, scored in the 23rd percentile on the MAP, and read 78 cwpm. Student D was new to the school last year. She started this fall comprehending text at a 2.1 level, reading 30 cwpm, and scoring in the 19th percentile on the MAP. In January, her comprehension remained static on the QRI at level 2.1, her MAP score grew to the 51st percentile, and she read 61 cwpm.

Lesson group 3 included two fourth grade boys, Students E and F. Student E has received reading intervention services since first grade. He started the year comprehending text at a level 2.1, reading 47 cwpm and scoring in the 7th percentile on the MAP. Last spring, he scored a Does Not Meet on the reading MCA. In January, he scored in the 11th percentile on the MAP, comprehended text at a level 2.1 as measured by the QRI, and read 65 cwpm. Student F was new to the school as a second grader and had received previous reading intervention services. He started this year comprehending text at an instructional level between second and third grades and scored in the thirteenth percentile on the MAP. His fluency score was below fourth grade level this September; however, he soon reached grade level in this area within a couple of months. He scored a Partially Meets score on the reading MCA last spring. By January, he was reading 107 cwpm, scored at the 12th percentile on the MAP, and comprehended text between a third and fourth grade level.

Lesson group 4 included two fourth graders, Students G and H. Both students have received previous reading intervention services. Student G started the year comprehending text at grade level as measured by the QRI; however, he scored in the twelfth percentile on the MAP. His fluency level was below grade level at 71 cwpm, but within a couple of months, he exceeded grade level standards by reading 107cwpm. He scored a Does Not Meet on the reading MCA last spring. In January, he scored in the 41st percentile on the MAP and maintained a comprehension level at grade level on the QRI. Student H started the year comprehending text slightly below grade level at a 3.8. She was a fluent reader with 105 cwpm. Her MAP score was in the 19th percentile. Her WIDA cumulative score was 3.9 with a reading score of 4.0. Last spring, she scored a Does Not Meet on the reading MCA. In January, she scored in the 28th percentile on the MAP, read 101 cwpm, and comprehended text close to fourth grade level.

Lesson group 5 included one fifth grade girl, Student I, who was diagnosed with dyslexia as a second grader and has received previous reading intervention services. Starting the year, she comprehended text at a level 3.8, read 77 cwpm, and scored in the 2nd percentile on the MAP. Last spring, she received a Does Not Meet score on the reading MCA. In January, her QRI score dropped to a 2.1. Her MAP score was in the 5th percentile, and she read 92 cwpm.

Lesson group 6 included Students J, K, and L, three fifth grade girls, all of whom have received previous reading intervention services. All three students scored a Does Not Meet score on the spring reading MCA last spring. Student J started the fall reading at a comprehension level of 4.3 and scoring in the 7th percentile on the MAP test. She is

considered a fluent reader reading 101 cwpm in the fall. In January, she comprehended text at a 4.4 level, scored in the 37th percentile on the MAP, and read 119 cwpm. Student K started the year comprehending text just below grade level at a 4.4 and scored in the eleventh percentile on the MAP test. Her fluency was below grade level at 74 cwpm. In January, she comprehended text at a fifth grade level, scored in the 37th percentile, and read 92 cwpm. Student L started the year comprehending text at grade level as measured by the QRI, scored at the 2nd percentile on the MAP test, and read 71 cwpm. In January, her QRI score was again at grade level, scored in the 22nd percentile on the MAP, and read 78 cwpm.

Location

The students in this study attended a kindergarten to fifth grade elementary school in a mid-sized suburban public school district located in a major metropolitan area of the upper Midwest in the United States. Out of a total school population of 503, twenty-nine percent of students were non-white, and twenty-four percent qualified for FRP.

Technique 1: Text Analysis of End of Unit Benchmark Test

Using functional language analysis (Fang & Schleppegrell, 2008; Schleppegrell, 2004, Schleppegrell, Achugar, & Oteíza, T, 2004) and genre theory (Derewianka, 2003), a template (see Appendix E) was developed to analyze the test questions and passages of the end of unit benchmark test to determine the linguistic and literary patterns found on this assessment. The participants were limited to include just the researcher as the developer of the template. The materials included the test passages and questions from the Scott Foresman Unit Benchmark tests (see Appendices F, G, H for sample questions).

Technique 2: Student Test Scores from Weekly and End of Unit Comprehension Tests

Students took a teacher scaffolded weekly comprehension practice test that assessed particular comprehension skills. Students also took a district mandated end of unit benchmark test. No teacher supports were provided when students took this test.

Technique 3: Student-Teacher Interaction in Doing Text Analysis

Digital recordings were taken of several students analyzing test questions with teacher support on the weekly practice tests.

Technique 4: Teacher Journal

A journal was kept by the researcher that included each SFL guided reading lesson's language and content objectives, SFL guiding questions, and teacher reflections made throughout the study.

Procedure

Data Analysis

Technique 1: Text Analysis of End of Unit Benchmark Test

The clause(s) of each test question in unit two for grades three, four and five were transcribed onto a chart (see template in Appendix E) that followed conventions adapted from Fang & Schleppegrell (2008) and Derewianka (2003) (see Appendices B, D). Next, each clause was coded by part of speech by the researcher based on the following guiding questions and corresponding functional language analysis strategy as indicated in parenthesis:

- how is this text organized? (analyzed theme, process types, cohesive devices)

- what is this text about? who does what to whom, how, when, and where? (analyzed participants, attributes, processes, circumstances)
- what is the author's perspective? how is that perspective infused into text? (analyzed process types, participant roles, word choice)
- what information is implicit or missing from the text? (analyzed ellipses, conjunction, nominalization)
- how does the author of this text interact with the reader? (analyzed speech functions, mood, modality)

Technique 2: Student Test Scores from Weekly and End of Unit Comprehension Tests

Approximately once per week after completing a series of SFL guided reading lessons, students took a comprehension practice test. Each test assessed a particular comprehension skill. The following teacher scaffolds were provided for students on these tests as needed.

1. **Analysis of test questions and answers**: The teacher helped students analyze each test question and answer using SFL guiding questions and prompting.

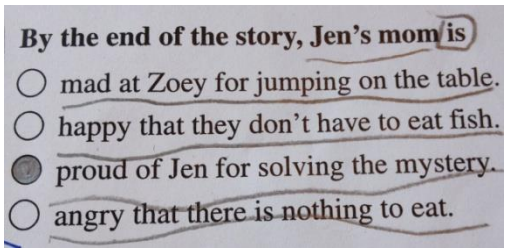
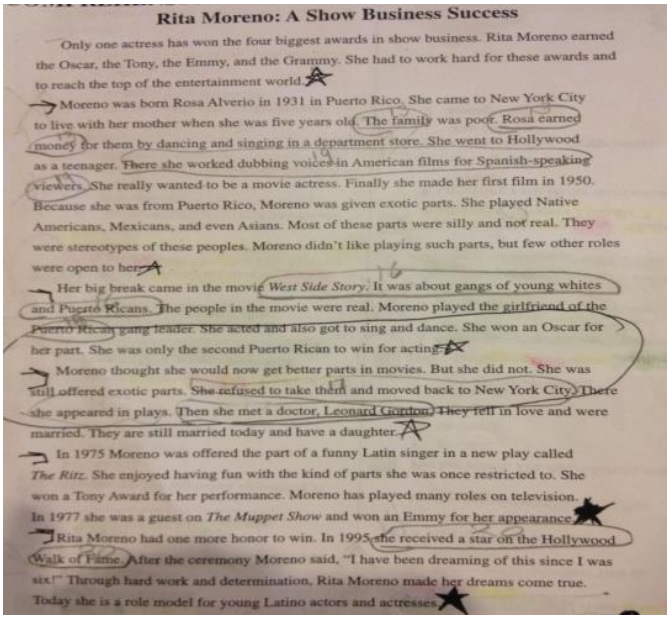


Figure 1. Teacher scaffold of text analysis. This figure illustrates an example of how the teacher supported students' language analysis of questions and answers on the weekly tests.

2. **Reading the text**: The teacher provided decoding and vocabulary support to students while students read the text aloud.

3. **Summarizing the text:** The students summarized the main idea of text aloud and the teacher provided corrective feedback. Students were taught how to paraphrase difficult text after each paragraph. To indicate a summary was made, students were required to draw a star next to each paragraph. An example of this is below.



Rita Moreno: A Show Business Success

Only one actress has won the four biggest awards in show business. Rita Moreno earned the Oscar, the Tony, the Emmy, and the Grammy. She had to work hard for these awards and to reach the top of the entertainment world.

Moreno was born Rosa Alverio in 1931 in Puerto Rico. She came to New York City to live with her mother when she was five years old. The family was poor. Rosa earned money for them by dancing and singing in a department store. She went to Hollywood as a teenager. There she worked dubbing voices in American films for Spanish-speaking viewers. She really wanted to be a movie actress. Finally she made her first film in 1950. Because she was from Puerto Rico, Moreno was given exotic parts. She played Native Americans, Mexicans, and even Asians. Most of these parts were silly and not real. They were stereotypes of these peoples. Moreno didn't like playing such parts, but few other roles were open to her.

Her big break came in the movie *West Side Story*. It was about gangs of young whites and Puerto Ricans. The people in the movie were real. Moreno played the girlfriend of the Puerto Rican gang leader. She acted and also got to sing and dance. She won an Oscar for her part. She was only the second Puerto Rican to win for acting.

Moreno thought she would now get better parts in movies. But she did not. She was still offered exotic parts. She refused to take them and moved back to New York City. There she appeared in plays. Then she met a doctor, Leonard Gordon. They fell in love and were married. They are still married today and have a daughter.

In 1975 Moreno was offered the part of a funny Latin singer in a new play called *The Ritz*. She enjoyed having fun with the kind of parts she was once restricted to. She won a Tony Award for her performance. Moreno has played many roles on television. In 1977 she was a guest on *The Muppet Show* and won an Emmy for her appearance.

Rita Moreno had one more honor to win. In 1995 she received a star on the Hollywood Walk of Fame. After the ceremony Moreno said, "I have been dreaming of this since I was six!" Through hard work and determination, Rita Moreno made her dreams come true. Today she is a role model for young Latino actors and actresses.

Figure 2. Teacher scaffold of summarizing a test passage. This figure illustrates an example of how the teacher supported students to summarize each paragraph on the weekly tests.

4. **Answering questions**: The teacher provided support in answering the questions using prompts and questioning.

Students also took an end of unit two district mandated benchmark test. No teacher supports were provided when students took this test. The majority of students took this test with the researcher. Some students took the test in the mainstream classroom. The date students took the test was determined by the mainstream classroom teacher; however, all students took the test within a two week window as mandated by the school

district. As defined the school district, students answering 65% of the benchmark questions correctly meet a threshold of proficiency, and answering 80% of the questions correctly or higher is considered proficient.

Technique 3: Student-Teacher Interaction in Text Analysis

In the middle of the study, digital recordings were taken of several students analyzing test questions on weekly practice tests. Teacher scaffolds were provided on these tests. A description of these scaffolds is included above and again in chapter 4. These recordings were then transcribed and included as part of study data.

Technique 4: Teacher Journal

SFL guided reading lessons were delivered to all students in groups of one to three students in (three) thirty-minutes lessons per week from October 2013 through December 2013. The teacher, as practitioner-participant, developed and delivered the lesson plans using an SFL influenced guide reading lesson template (see Appendix I). A journal was kept by the researcher that included each lesson's language and content objectives and SFL guiding questions. The journal also included teacher reflections made throughout the study.

Verification of Data

Internal validity of the study's data is met through triangulation. Using four different data sources (text analysis, test scores, digital recordings of student-teacher interaction, and teacher journal) coalesces and verifies the information (Foreman, 1948).

Ethics

The following actions were taken to ensure this study respected all professional and federal regulations to protect informants from harm:

1. A human subjects review was completed by Hamline University as well as by the school district in which the research took place.

2. Informed consent was requested from each potential study participant. In this written permission form, the objectives of the research were explicitly shared.

3. No data was collected on students who did not provide written consent.

4. All participants and informants remained anonymous.

5. All data was secured in password protected computer files and locked file drawers.

Conclusion

This chapter included the methods of research used in this study. Four data techniques were used: text analysis of the end of unit benchmark test, student test scores from weekly and end of unit comprehension tests, student-teacher interaction in text analysis, and teacher journal. The subsequent chapter presents the results of the study.

CHAPTER FOUR: RESULTS

In this study, I address the research question, *How does a functional linguistics approach enhance low level readers understanding of text and enable them to answer test questions on a benchmark test?* This chapter will explain the results of this study by presenting the following:

1. Text analysis data that demonstrates language feature patterns that are unique to particular comprehension question types on the end of unit language arts benchmark test.
2. Teacher journal that includes SFL lesson objectives, pedagogical tools, and SFL guiding questions that were developed based on the results from the text analysis.
3. Aggregate and individual student test scores presented along with additional teacher journal data of teacher reflections, and examples of how the teacher scaffolded students' analysis of test questions/answers.

Linguistic complexity was found in all types of questions, regardless of the comprehension skill a question was testing. Expanded noun groups, added circumstances, and embedded clauses that increased the language density of the questions all contributed to the difficulty of the questions. Table 1 along with a forwarding textual description documents the patterns found between the language of the test questions and the comprehension skill being tested.

In making blueberry mush, when do you cover the pan? This example of a sequence question shows how the reader is asked to find a time answer, or when something occurred. Sequence questions often used signal words in the questions asking the reader to determine how the text is developing but do not include language of modality that asks the reader to determine other possibilities in the text or attribution language that asks the reader to find what people in the text think.

Why did the author probably include the recipe for blueberry mush? This example of an author's purpose question shows how often ask the reader to determine other possibilities with the use of the word *probably*, or what characters or people in the text think using modals and attribution language. These questions also want the reader to determine the reason why something happened in the text or who is involved in the event.

How did the ant feel when he saw the man with the net? This example of a character question shows how the reader is asked typically ask the reader how something is felt or done, but character questions also often ask the reader to find when it happens, or the place it happens. This example also shows how a sensing process, like *feel*, is often used in character questions, but all of the process types, saying, doing, sensing, and relating, are employed in character questions. This tells us that students need to understand not only actions of characters, but what they say, feel or think. However, some questions also include relating processes that require the student to relate, or link, two participants together. Modality and attribution language are often found in these questions.

Which of the following statements is supported by information from the selection? Here, it is shown that main idea and detail questions want the reader to identify the *what* of the text, but they also typically will ask the reader to find the participants and places in the text. The processes in the questions are primarily relating and doing processes. This requires the reader to find the actions in the text, but also frequently asks the reader to relate, or link, two participants together as in the example above. Here, *the following statements* is being related to the supporting information from the selection. A cohesive device, the referential pronoun, is frequently used, requiring the reader to link back to text that was previously mentioned. Attribution and modality language is also used.

Which of these conclusions can be drawn from the selection? This sample draw conclusions questions shows a doing process with the inclusion of the word drawn, but these types of questions also often include relating and sensing processes. Language of modality as is seen in the above example in *can be* is also is used to have the reader consider other possibilities. Draw conclusions questions typically ask the reader to refer back to the text for the answer as is demonstrated in this example with the inclusion of *from the selection.*

Table 1

Functional Language Analysis of Language Arts Benchmark Test Questions - ALL GRADES

Language Feature *Guiding Question*	**Sequence**	**Author's Purpose**	**Main Idea/Detail**	**Literary Element Setting**	**Literary Element Theme**	**Literary Element Character**	**Draw Conclusions**
Theme Type *How is the text organized?* *What language feature begins the question?*	-speech function -process -participant -clause as participant -circumstance	-speech function -process -participant -circumstance -pointer -attribution	-speech function -process -participant	-speech function -participant	-speech function	-speech function -participant -process -circumstance	-speech function -participant -qualifier
Speech Function *How does the author interact with the reader?* *Type of sentence?*	-interrogative -declarative	-interrogative -declarative	-interrogative -declarative	-interrogative -declarative	interrogative	-interrogative -declarative -imperative	interrogative declarative
Question Word *What is the author asking the reader to find:* *A thing? (which/what)* *A person? (who)* *A place? (what)* *The time? (when)* *For what reason? (why)* *In what way? (how)*	-what -when -about how long -which	-what -why -which of -who	what	-where -what -which of	which	-which of -how -when -what	-which -how -why -what
Types of Noun Group Expansion *Which ones?(pointer)* *How many? How much? (quantifier)* *What's it like? (qualifier)* *What type?(* *Tell me more.*	-pointer -quantifier -qualifier -clause as participant	-pointer -qualifier -clause as participant -describer	-pointer -qualifier -quantifier	-pointer -qualifier -clause as participant -describer	None	-embedded clause (qualifier) -clause as participant -quantifier -pointer -describer	-pointer -qualifier -describer
Participant Roles *Who is participating in the process?* *Doer/done-to?* *Sayer/the described?* *Senser/the description?* *Receiver/received?*	-the described, -do-er -receiver -senser -description	-do-er -receiver -described -identifier -description	-receiver -described -identifier -do-er	-do-er -receiver -described -description	relating	-sayer -what is said -receiver -do-er -described -senser	-do-er -receiver -senser -what is sensed -described
Process Types *What is happening?(doing)* *What is being said?(saying)* *What is thought, felt, perceived?(sensing)* *How is information being linked?(relating)*	-doing -relating -sensing	-doing -relating	-doing -relating	-doing -relating	relating	-doing -relating -saying -sensing	-doing -relating -sensing
Circumstance *What does what to whom, how, when, where, and why?*	Yes	Yes	Yes	Yes	None	Yes	Yes
Ellipses or Nominalization *What information is missing?*	Yes	Yes	None	Yes	Yes	Yes	Yes
Signal Words or Referring Words *How is the text developing?* *How are stretches of text being linked?*	Yes	Yes	Yes	None	None	None	None
Modality *What are other possibilities?*	None	Yes	None	None	None	Yes	Yes
Attribution *What do others think about this?*	None	Yes	Yes	None	None	Yes	None

Teacher journal data - SFL lesson objectives, pedagogical tools, and SFL guiding questions

The language feature patterns described above were used to develop SFL guided reading lessons as detailed in tables 2 through 10. The lessons included language and content objectives and SFL guiding questions. The language objectives made the comprehension skills taught in the mainstream content accessible for students and included identifying and describing the language features found in the content objective. An additional language objective was often included for answering test questions. Guiding questions were used to support students in identifying the text's language features.

Table 2

Teacher Journal of Content and Language Objectives and Guiding Questions, WEEK 1, ALL GRADES

Content Objective	SFL Language Objective	SFL Guiding Questions
Students will be able to describe a **character** in depth drawing on specific details in a narrative text.	Students will be able to: 1. identify the processes and their types that tell what is happening in the text by color coding the text. 2. describe in a group discussion how the processes and their types tell what is happening in the text. 3. answer grade level test questions that test character elements after identifying the processes embedded in the questions.	**<u>Processes</u>** 1. What is happening in the text? (doing words) 2. What is being said? (saying words) 3. What is thought, felt, perceived? (sensing words) 4. How is the information being linked? (relating words)

Table 3

Teacher Journal of Content and Language Objectives and Guiding Questions, WEEK 2, ALL GRADES

Content Objective	SFL Language Objective	SFL Guiding Questions
Students will be able to describe a **character** in depth drawing on specific details in a narrative text.	Students will be able to: 1. identify who is participating and their role in the processes of the text by color coding the text. 2. describe how the participants and their roles demonstrate the processes of the text through discussion and using a story map graphic organizer. 3. answer grade level test questions that test character elements after identifying the processes and participants embedded in the questions.	**<u>Participants</u>** Who or what is this text about? ○ When the process is an action, the participant is the do-er or the done-to. ○ When the process is a saying one, the participant is the sayer or what is said. ○ When the activity involves a sensing process, the participant is a senser or what is sensed.

Table 4

Teacher Journal of Content and Language Objectives and Guiding Questions, WEEK 3, ALL GRADES

Content Objective	SFL Language Objectives	SFL Guiding Questions
Students will be able to describe a **character** in depth drawing on specific details in the text.	Students will be able to: 1. identify the circumstances the author used to explain who does what to whom, how, when, where, and why by sorting the language features at the sentence level. 2. describe in a group discussion with the aid of a story map graphic organizer how the participants and their types tell more about the characters in the text. 3. answer grade level test questions that test character elements after identifying the participants, processes, and circumstances embedded in the questions.	**<u>Circumstances</u>** Circumstances tell us more about what the participants are doing in the text such as: Where? When? How long? How often? In what way? By what means? Like what? Why? With whom?

Table 5

Teacher Journal of Content and Language Objectives and Guiding Questions, WEEK 4, GRADES 3 & 5

Content Objective	SFL Language Objectives	SFL Guided Questions
Students will be able to describe in depth the **setting** in a story drawing on specific details in the text.	Students will be able to: 1. identify the circumstances the author used to explain who does 2. describe in a group discussion with the aid of a story map graphic organizer how the circumstances tell us more about the setting of a story. 3. answer grade level test questions that test knowledge of the setting in a story after identifying the circumstances embedded in the questions.	**Circumstances** Circumstances tell us more about what the participants are doing in the text such as: Where? When? How long? How often? In what way? By what means? Like what? Why? With whom?

Table 6

Teacher Journal of Content and Language Objectives and Guiding Questions, WEEK 4, GRADE 4

Content Objective	SFL Language Objectives	SFL Guided Questions
Students will be able to describe the main idea and details in a text drawing on specific details in the text.	Students will be able to: 1. identify the circumstances the author used to explain who does what to whom, how, when, where, and why by sorting the language features at the sentence level. 2. explain how the circumstances the author used tells us more about the main idea or details of a text. 3. answer test questions that test knowledge of the main idea and details after identifying the circumstances embedded in the questions.	**Circumstances** Circumstances tell us more about what the participants are doing in the text such as: Where? When? How long? How often? In what way? By what means? Like what? Why? With whom?

Table 7

Teacher Journal of Content and Language Objectives and Guiding Questions, WEEK 5, GRADES 3 & 4

Content Objective	SFL Language Objectives	SFL Guided Questions
Students will be able determine the main idea of a text and explain how it is supported by key details.	Student will be able to: 1. identify how a noun group is expanded in a clause. 2. explain how expanding a noun group gives us more detailed information about the person or thing involved in the process. 3. apply their knowledge of noun group expansion when answering test questions on main idea.	**<u>Noun Group Expansion</u>** What do we know about the participant? (noun group expansion) o Who? What? Participant/Thing o Which ones? Pointer o How many? Quantifiers o What is it like? Describers o What type? Classifiers o Tell me more.

Table 8

Teacher Journal of Content and Language Objectives and Guiding Questions, WEEK 5, GRADE 5

Content Objective	SFL Language Objectives	SFL Guided Questions
Students will be able to compare and contrast the overall structure of events, ideas, concepts, or information in two or more texts.	Student will be able to: 1. identify how a noun group is expanded in a clause. 2. explain how expanding a noun group gives us more detailed information about the person or thing involved in the process. 3. apply their knowledge of noun group expansion when answering test questions on main idea.	**<u>Noun Group Expansion</u>** What do we know about the participant? (noun group expansion) ○ Who? What? Participant/Thing ○ Which ones? Pointer ○ How many? Quantifiers ○ What is it like? Describers ○ What type? Classifiers ○ Tell me more.

Table 9

Teacher Journal of Content and Language Objectives and Guiding Questions, WEEK 6, ALL GRADES

Content Objective	SFL Language Objectives	SFL Guided Questions
Students will be able to explain how an author uses reason and evidence to support particular points in an informational text (author's purpose).	Students will be able to: 1. identify the themes and rhemes that organize the ideas in an informational text. 2.explain how the author chooses particular themes and rhemes to support points in the text. 3. apply their knowledge of themes and rhemes when answering test questions on author's purpose.	**Theme/Rheme** Theme: What was already mentioned in the text? Rheme: What's the new information the author wants me to know?

Table 10

Teacher Journal of Content and Language Objectives and Guiding Questions, WEEK 7, GRADES 3 & 4

Content Objective	SFL Language Objectives	SFL Guided Questions
Student will be able to describe the overall chronology structure of events, ideas, concepts or information in a recount text.	Students will be able to: 1. identify the signal words that organize the text and/or connect ideas in the text in an informational text. 2. explain how the signal or referring words organize the text and/or connect ideas in the text.	**Signal Words** Look for connecting words. What words tell how the text is connected or organized? Sequence words: firstly, first, in the first place, first of all, to start with, to begin, for a start, second, third, fourth, at this point, to get back to the point, then, in short, all in all, briefly, to summarize, to sum up, finally, a final point, to conclude, in conclusion, given to the above points, in light of the above

Aggregate and Individual Student Test Scores and Teacher Journal Data, Including Teacher Reflections, Examples of Teacher Scaffolds

Tables 11 to 14 present an aggregate comparison of students taking the comprehension reading tests with teacher scaffolds and without scaffolds. The percentage of students who scored at the proficiency threshold level (65%) or higher on the teacher-supported weekly practice tests is compared to the end of unit benchmark test that was taken with no teacher support. Following this, an individual summary of each student's progress is documented in tables 15 to 45 using test scores, teacher reflections, and

examples of teacher's scaffolding of student test question/answer analysis. The scores are represented as the percentage of questions answered correctly. In the school district in, a score of 80% is considered a proficient score and 65% is considered the threshold of proficiency. Students took the end of unit benchmark test with no teacher scaffolds, or supports. The practice tests were taken throughout the study with teacher scaffolds but decreased over time based on individual student need. The scaffolds provided for each test is noted in the student's test score data. Below is a description of each scaffold.

1. **Analysis of test questions and answers**: The teacher helped students analyze each test question/answer using SFL guiding questions and prompting.

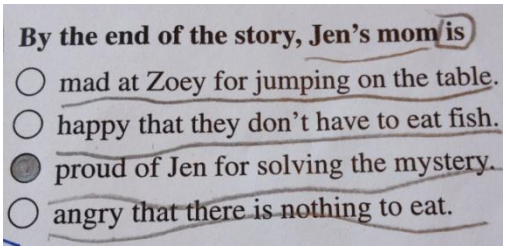
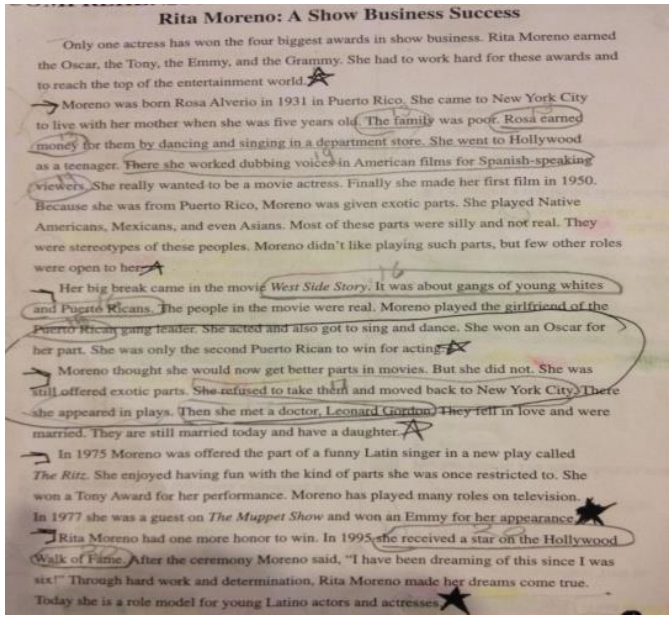


Figure 1. Teacher scaffold of text analysis. This figure illustrates an example of how the teacher supported students' language analysis of questions and answers on the weekly tests.

2. **Reading the text**: The teacher provided decoding and vocabulary support to students while the students read the text aloud.
3. **Summarizing the text:** The students summarized the main idea of text aloud and the teacher provided corrective feedback. Students were taught how to paraphrase difficult text after each paragraph. To indicate a summary was made, students were required to draw a star next to each paragraph. An example of this is below.



Rita Moreno: A Show Business Success

Only one actress has won the four biggest awards in show business. Rita Moreno earned the Oscar, the Tony, the Emmy, and the Grammy. She had to work hard for these awards and to reach the top of the entertainment world.

Moreno was born Rosa Alverio in 1931 in Puerto Rico. She came to New York City to live with her mother when she was five years old. The family was poor. Rosa earned money for them by dancing and singing in a department store. She went to Hollywood as a teenager. There she worked dubbing voices in American films for Spanish-speaking viewers. She really wanted to be a movie actress. Finally she made her first film in 1950. Because she was from Puerto Rico, Moreno was given exotic parts. She played Native Americans, Mexicans, and even Asians. Most of these parts were silly and not real. They were stereotypes of these peoples. Moreno didn't like playing such parts, but few other roles were open to her.

Her big break came in the movie *West Side Story*. It was about gangs of young whites and Puerto Ricans. The people in the movie were real. Moreno played the girlfriend of the Puerto Rican gang leader. She acted and also got to sing and dance. She won an Oscar for her part. She was only the second Puerto Rican to win for acting.

Moreno thought she would now get better parts in movies. But she did not. She was still offered exotic parts. She refused to take them and moved back to New York City. There she appeared in plays. Then she met a doctor, Leonard Gordon. They fell in love and were married. They are still married today and have a daughter.

In 1975 Moreno was offered the part of a funny Latin singer in a new play called *The Ritz*. She enjoyed having fun with the kind of parts she was once restricted to. She won a Tony Award for her performance. Moreno has played many roles on television. In 1977 she was a guest on *The Muppet Show* and won an Emmy for her appearance.

Rita Moreno had one more honor to win. In 1995 she received a star on the Hollywood Walk of Fame. After the ceremony Moreno said, "I have been dreaming of this since I was six!" Through hard work and determination, Rita Moreno made her dreams come true. Today she is a role model for young Latino actors and actresses.

Figure 2. Teacher scaffold of summarizing a test passage. This figure illustrates an example of how the teacher supported students to summarize each paragraph on the weekly tests.

5. **Answering questions**: The teacher provided support in answering the questions using prompts and questioning.

Table 11 shows that when teacher scaffolds, as defined above, were provided, nearly all students in the study could reach a threshold of proficiency in answering character, setting, and sequence questions on grade level practice tests. On the end of unit benchmark test taken with no support, a majority of students could reach a threshold of proficiency in answering setting, main idea/details, and compare/contrast questions.

Table 11

Percentage of ALL students who scored the proficiency threshold level or higher on comprehension skill tests: A comparison between teacher-supported weekly practice tests and unsupported end of unit benchmark test

	Character	**Setting**	**Main Idea/Details**	**Compare/ Contrast**	**Author's Purpose**	**Sequence**
Weekly Practice Tests - Teacher scaffolds were provided	83.3%	85.7%	25.0%	50.0%	20.0%	100.0%
	# of Test Takers	**# of Test Takers**	**# of Test Takers**	**# of Test Takers**	**# of Test Takers**	**# of Test Takers**
	12	7	8	4	10	2
	Weeks Tests Were Taken	**Week Test Was Taken**	**Weeks Tests Were Taken**	**Week Test Was Taken**	**Week Test Was Taken**	**Week Test Was Taken**
	Weeks 2 & 3	Week 4	Weeks 4 & 5	Week 5	Week 6	Week 7
Unit 2 Benchmark Test -	40.0%	100.0%	71.4%	66.7%	40.0%	30.0%
No teacher scaffolds were provided	**# of Test Takers**	**# of Test Takers**	**# of Test Takers**	**# of Test Takers**	**# of Test Takers**	**# of Test Takers**
Most students took test in Week 8 of the study	10	6	7	3	10	10

Table 12 shows that when teacher scaffolds were provided, nearly all third grade students in the study could reach a threshold of proficiency in all tested skills with the exception of main idea/details on grade level practice tests. On the end of unit benchmark test taken with no support, a majority of students could reach a threshold of proficiency in answering in all areas except for character and sequence.

Table 12

Percentage of THIRD GRADE students who scored the proficiency threshold level or higher on comprehension skill tests: A comparison between teacher-supported weekly practice tests and unsupported end of unit benchmark test

	Character	Setting	Main Idea/Details	Compare/ Contrast	Author's Purpose	Sequence
Weekly Practice Tests - Teacher scaffolds were provided	75.0%	66.7%	0.0%	NA	100.0%	100.0%
	# of Test Takers 4	**# of Test Takers** 3	**# of Test Takers** 4	**# of Test Takers** 0	**# of Test Takers** 2	**# of Test Takers** 1
	Weeks Tests Were Taken Weeks 2 & 3	**Week Test Was Taken** Week 4	**Weeks Tests Were Taken** Weeks 4 & 5	**Week Test Was Taken** NA	**Week Test Was Taken** Week 6	**Week Test Was Taken** Week 7
Unit 2 Benchmark Test - No teacher scaffolds were provided	33.3%	100.0%	100.0%	66.7%	100.0%	33.3%
	# of Test Takers 3	**# of Test Takers** 3	**# of Test Takers** 3	**# of Test Takers** 3	**# of Test Takers** 3	**# of Test Takers** 3
Most students took test in Week 8 of the study						

Table 13 demonstrates that the fourth grade students in this study struggled when taking the comprehension tests, regardless of the level of teacher support. As described in chapter 3, these students are represented in the study as Students E, F, G, and H. Individual summaries included below provide qualitative progress data of these students.

Table 13

Percentage of FOURTH GRADE students who scored the proficiency threshold level or higher on comprehension skill tests: A comparison between teacher-supported weekly practice tests and unsupported end of unit benchmark test

	Character	Setting	Main Idea/Details	Compare/ Contrast	Author's Purpose	Sequence
Weekly Practice Tests - Teacher scaffolds were provided	100.0%	NA	25.0%	NA	0.0%	33.3%
	# of Test Takers 4	**# of Test Takers** 0	**# of Test Takers** 4	**# of Test Takers** 0	**# of Test Takers** 4	**# of Test Takers** 3
	Weeks Tests Were Taken Weeks 2 & 3	**Week Test Was Taken** NA	**Weeks Tests Were Taken** Weeks 4 & 5	**Week Test Was Taken** NA	**Week Test Was Taken** Week 6	**Week Test Was Taken** Week 7
Unit 2 Benchmark Test - No teacher scaffolds were provided	25.0%	NA	50.0%	NA	0.0%	0.0%
	# of Test Takers 4	**# of Test Takers** 0	**# of Test Takers** 4	**# of Test Takers** 0	**# of Test Takers** 4	**# of Test Takers** 4
Most students took the test in Week 8 of the study						

Table 14 shows that when teacher scaffolds were provided, nearly all students in the study could reach a threshold of proficiency in answering character and setting

questions on grade level practice tests. On the end of unit benchmark test taken with no support, a majority of students could reach a threshold of proficiency in answering character, setting, and compare/contrast questions.

Table 14

Percentage of FIFTH GRADE students who scored the proficiency threshold level or higher on comprehension skill tests: A comparison between teacher-supported weekly practice tests and unsupported end of unit benchmark test

	Character	Setting	Main Idea/Details	Compare/ Contrast	Author's Purpose	Sequence
Weekly Practice Tests - Teacher scaffolds were provided	75.0%	100.0%	NA	50.0%	0.0%	0.0%
	# of Test Takers	# of Test Takers	# of Test Takers	# of Test Takers	# of Test Takers	# of Test Takers
	4	4	0	4	4	4
	Weeks Tests Were Taken	Week Test Was Taken	Weeks Tests Were Taken	Week Test Was Taken	Week Test Was Taken	Week Test Was Taken
	Weeks 2 & 3	Week 4	NA	Week 5	Week 6	Week 7
Unit 2 Benchmark Test - No teacher scaffolds were provided	66.7%	100.0%	NA	66.7%	0.0%	33.3%
	# of Test Takers	# of Test Takers	# of Test Takers	# of Test Takers	# of Test Takers	# of Test Takers
	3	3	0	3	3	3
Most students took the test in Week 8 of the study						

A purpose of this study was to develop a habit of mind that students access when approaching tests. Several transcribed recordings of students analyzing test questions near the end of the study. An analysis of these are found in tables below. Table 15 quantifies to what degree students could independently identify language features by including the percentage of students who needed no teacher support, an SFL guiding question prompt, additional prompts as well as the percentage of students who could not identify the feature. The table demonstrates a habit of mind was established for all students in identifying the subject participant, for a majority of students in identifying the process type and the circumstance.

Table 15

The amount of teacher support students needed to correctly identify language features in test questions.

	Subject Participant	**Object Participant**	**Process**	**Process Type**	**Circumstance**	**Noun Group Expansion**
Percentage of students who needed no teacher support	16.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Percentage of students who needed a teacher provided SFL guiding question only	83.3%	33.3%	16.6%	80.0%	75.0%	0.0%
Percentage of students who needed additional teacher prompts	0.0%	50.0%	0%	0.0%	25.0%	0.0%
Percentage of students who could not identify the language feature	0.0%	16.6%	83.3%	20.0%	0.0%	100.0%

As described above with data from the student text analysis, a purpose of this study was to develop a habit of mind that students access when approaching tests. Results from the teacher journal that further support this purpose include excerpts from the teacher journal that describe each student's progress during the study. This data is found in the tables below, and Table 16A provides a summary of the trends founds. Table 16B also includes trends in the habits students themselves reported as helpful to correct errors on tests. Table 16A shows that students demonstrated an overall understanding of text

analysis, could independently identify processes but required teacher prompts to do this analysis. Table 16B demonstrates students developed a habit of mind not only to approach tests with a functional approach, but also to employ effective test taking strategies.

Table 16A

Creating a Habit of Mind: Percentage of students described in the teacher journal with a particular descriptor - TEXT ANALYSIS

Teacher Journal Descriptor - Student Text Analysis	**Percentage of students with the descriptor**
The number of lessons were cut due to a variety of reasons including unexpected days off of school, classrooms taking the benchmark tests earlier than expected.	100%
Student is understanding text analysis.	66.7%
Student indentifies processes well.	41.6%
Student needs teacher prompts to analyze text.	41.6%
Student summarize text independently during tests.	33.3%
Teacher needs to provide less support in text analysis.	25%
Student demonstrates inattentiveness or impulsivity that affects lessons.	25%
Student lacks tenacity in completing tests.	25%
Student shows frustration in text analysis.	25%
Student was able to analyze test questions independently.	25%
Student struggles in lessons.	16.6%
Student demonstrates independence in text analysis.	16.6%
Student identifies participants well.	16.6%
Student is quiet during lessons.	16.6%
Student lacks confidence that affects independence .	16.6%
Student struggles to decode words.	8.33%
Student struggles to identify participants.	8.33%
Student identifies circumstances well.	8.33%
Student lacks oral skills to explain reasoning in text analysis.	8.33%

Table 16B

Creating a Habit of Mind: Percentage of students described in the teacher journal with a particular descriptor - TEST TAKING SKILLS

Teacher Journal Description Student Test Taking Skills	**Percentage of students described in this way**
Student reported it was necessary to look back in the text for clues to correct an error on a test.	66.7%
Student reported it was necessary to read the text again to correct an error on a test.	41.6%
Student reported it was necessary to read the test question again to correct an error on a test.	16.6%
Student reported it was necessary to eliminate wrong answer to correct an error on a test.	16.6%
Student reported it was necessary to not skip lines to correct an error on a test.	8.33%
Student reported it was necessary to summarize text to correct an error on a test.	8.33%
Student reported it was necessary to use one's background knowledge to correct an error on a test.	8.33%

Student A

Table 17 documents that when appropriate teacher scaffolds were provided, Student A demonstrated proficiency in answering character, setting and sequence questions by scoring at or above 80%. When no teacher scaffolds were provided as on the end of unit benchmark test, Student A was still able to demonstrate proficiency in answering author's purpose questions, and met a threshold level of proficiency by scoring above 65% in answering setting and main idea/details questions.

Table 17

Student Test Scores for Student A

	Percentage of **Character** Questions Answered Correctly	Percentage of **Setting** Questions Answered Correctly	Percentage of **Main Idea/Details** Questions Answered Correctly	Percentage of **Author's Purpose** Questions Answered Correctly	Percentage of **Sequence** Questions Answered Correctly
Practice Tests Teacher scaffolds provided as indicated	50% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text •summarizing the text	100% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text	60% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text	Test not given	100% Teacher Scaffolds: •analyzing test questions •analyzing answer choices
Practice Tests Teacher scaffolds provided as indicated	100% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text	Test not given	Test not given	Test not given	Test not given
Unit 2 Language Arts Benchmark Test No teacher scaffolds provided	28.6%	66.7%	66.7%	100%	33.3%

Table 18 includes teacher reflection data that shows Student A had a strong understanding of the processes found in text and could easily comprehend text when it

was read to him in a choral method. However, his fluency skills could limit his ability to decode grade level text.

Table 18

Teacher Reflection Data of Student A

In the next group, Student A did beautifully. He significantly struggles with decoding grade level text, but he comprehends it when read chorally with him. He can summarize each paragraph, can very easily tell me the main idea of each paragraph, and does not focus on the details. He completely understands the processes. I don't think he, or anyone, completely understands the participants. He needs teacher questioning to understand it. He ended up with a 100% on the practice test which is so encouraging. His previous scores on these practice tests have been 29 % and 50%. This student is a very low reader and has been so since first grade. So, this is a great achievement for him.
Student A did very well on his first practice test. However, as I learned with Student I, I need to draw a better connection as to how circumstances provide meaning to the text, and provide more information about the various aspects of the text.
Student A was not on his game today, but he did well in identifying the processes.
With days off, cold days, etc, I did not have the time to finish all of the lessons. Thus, the lessons were cut shorter than planned.
After each practice test, I gave Student A the test back to correct with no additional help. Then, he had to record what he did differently to get the answer correct the second time. He wrote that he looked back at the story, went back to the story and got it right.

Table 19 includes student analysis data recorded near the end of the study that demonstrates the difficulty he had in identifying processes in test questions and distinguishing between noun group expansion and processes when reading a main idea/detail test question.

Table 19

Example of Teacher Scaffold of Test Question/Answer Analysis by Student A- Main Idea/Detail Question

What is the topic of this selection? **A. why people have nightmares** **B. the first sleep cycle** **C. colorful dreams** **D. brain activity during sleep**	
Teacher	**Student A**
Ask yourself, what kind of question is this?	
	What kind of question is this?
Is it a who, what, when, where, why, or how?	
	When, I mean, where. It's a where.
I don't see the word where. What question word do you see?	
	That, what
What, it's a what question. Now, who or what are we talking about?	
	The topic
The topic - Good job!	
	So, I underline the topic?
Sure, whatever makes sense to you. Topic *what*?	
	Topic of this s -
Nope, that just tells me more information. That's my circumstance. *Circles "of this selection."* So, what topic? The one in this selection. That's extra information. Topic *what?*	
	Topic
Topic *is. Is*. That's my process - *is.* Now, what is *is?* Doing, saying, sensing, or relating?	
	What?
What is *is?* Doing, saying, sensing, or relating?	
	Sensing, I mean, is, a doing.
It's not something you do.	
	Saying

It's not something you say.	
	It's a process.
It just relates, doesn't it? What is it relating? The topic to what? The topic *is* what?	
	Is. . . is the, is the, is the, I forgot this word (points to the word "selection").
That's just extra information. What are we relating?	
	Points to the answers Is it over here?
It's any of those. It could be any of these. We don't know. It could be why people have nightmares, the first sleep cycles, the colorful dreams, the brain activity - we don't know. It could be any of them. So, we circle all of them.	

Student B

Table 20 documents that Student B had limited test score data. With limited English language skills as newcomer to the United States, her classroom teacher did not have her take the language arts benchmark test, and the grade level practice tests also proved very difficult for her.

Table 20

Student Test Scores for Student B

	Percentage of **Character** Questions Answered Correctly	Percentage of **Setting** Questions Answered Correctly	Percentage of **Main Idea/Details** Questions Answered Correctly	Percentage of **Author's Purpose** Questions Answered Correctly	Percentage of **Sequence** Questions Answered Correctly
Practice Tests Teacher scaffolds provided as indicated.	50% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text •summarizing the text •answering the questions	Test not given	40% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text	Test not given	Test not given
Practice Tests Teacher scaffolds provided as indicated.	20% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text •summarizing the text	Test not given	40% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text	Test not given	Test not given

Table 21 does demonstrate that the number of teacher scaffolds provided during the practice tests decreased over time without decreasing Student B's scores, nd that she benefitted from the functional lessons as she became more familiar with English.

Table 21

Teacher Reflection Data of Student B

Student B, as a newcomer, is gaining in her overall decoding abilities and basic English skills.
Student B is doing well even though she's a newcomer. It is easy to see this pedagogy is helping her understand the language better.
With days off, cold days, etc, I did not have the time to finish all of the lessons. Thus, the lessons were cut shorter than planned.
After each practice test, I gave Student B the test back to correct with no additional help. Then, she had to record what she did differently to get the answer correct the second time. She wrote that she found the answer in the story.

Student C

Table 22 documents that when appropriate teacher scaffolds were provided, Student C demonstrated proficiency in answering character, setting and author's purpose questions by scoring at or above 80%. When no teacher scaffolds were provided as on the benchmark test taken at the end of the study, Student C met a threshold level of proficiency by scoring above 65% in the areas of setting, author's purpose, and sequence questions. He also was able to demonstrate proficiency in answering main idea questions on the benchmark test by the end of the study.

Table 22

Student Test Scores for Student C

	Percentage of **Character** Questions Answered Correctly	Percentage of **Setting** Questions Answered Correctly	Percentage of **Main Idea/Details** Questions Answered Correctly	Percentage of **Author's Purpose** Questions Answered Correctly	Percentage of **Sequence** Questions Answered Correctly
Practice Tests Teacher scaffolds provided as indicated.	100% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text •summarizing the text	80% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	40% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	100% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	Test not given
Practice Tests Teacher scaffolds provided as indicated.	100% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text •summarizing the text	Test not given	Test not given	Test not given	Test not given
Unit 2 Language Arts Benchmark Test No teacher scaffolds provided	42.9%	66.7%	100%	66.7%	66.7%

Table 23 shows Student C consistently showed progress in the lessons but did need continual teacher support. This data also indicates he independently used language analysis when he had trouble understanding how to answer a question.

Table 23

Teacher Reflection Data of Student C

In the next group, Student D was absent, but Student C was there. He needed more support, but he did the questions at the end and got a 100%. So I think I need to back off of him a little more, and let him show me what he actually is able to do so I know what scaffolding he needs.
In Student C and D's group, since Student D missed the last lesson, I had to decide how to catch her up but also move the lesson forward for Student C. I ended up having Student C play the role of the teacher by having him provide the prompting as we analyzed the text. However, I had to jump in quite a bit to provide support as he became distracted. So, I don't think he got as much out of the lesson as he could have.
Students C and D did very well. Student C lacks the confidence to analyze the language features by himself. However, overall, I'm pleased with both students' progress right now.
I was very pleased with two 3rd graders(Students C and D) who read the practice test this week for the first time with no support beyond the question and answer analysis. One earned an 80% and the other a 60%.
With days off, cold days, etc, I did not have the time to finish all of the lessons. Thus, the lessons were cut shorter than planned.
After each practice test, I gave Student C the test back to correct with no additional help. Then, he had to record what he did differently to get the answer correct the second time. He wrote he looked back and found the answers, focused really hard, looked and found the answers, and looked at the sentences.

Table 24 demonstrates Student C's lack of fluency level caused him struggle when reading grade level test questions. The data also reveals that significant teacher prompting was provided while he analyzed test questions.

Table 24

Example of Teacher Scaffold of Test Question/Answer Analysis by Student C - Main Idea/Detail Question

What is the main idea of paragraph 4? **A. Everyone goes through sleep cycles.** **B. The eyes move back and forth during dreaming.** **C. The heart rate slows during Light Sleep.** **D. Dr. Chang prints out pictures from the machine.**	
Teacher	**Student A**
	What . . . what is the main idea of paragraph 4?
Read the answers.	
	Everyone goes through sleep circles
It's not sleep *circles*. What is that?	
	Cycles. The eyes move back and forth during dreaming, the heart rate slows during Light Sleep, Dr. Ch-
Chang	
	Chang points out pictures from the machine
We don't point out pictures from a machine. What do we do?	
	Print. Dr. Chang prints out pictures from the machine.
Okay, go back to the question and talk it out. Who or what are you talking about?	
	What
What is the question word, yep. Now, what are we talking about?	
	STUDENT D interjects: Main idea.
Main idea, good. So, underline main idea. What's "of paragraph 4?" What does that tell you?	
	It tells us extra information.
Yes, it tells us the where, doesn't it? What main idea? The one in paragraph 4.	

Student D

Table 25 documents that when appropriate teacher scaffolds were provided, Student D demonstrated proficiency in answering character and author's purpose questions by scoring at or above 80%. When no teacher scaffolds were provided as on the benchmark test taken at the end of the study, Student D was able to reach a threshold level of proficiency in nearly all areas.

Table 25

Student Test Scores for Student D

	Percentage of **Character** Questions Answered Correctly	Percentage of **Setting** Questions Answered Correctly	Percentage of **Main Idea/ Details** Questions Answered Correctly	Percentage of **Author's Purpose** Questions Answered Correctly	Percentage of **Sequence** Questions Answered Correctly
Practice Tests Teacher scaffolds provided as indicated.	100% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text •summarizing the text	60% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	40% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	100% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	Test not given
Practice Tests Teacher scaffolds provided as indicated.	100% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text •summarizing the text	Test not given	Test not given	Test not given	Test not given
Unit 2 Language Arts Benchmark Test No teacher scaffolds provided	71.4%	66.7%	66.7%	66.7%	33.3%

Table 26 shows Student D was strong in identifying processes but required much teacher prompting. She was able to make independent corrections to practice tests when returned, and if she was prompted to reread, look back in the text to find the answer, and eliminate answer choices, her score improved.

Table 26

Teacher Reflection Data of Student D

In the next group, Student D was absent.
In Student C and D's group, since Student D missed the last lesson, I had to decide how to catch her up but also the move the lesson forward for Student C. I ended up having Student C play the role of the teacher by having him provide the prompting as we analyzed the text. Student D is doing very well. She was able to find the processes and their types very easily. They both still need a lot of help on finding the participants and connecting them, such as a doing process to the do-er.
Students C and D did very well. Student D is very good at identifying the processes and the types, and applying these to the meaning of the text. However, she needs many teacher prompts to do this work which may due to her inattentiveness. However, overall, I'm pleased with both students' progress right now.
With days off, cold days, etc, I did not have the time to finish all of the lessons. Thus, the lessons were cut shorter than planned.
After each practice test, I gave Student D the test back to correct with no additional help. Then, she had to record what she did differently to get the answer correct the second time. She wrote she needed to read the text again, go back in the text to find answers, and crossed off answers that weren't right.

Tables 27A and 27B reinforce that Student D, with teacher prompts, can identify and define the processes in a question. In addition, she can identify participants in a question, and with heavy prompting can also identify the words that expand the noun group. This data also shows Student D can struggle to fluently read grade level text.

Table 27A

Example of Teacher Scaffold of Test Question/Answer Analysis by Student D - Main Idea/Detail Question

What is the topic of this selection?
A. why people have nightmares
B. the first sleep cycle
C. colorful dreams
D. brain activity during sleep

Teacher	Student A
	What is the topic of the sen. . . sentence?
What sound would you expect to you in the middle of sentence?	
	No response.
Sen-tence? What do you hear in the middle?	
	No response given.
/n/, but I don't see an N, do I? I see an L. So, It's not going to be sen. What's it going to be?	
	Sel
Yes, sel-ec-	
	tion
Yes, try it again	
	What is the topic of the selection?
Read the answers.	
	why people have nightmares, the first sleep circle
Cycle	
	cycle, colorful dreams, brain activity during sleep
Okay, we ask, who or what are we talking about in this question?	
	the topic
Yes, good, topic, the topic. Underline topic. Now we ask, the topic of the selection *what?*	
	is
Is, where's the is? (student underlines). Good! Now, we ask, what is *is*? what	

process is that?	
	relating
Relating - relating what?	
	Topic
Yep, to what?	
	This? (points to "of this selection")
Nope, remember, "of this selection" is tell me more. That expands the topic. So, what are you relating topic to?	
	What? Of?
That's the extra information. What is the topic of this selection? So, topic is being related to why people have nightmares or the first sleep cycle or colorful dreams or brain activity. We don't know which one it is related to yet. So, we can circle all of them since we don't know yet. And which topic? What topic are we talking about? Where is it?	
	We don't know.
We do. Which topic?	
	Right here. *Points to "of this selection"*
Yes! Of this selection. So, selection means the story or the text. Let's circle that since it's extra information.	

Table 27B

Example of Teacher Scaffold of Test Question/Answer Analysis by Student D - Main Idea/Detail Question

Which detail supports the main idea that all the colors in Dr. Chang's pictures mean something? **A. The pictures show yellow, orange, and red spots.** **B. The machine's pictures prove that people dream.** **C. The brain is active while people are sleeping.** **D. The red part covers the section that experiences fear.**	
Teacher	**Student A**
Let's go back to the question and think about it. Who or what are you talking about? So, I read it again - Which detail supports the main idea that all colors in Dr. Chang's pictures mean something. Who or what are we talking about?	

	Main idea?
That's the done-to. So you can underline that. What's the do-er?	
	No response.
So, supports is the process, and that's a doing process. Supports *what?* The main idea. *What* supports? What's the do-er?	
	STUDENT C interjects: The main idea
TEACHER: That's the done-to. What is doing the doing? [Student D], you look.	
	Supports
Yes, what's supporting?. You need to look.	
	The detail?
Yes, the detail. Detail *what?* Supports. Supports *what?* The main idea! Look at the next part - "that all the colors in Dr. Chang's pictures mean something." What does that tell you?	
	extra information
Extra information about what?	
	machine? pictures?
Look at the question - The main idea *that* . . . So, this whole thing (circles "that all the colors in Dr. Chang's pictures mean something") gives us extra information. That tells us about the main idea. The main idea *what?* That all the colors in Dr. Chang's pictures mean something.	

Student E

Table 28 documents that when appropriate teacher scaffolds were provided, Student E demonstrated a threshold level of proficiency in answering character and sequence questions by scoring above 65%. When no teacher scaffolds were provided as on the benchmark test taken at the end of the study, Student E was unable to reach a threshold level of proficiency in any area.

Table 28

Student Test Scores for Student E

	Percentage of **Character** Questions Answered Correctly	Percentage of **Main Idea/Details** Questions Answered Correctly	Percentage of **Author's Purpose** Questions Answered Correctly	Percentage of **Sequence** Questions Answered Correctly
Practice Tests Teacher scaffolds provided as indicated.	67% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text •summarizing the text	43% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	40% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	75% Teacher Scaffolds: •analyzing test questions •analyzing answer choices
Practice Tests Teacher scaffolds provided as indicated.	67% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text	40% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	Test not given	Test not given
Unit 2 Language Arts Benchmark Test No teacher scaffolds provided	33.3%	28.6%	20%	50%

The teacher journal data in Table 29 reinforces the data from 28 that indicates Student E struggles with independence. Here again, it is shown he is successful in

analyzing language in a small group intervention setting with teacher prompts provided but does not do the same in the mainstream setting, in which the benchmark test was taken.

Table 29

Teacher Reflection Data of Student E

Student E is understanding our work with language but is doing so with teacher supports. He needs less scaffolding in order to do the thinking on his own. Student F is doing well, but the students can be a bit silly together. However, they also seem to feed off of each other in a positive way which is building understanding of this.
Students E and F are doing beautifully. Student E completely understands how to identify the language features, describe them, and use these to explain the meaning of the text. However, I question if he can apply this independently in the classroom. He often demonstrates a high level of understanding of what I teach him in general but struggles to translate this learning back to the classroom or on classroom assessment like the benchmark tests. I think I need to be much more careful about the scaffolding I provide as he lacks the confidence to believe he can independently apply what's learned in intervention to the classroom.
Student E had a 100% on his practice test. I provided a small amount of support in answering the question he initially had wrong. With that small amount of support, he answered the question correctly. This again tells me that I need to be very careful of my scaffolding if my goal is to build independence.
4th graders did not do well. In fact, they all failed this weekly practice assessment. I think the main differences between the fourth grade and the other students were that the main idea questions were more difficult than the setting questions as the other grades had, and the 4th graders had more questions to answer so they may have rushed through. However, when I handed the test back to the fourth graders to correct, only one was able to improve his score on his own. So, "rushing" may not have been a factor. My plan to improve their progress is to continue teaching the language objectives of understanding how the noun phrase expands, but rather than applying this to the comprehension skill of fact and opinion, as originally planned, I am going to continue to focus on main idea, and stay with informational text.
Today, we did an assessment, and across the board, the results were very frustrating. However, I did have a lot of moments where I saw growth in the students, for instance, in E, F, G, and H. They had a test question in which the process was far from the participant, not next to it, and it said something like, "The author's purpose in paragraph 4 was to. . . " Instead of saying the process is "in paragraph 4," the students told me the

process was "was." I asked how figured this out, and they said "in paragraph 4" told them where the author's purpose was. So, they were able to explain the circumstance. Other groups weren't able to do this.

With days off, cold days, etc, I did not have the time to finish all of the lessons. Thus, the lessons were cut shorter than planned.

Another reflection I have as I think ahead to changes I would make in teaching unit three is the idea of just hitting the target skills in each unit rather than trying to address all of them. For example, Student E's fourth grade unit 2 mostly concentrates on main/idea.

Student F

Table 30 shows Student F's performance was inconsistent. On the teacher supported practice tests, he was successful in answering character questions; however, he did not answer these questions correctly on the benchmark test when no teacher support was provided. Reversely, when answering main idea questions with teacher support on the practice tests, he did poorly, but answered the majority of these types of questions correctly on the benchmark test in which no teacher support was provided.

Table 30

Student Test Scores for Student F

	Percentage of **Character** Questions Answered Correctly	Percentage of **Main Idea/Details** Questions Answered Correctly	Percentage of **Author's Purpose** Questions Answered Correctly	Percentage of **Sequence** Questions Answered Correctly
Practice Tests Teacher scaffolds provided as indicated.	75% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text •summarizing the text while reading	14% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	20% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	Test not given
Practice Tests Teacher scaffolds provided as indicated.	100% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	0% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	Test not given	Test not given
Unit 2 Language Arts Benchmark Test No teacher scaffolds provided	0%	71.4%	40%	0%

Table 31 illustrates Student F did well analyzing language in the lessons, but there is data that also reveals attention issues affected his performance. In addition, when

practice tests were returned to him to apply test taking strategies such as eliminating answers and looking for text clues, his scores increased.

Table 31

Teacher Reflection Data of Student F

Student F is doing well, but the students [E and F] can be a bit silly together. However, they also seem to feed off of each other in a positive way which is building understanding of this.

Student F had a 100% on the practice test today. I provided a small amount of support in answering the question he initially had wrong. With that small amount of support, he answered the question correctly. This again tells me that I need to be very careful of my scaffolding if my goal is to build independence.

Student F is catching on but his hyperactivity can get in the way of maintaining focus.

4th graders did not do well. In fact, they all failed this weekly practice assessment. I think the main differences between the fourth grade and the other students were the main idea questions were more difficult than the setting questions as the other grades had, and the 4th graders had more questions to answer so they may have rushed through. However, when I handed the test back to the fourth graders to correct, only one was able to improve his score on his own. So, "rushing" may not have been a factor. My plan to improve their progress is to continue teaching the language objectives of understanding how the noun phrase expands, but rather than applying this to the comprehension skill of fact and opinion, as originally planned, I am going to continue to focus on main idea, and stay with informational text.

Today, we did an assessment, and across the board, the results were very frustrating. However, I did have a lot of moments where I saw growth in the students, for instance, in E, F, G, and H. They had a test question in which the process was far from the participant, not next to it, and it said something like, "The author's purpose in paragraph 4 was to. . . " Instead of saying the process is "in paragraph 4," the students told me the process was "was." I asked how figured this out, and they said "in paragraph 4" told them where the author's purpose was. So, they were able to explain the circumstance. Other groups weren't able to do this.

With days off, cold days, etc, I did not have the time to finish all of the lessons. Thus, the lessons were cut shorter than planned.

Another reflection I have as I think ahead to changes I would make in teaching unit three is the idea of just hitting the target skills in each unit rather than trying to address all of them. For example, Student F's, fourth grade unit 2 mostly concentrates on main/idea.

After each practice test, I gave Student F the test back to correct with no additional help. Then, he had to record what he did differently to get the answer correct the second time. He wrote that he needed to reread and reread until he got the answer, go back in the story to find many clues, eliminate wrong answers, and use his background knowledge

Student G

Table 32 documents that when appropriate teacher scaffolds were provided, Student E demonstrated a threshold level of proficiency in answering character and sequence questions by scoring above 65%. When no teacher scaffolds were provided as on the benchmark test taken at the end of the study, Student E demonstrated proficiency in the area of author's purpose but was unable to reach at least a threshold level of proficiency in other areas. It should be noted, this student took the benchmark test in his mainstream classroom rather than in a small group setting with the researcher as the majority of other study participants did.

Table 32

Student Test Scores for Student G

	Percentage of **Character** Questions Answered Correctly	Percentage of **Main Idea/Details** Questions Answered Correctly	Percentage of **Author's Purpose** Questions Answered Correctly	Percentage of **Sequence** Questions Answered Correctly
Practice Tests Teacher scaffolds provided as indicated	75% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text •summarizing the text	57% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	60% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	Test not given
Practice Tests Teacher scaffolds provided as indicated	100% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	80% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	Test not given	Test not given
Unit 2 Language Arts Benchmark Test No teacher scaffolds provided	33.3%	28.6%	100%	0%

Table 33 documents Student G is a fluent reader yet struggled at times with the language analysis. The researcher frequently questions whether this is more an issue of affect and persistence or lack of knowledge.

Table 33

Teacher Reflection Data of Student G

The lesson's objective was on using participants to describe the characters in more detail. Student G is doing well overall with this, but he struggles to explain. For example, if the process is a doing, he can't say why it's a doing, but knows that it is. He does a lot of guessing so I need to slow him down.

Students G and H did the weekly practice test today, and they both did very well. Student G received 100%. I did not provide any support in reading or summarizing the text. I did analyze the test questions and answers with them though which included a lot of prompting. This raises the question as to when I will back off the support I give in helping them analyze the test questions.

The next group, Students G and H, did not do well. They are the highest level readers I work with yet they do not seem to understand how to apply these strategies. I think though that I expect more from them, and consequently, I don't provide as much patience for error as I do with the other groups.

4th graders did not do well. In fact, they all failed this weekly practice assessment. I think the main differences between the fourth grade and the other students were the main idea questions were more difficult than the setting questions as the other grades had, and the 4th graders had more questions to answer so they may have rushed through. However, when I handed the test back to the fourth graders to correct, only one was able to improve his score on his own. So, "rushing" may not have been a factor. My plan to improve their progress is to continue teaching the language objectives of understanding how the noun phrase expands, but rather than applying this to the comprehension skill of fact and opinion, as originally planned, I am going to continue to focus on main idea, and stay with informational text.

Again, I often feel as if much of the success of the students depends on their application of test taking skills and student persistence to maintain focus through the rigor of the test. However, I also question whether students who rush through a test do so because they really don't understand the content or if it's just not understanding the language skill. It almost feels like a question of the chicken and the egg. For example, I had a student this week who did rush through the test, and I know he could have done better, and he essentially refused to reread the text after getting the test back to correct. I felt frustration because I thought he was not trying his best. However, when I talked through one of the main idea questions, he easily found the answer. In this case, he needed more instruction. Hopefully, I'm responding to this need by providing more instruction and time. It's a lesson for me that I need to reflect on my own practices rather than placing blame on the child's actions.

With days off, cold days, etc, I did not have the time to finish all of the lessons. Thus, the

lessons were cut shorter than planned.

Another reflection I have as I think ahead to changes I would make in teaching unit three is the idea of just hitting the target skills in each unit rather than trying to address all of them. For example, Student Gs, fourth grade unit 2 mostly concentrates on main/idea.

After each practice test, I gave Student G the test back to correct with no additional help. Then, he had to record what he did differently to get the answer correct the second time. He wrote he went back to the story to find the clues, reread and reread, use the STP strategy to summarize the text, eliminate wrong answers, use his background knowledge, know what entertain, inform, and persuade meant, take his time, and look back in the paragraph to get the main idea.

Student H

Table 34 documents that when appropriate teacher scaffolds were provided, Student H demonstrated a threshold level of proficiency in answering character questions by scoring above 65%. When no teacher scaffolds were provided as on the benchmark test taken at the end of the study, Student H maintained the threshold of proficiency in answering character questions but was also able to do this with main idea/detail questions.

Table 34

Student Test Scores for Student H

	Percentage of **Character** Questions Answered Correctly	Percentage of **Main Idea/Details** Questions Answered Correctly	Percentage of **Author's Purpose** Questions Answered Correctly	Percentage of **Sequence** Questions Answered Correctly
Practice Tests Teacher scaffolds provided as indicated.	75% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text •summarizing the text	57% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	40% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	Test not given
Practice Tests Teacher scaffolds provided as indicated.	67% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	40% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	Test not given	Test not given
Unit 2 Language Arts Benchmark Test No teacher scaffolds provided	66.7%	71.4%	20%	0%

Table 35 shows that she had a strong understanding of processes and how to identify them in text. However, she did show inconsistencies in her overall progress.

Table 35

Teacher Reflection Data of Student H

The next group did not do the practice test. The lesson's objective was on using participants to describe the characters in more detail. Student H did great. She is quiet which I sometimes interpret as not understanding. However, when working one-one-one, she independently, with absolutely no prompt, identified the process which was very encouraging. She is internalizing, she is noticing the language on her own which is my

main objective.

Students G and H did the weekly practice test today, and they both did very well. Student H would have had a 100% had she not skipped a question. I did not provide any support in reading or summarizing the text. I did analyze the test questions and answers with them though included a lot of prompting. This raises the question as to when I will back off the support I give in helping them analyze the test questions.

The next group, Students G and H, did not do well. They are the highest level readers I work with yet they do not seem to understand how to apply these strategies. I think though that I expect more from them, and consequently, I don't provide as much patience for error as I do with the other groups.

Today, we did an assessment, and across the board, the results were very frustrating. However, I did have a lot of moments where I saw growth in the students, for instance, in E, F, G, and H. They had a test question in which the process was far from the participant, not next to it, and it said something like, "The author's purpose in paragraph 4 was to. . . " Instead of saying the process is "in paragraph 4," the students told me the process was "was." I asked how figured this out, and they said "in paragraph 4" told them where the author's purpose was. So, they were able to explain the circumstance. Other groups weren't able to do this.

4th graders did not do well. In fact, they all failed this weekly practice assessment. I think the main differences between the fourth grade and the other students were the main idea questions were more difficult than the setting questions as the other grades had, and the 4th graders had more questions to answer so they may have rushed through. However, when I handed the test back to the fourth graders to correct, only one was able to improve his score on his own. So, "rushing" may not have been a factor. My plan to improve their progress is to continue teaching the language objectives of understanding how the noun phrase expands, but rather than applying this to the comprehension skill of fact and opinion, as originally planned, I am going to continue to focus on main idea, and stay with informational text.

With days off, cold days, etc, I did not have the time to finish all of the lessons. Thus, the lessons were cut shorter than planned.

Another reflection I have as I think ahead to changes I would make in teaching unit three is the idea of just hitting the target skills in each unit rather than trying to address all of them. For example, Student H's fourth grade unit 2 mostly concentrates on main/idea.

After each practice test, I gave Student H he test back to correct with no additional help. Then, she had to record what she did differently to get the answer correct the second time. She consistently said she circled the answer in the story. She also said she needed some help knowing the words.

Student I

Table 36 documents that when appropriate teacher scaffolds were provided, Student I demonstrated proficiency in answering 80% of setting questions correctly. When no teacher scaffolds were provided as on the benchmark test taken at the end of the study, Student I was able to maintain this proficient level by answering 100% of these setting questions correctly. In addition, she also was proficient on the benchmark test in the area of main idea/details and met a threshold of proficiency in the area of sequence.

Table 36

Student Test Scores for Student I

	Percentage of **Character** Questions Answered Correctly	Percentage of **Setting** Questions Answered Correctly	Percentage of **Compare/ Contrast** Questions Answered Correctly	Percentage of **Author's Purpose** Questions Answered Correctly	Percentage of **Sequence** Questions Answered Correctly
Practice Tests Teacher scaffolds provided as indicated.	33% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text •summarizing the text	80% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text	50% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	20% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	Test not given
Practice Tests Teacher scaffolds provided as indicated.	60% Teacher Scaffolds: •analyzing test questions •analyzing answer choices •reading the text •summarizing the text	Test not given	Test not given	Test not given	Test not given
Unit 2 Language Arts Benchmark Test No teacher scaffolds provided	50%	100%	71.4%	20%	66.7%

Table 37 provides evidence that Student I was able to successfully answer setting questions after analyzing the language features of the test question with teacher support. This data also supports Student's I overall success in the study.

Table 37

Teacher Reflection Data of Student I

In Student I's lesson today, I felt as if she was frustrated. I didn't initially model the question in the practice test, and I should have, and I think that threw off the lesson a little bit. I was expecting too much from her, and I was jumping into scaffold. It should have been model, guided practice, and independent practice. I should remember that even in a practice test situation.
I introduced circumstances to Student I today. At first, I thought I would not do color coding to teach how to identify circumstances as I had done in teaching participants and processes, but now having taught a lesson, I think the color coding will help draw a connection as to how the circumstances relate to the participants and processes. While I feel the color coding is important, I also learned today that I need to work better at drawing a stronger link between the language objectives and the content objective. So, it is important to move beyond just marking up a text to identify the various language features and instead work to explain how the language tells us more about the main idea, or sequence, or author's purpose of the text. For instance, circumstances can tell us more about the setting of the text. So, after marking up the text to identify the circumstances, the students can add details about the setting to a story map, or after identifying participants, they can add details about the characters.
Student I's lesson went well. She needed many prompts to determine the language features, but once we analyzed the language of the questions on the practice test, she could easily tell me the setting of the text. *The 5th graders all answered over 80% of the questions correctly, two of them earning 100%. All of these students read and summarized the text independently, and three of the four students even analyzed the language of the test questions on their own which was excellent and very promising to see.*
One frustrating part I'm finding is connecting with teachers in the mainstream to the level I would prefer. Student I's classroom teacher gave the unit 2 benchmark test even though I still had 2 more weeks of lessons left to teach. Had I known this would happen, I could have prepped the students a little bit. But, I guess this is a true test whether they are applying the strategies, especially the test taking strategies we've been working on.
With days off, cold days, etc, I did not have the time to finish all of the lessons. Thus, the lessons were cut shorter than planned.

Another reflection I have as I think ahead to changes I would make in teaching unit three is the idea of just hitting the target skills in each unit rather than trying to address all of them. For example, Student I's, fifth grade unit 2 mostly concentrates on compare/contrast.

After each practice test, I gave Student I the test back to correct with no additional help. Then, she had to record what she did differently to get the answer correct the second time. She wrote down she needed to eliminate and use the STP summary strategy while reading, sound out words, check her work, and look back in the text to find the answer.

Table 38 demonstrates Student I's ability to identify participants easily without teacher support. It also shows her keen understanding of the relating process, and how this process relates participants to one another.

Table 38

Student Analysis Data of Compare/Contrast Test Question by Student J

Both Oscar and Greta are
A. friends of Old Man Winter.
B. turned into animals by Old Man Winter.
C. enemies of Spring.
D. turned into animals by Spring.

Teacher	Student J
	Both Oscar and Great. . . Greta . . . are friends with Old Man Winter, turned into animals by Old Man Winter. . . turned into animals by Old Man Winter, enemies of Spring, turned into animals by Spring (*student marks text).* Oscar and Greta *(underlines these words).* Then, circle this *(circles all of the answers).*
Why did you circle this?	
	because, ah, the questions?
Okay, Oscar and Greta. Who are we talking about?	
	Oscar and Greta.
Oscar and Greta *what*?	
	are turned into
Are. . . what is are?	
	a process

A process. Good. What kind of process?	
	A. . . relating
Good. So, you're relating Oscar and Greta to what?	
	the questions
One of those answers, right?	
	Yeah
Good, great	

Student J

Table 39 documents that when appropriate teacher scaffolds were provided, Student J demonstrated proficiency in answering character, setting, and compare/contrast questions by scoring at or above 80%. When no teacher scaffolds were provided as on the benchmark test taken at the end of the study, Student J was able to maintain this proficient level in the areas of character and setting.

Table 39

Student Test Scores for Student J

	Percentage of **Character** Questions Answered Correctly	Percentage of **Setting** Questions Answered Correctly	Percentage of **Compare/Contrast** Questions Answered Correctly	Percentage of **Author's Purpose** Questions Answered Correctly	Percentage of **Sequence** Questions Answered Correctly
Practice Tests Teacher scaffolds provided as indicated.	33%	100%	100%	60%	No test given
Practice Tests Teacher scaffolds provided as indicated.	80%	Test not given	Test not given	Test not given	No test given
Unit 2 Language Arts Benchmark Test No teacher scaffolds provided	100%	100%	57.1%	40%	33.3%

Table 40 illustrates Student J's attention issues that can cause distraction in her work as well as her reliance on regular teacher direction to support her reading.

Table 40

Teacher Reflection Data of Student J

In the second group of 5th graders, it went great. I felt as if Student J, during the guided practice, didn't seem to totally understand what we were doing, but I think she was just more quiet about it, more reflective so it didn't come across as if she was getting it. Student J, who I thought didn't get it, was the one who actually did so. So, I have to be careful, just because she's quiet, doesn't mean she doesn't understand.
Students J, K, and L did well today. They read the practice test by themselves. Student J did better than the others, who I feel understands SFL much better during the lessons. However, I also think much of it is tenacity to take a test of which she has.

Student J was quiet again in her group, but she could tell me the right answers thoughtfully. However, she can become lost in a group setting, and as we move along causes her to fall behind, and appear to not understand the learning.

Another reflection I have as I think ahead to changes I would make in teaching unit three is the idea of just hitting the target skills in each unit rather than trying to address all of them. For example, Student J's, fifth grade unit 2 mostly concentrates on compare/contrast.

With days off, cold days, etc, I did not have the time to finish all of the lessons. Thus, the lessons were cut shorter than planned.

Table 42 provides data that reinforces the teacher journal data, indicating Student J relies on teacher prompting to engage with the text, but if she is engaged, she easily can identify the various language features pertinent to the test question.

Table 42

Example of Teacher Scaffold of Test Question/Answer Analysis by Student J - Compare/Contrast Question

As someone holding Spring captive, Old Man Winter could best be compared to
A. a knight on a quest in a foreign land.
B. a hunter seeking big game.
C. a prince seeking a princess.
D. a king seeking power over others

Teacher	Student J
	As someone/as someone holding Spring captive, Old Man Winter could best/could best be compared to, a knight/a knight on a quest in a for . . . forinsense,
foreign land	
	a hunter seeking big game, a prince seeking a princess, a king seeking over . . .power over others
Okay, what do you ask yourself?	
	No response
Who or what are we talking about in that question?	
	Old Man Winter
Got it. Old Man Winter. Sometimes it	

helps to underline that if you want to but you don't have to. Then, we ask, Old Man Winter *what?*	
	could best be compared to
Yes - could best be compared to. What is compare? What kind of process is that we ask ourselves?	
	like, related
No, not related. What is compare? Do, say, or feel?	
	feel
Maybe a feel, maybe a doing. So, what are we comparing? To what?	
	Old Man Winter
Old Man Winter is being compared to what?	
	A knight
Maybe a knight, a hunter, a prince or king. Let's underline all of these because they're the possible things it can be compared to. We're not sure yet.	

Student K

Table 42 documents that when appropriate teacher scaffolds were provided, Student K demonstrated proficiency in answering character and setting questions by answering 100% of the questions correctly. Data as to Student K's ability to answer questions without teacher support is not available considering that Student K took the benchmark test with support.

Table 42

Student Test Scores for Student K

	Percentage of **Character** Questions Answered Correctly	Percentage of **Setting** Questions Answered Correctly	Percentage of **Compare/Contrast** Questions Answered Correctly	Percentage of **Author's Purpose** Questions Answered Correctly	Percentage of **Sequence** Questions Answered Correctly
Practice Tests Teacher scaffolds provided as indicated.	100% Teacher Scaffolds: •analyzing test questions •analyzing answer choice	100% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	40% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	20% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	No test given
Practice Tests Teacher scaffolds provided as indicated.	40% Teacher Scaffolds: •analyzing test questions •analyzing answer choice	No test given	No test given	No test given	No test given
Unit 2 Language Arts Benchmark Test No teacher scaffolds provided	Invalid score	Invalid score	Invalid score	Invalid score	Invalid score

Table 43 reveals Student K can be impulsive and a consequence of this is her using ineffective strategies such as guessing to demonstrate understanding.

Table 43

Teacher Reflection Data of Student K

In the second group of 5th graders, it went great. Student K seemed like she was completely understanding it. She was spot on, but she struggles with the oral skills to explain her reasoning, but it seems as if she's understanding it. Student K was using all of the different highlighters to color code, so was saying that all of the processes were the same. *Students J, K, and L did well today. They read the practice test by themselves. I think much of it is tenacity to take a test. I've been emphasizing the test taking skill of going back to the text to find the text clues. In doing so, I've been handing the tests back the students to apply these test taking strategies. Student K struggled with this, became frustrated, and said she couldn't do it. However, I pushed her a bit to look back in the text to find the text clues. Another student was then able to answer the questions easily while Student K remained frustrated. For her, this frustration affects much of her schoolwork and school experience. So, I question whether the problem is her not understanding the academic language or is it an issue of affect? I would say for this student that a significant aspect is affect.* *Student K seems to be more engaged, but her impulsivity causes her to lose course when working independently. She needs teacher prompts to guide to think about the meaning of the language or that language carries meaning.* *One frustrating part I'm finding is connecting with teachers in the mainstream to the level I would prefer. Student K's classroom teacher gave the unit 2 benchmark test even though I still had 2 more weeks of lessons left to teach. Had I known this would happen, I could have prepped the students a little bit. But, I guess this is a true test whether they are applying the strategies, especially the test taking strategies we've been working on.* *With days off, cold days, etc, I did not have the time to finish all of the lessons. Thus, the lessons were cut shorter than planned.* *Another reflection I have as I think ahead to changes I would make in teaching unit three is the idea of just hitting the target skills in each unit rather than trying to address all of them. For example, Student K's, fifth grade unit 2 mostly concentrates on compare/contrast.* *After each practice test, I gave Student K the test back to correct with no additional help. Then, she had to record what she did differently to get the answer correct the second time. Consistently, she wrote she needed to reread better, look back in the text for the answer, not getting mad while taking a test, not skipping lines when reading, and checking answers when finished.*

Table 44 shows Student K can identify participants with teacher prompt. It also includes data that reinforces her impulsivity as the guessing strategy is frequently utilized.

Table 44

Example of Teacher Scaffold of Test Question/Answer Analysis by Student K - Compare/Contrast Question

In paragraph 6, Old Man Winter's ice castle is compared to **A. a monster.** **B. a tiger.** **C. a mountain.** **D. a snowstorm.**	
Teacher	**Student K**
	In paragraph 6, Old Man Winter's ice castle is compared to. So...
Always read the answers.	
	a monster, a tiger, a mountain, a snowstorm. So, um, at first we do, so, so, in paragraph 6.
Who or what are we talking about?	
	Old Man Winter's ice castle
Good, the ice castle. Whose ice castle? Old Man Winter's, you're right. Then, we say, Old Man Winter's Ice Castle *what?*	
	Old Man Winter's Ice Castle *what?* In paragraph 6
Is . . . is, right? What kind of process is *is?* What's is?	
	Is compared to
What process is *is?* Is it doing, saying, sensing, or relating?	
	It's relating because
If it's relating, what is it relating?	
	It's relating to "is compared to"
What things are being related?	
	Um, um, Old Man Winter's ice castle
the ice castle is being related to. . . ?	
	Paragraph 6
No	
	the answers
To the answers, right. We're not sure what	

it's being related. It could be monster, tiger, mountain, or snowstorm. We're not sure yet. We have to figure it out. So, let's circle all of them. Now, what's "in paragraph 6?"	
	um, that's like, read it, in paragraph 6.
It's a tell me more. It's a circumstance, isn't it? So, where is it being compared to? In paragraph 6. So we need to look in paragraph 6 for the answer.	

Student L

Table 45 documents that when appropriate teacher scaffolds were provided, Student L demonstrated a threshold level of proficiency in answering character questions by scoring above 65% and demonstrated proficiency in the areas of setting and compare/contrast. When no teacher scaffolds were provided as on the unit 2 benchmark test taken at the end of the study, Student L was able to demonstrate at least a threshold level of proficiency in all areas except author's purpose.

Table 45

Student Test Scores for Student L

	Percentage of **Character** Questions Answered Correctly	Percentage of **Setting** Questions Answered Correctly	Percentage of **Compare/Contrast** Questions Answered Correctly	Percentage of **Author's Purpose** Questions Answered Correctly	Percentage of **Sequence** Questions Answered Correctly
Practice Tests Teacher scaffolds provided as indicated.	67% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	80% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	80% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	20% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	No test given
Practice Tests Teacher scaffolds provided as indicated.	40% Teacher Scaffolds: •analyzing test questions •analyzing answer choices	No test given	No test given	No test given	No test given
Unit 2 Language Arts Benchmark Test No teacher scaffolds provided	100%	100%	85.7%	40%	66.7%

Tables 46 and 47 demonstrates Student L can struggle in accurately identifying processes. It also shows that she understands asking guiding questions will lead her to identifying meaningful language features. It also demonstrates her ability to successfully identify circumstances in a question.

Table 46

Teacher Reflection Data of Student L

In the second group of 5th graders, it went great. Student L seems to be getting it; however, at the end I gave them a practice question to be done completely by themselves. Student L immediately got frustrated and said she couldn't do it.

Students J, K, and L did well today. They read the practice test by themselves. I think much of it is tenacity to take a test. I've been emphasizing the test taking skill of going back to the text to find the text clues. In doing so, I've been handing the tests back the students to apply these test taking strategies. Student L and another student struggled, became frustrated, and said they couldn't do it. However, I pushed them a bit to look back in the text to find the text clues. Student L was then able to answer the questions easily while the other remained frustrated.

Student L did well. She is very good at asking pertinent questions and identifying each process. We'll see if she can apply this knowledge to help her identify the setting of the text.

One frustrating part I'm finding is connecting with teachers in the mainstream to the level I would prefer. Student L's classroom teacher gave the unit 2 benchmark test even though I still had 2 more weeks of lessons left to teach. Had I known this would happen, I could have prepped the students a little bit. But, I guess this is a true test whether they are applying the strategies, especially the test taking strategies we've been working on.

With days off, cold days, etc, I did not have the time to finish all of the lessons. Thus, the lessons were cut shorter than planned.

Another reflection I have as I think ahead to changes I would make in teaching unit three is the idea of just hitting the target skills in each unit rather than trying to address all of them. For example, Student L's, fifth grade unit 2 mostly concentrates on compare/contrast.

After each practice test, I gave Student L the test back to correct with no additional help. Then, she had to record what she did differently to get the answer correct the second time. Consistently, she said she reread the text and eliminated wrong answers. Other things noted included looking back, need to slow down, look at the answer more and read the answer more carefully.

Table 47

Example of Teacher Scaffold of Test Question/Answer Analysis by Student L - Compare/Contrast Question

How is Oscar different from other people in his village? **A. He doesn't want to challenge Old Man Winter.** **B. He doesn't mind the cold.** **C. He is friendly with the mayor.** **D. He has been to the North Pole.**	
Teacher	**Student L**
	How is Oscar different from other people in this village/in his village. How *what*? is Oscar different. . . Umm...
Well, first ask, who or what are we talking about?	
	We're talking about Oscar (underlines Oscar)
Oscar *what*?	
	Oscar *what*? Different from other people (underlines this text)
Is different from other people, right?	
	Is different from other people.
What is *is*? What process is that?	
	Is, is a tell me more.
Is it a doing, a saying, a sensing, or a relating?	
	a relating
Okay, then, you ask yourself, "What is Oscar being related to?"	
	Um, other people
You got it, other people. Good. What's the part about "in his village?" What does that tell you?	
	That tells us more.
Yeah, it tells you more.	
	It tells us more than we need to know
It tells you the where, doesn't it?	
	In his village . .. *student underlines these words*

CHAPTER FIVE: CONCLUSIONS

In this study, I address the research question *How does a functional linguistics approach enhance low level readers understanding of text and enable them to answer test questions on a benchmark test?* Here, I will discuss the major findings as well as limitations of the study, implications for teachers of low level readers, and suggestions for further research.

Major Findings

1. Comprehension test questions have specific language patterns unique to the type of comprehension skill being assessed.
2. Learning language patterns help students develop a habit of mind when approaching academic text and test questions.
3. Language pattern knowledge is only one aspect leading to successfully answering test questions.
4. Low level readers benefit from additional explicit teaching of content objectives while interweaving language patterns.
5. A functional language approach is more effective when the scope of its application is narrowed.

Comprehension test questions have specific language patterns unique to the type of comprehension skill being assessed.

As discussed in chapter two, Schleppegrell and her colleagues developed functional language analysis tools to uncover language patterns in the areas of social studies, writing, science, math, and language arts (Fang & Schleppegrell, 2008; Achugar, Schleppegrell & Oteiza, 2007). However, according to Schleppegrell, no known

published research is available in regards to the functional language analysis of test questions (personal communication, September 4, 2013).

By applying these same functional language analysis tools, this study concludes specific language patterns do exist in language arts test questions as they do in content subject areas, and these language patterns, as discussed in chapter 4, are unique to the type of comprehension skill being assessed by the question. For example, sequence questions ask the reader to find when something occurs, use signal words but do not include language of modality or attribution. Author's purpose questions often ask the reader to determine other possibilities or what characters or people in the text think using modals and attribution language. These questions also want the reader to determine the reason why something happens in the text or who is involved in the event. Character questions typically ask the reader how something is done, when it happened, or the place it happens. Character questions involve all of the processes: saying, doing, sensing, and relating which tells us the test taker needs to not only understand actions of characters, but what they say, feel or think. Character questions also include relating processes that require the student to relate, or link, two participants together. Modality and attribution language were also often found in character questions. Main idea and detail question want the reader to identify the participants and places in the text, or the "what" of the text. The processes in the questions are primarily relating and doing processes which requires the reader to find the actions in the text, but also may ask the reader to relate, or link, two participants together. A cohesive device, the referential pronoun, is frequently used, requiring the reader to link back to text that is previously mentioned. Attribution

and modality language is also used. Finally, draw conclusions questions often include sensing processes, which requires the reader needs to determine what is being felt or thought.

Learning language patterns help students develop a habit of mind when approaching academic text and test questions.

As described above, the text analysis concludes there are specific language patterns in questions that are dependent on the type of comprehension skill being tested. From chapter two, we know Fang and Schleppegrell (2004) have worked extensively to develop a pedagogical approach that teaches students how to explore text in a way that highlights such language patterns. In doing so, students are taught to uncover how each clause presents experiences, and consequently, raise students' consciousness to the power different language choices have on meaning.

When such a functional pedagogy is applied to understanding the language patterns of test questions, a functional metalanguage is then established for students. This metalanguage made it possible for students to develop a habit of mind to strategically approach linguistically dense comprehension questions even when no teacher scaffolding was provided. Consequently, students' higher-order thinking skills were continually being developed, which, according to Rose (1989), is what struggling readers, students with a history of school failure, need to in order to believe they can perform at a high level.

Language pattern knowledge is only one aspect leading to successfully answering test questions.

Student success on practice tests is dependent not only on an understanding of the language of the questions but on other variables as well. Other variables that affect performance include a student’s application of effective test taking strategies, a student's persistence to apply taught strategies and the test-taking environment.

Many times in this study, test scores significantly increase when a completed test was returned to a student to apply effective test taking strategies such as persistently looking back in the text for answer clues, narrowing answer choices through elimination, or answering a question that had been overlooked or skipped the first time through. None of this is related to the language of the test, but the absence of these strategies can predict an inaccurate reflection of a student's knowledge.

However, applying these strategies requires student persistence. It is far easier and faster to simply guess an answer or leave blank a question that appears difficult than it is to repeatedly work at the task by turning to alternative methods such as searching for appropriate text clues or eliminating answer choices. However, to be persistent requires a belief that the task will likely result in success (Feather, 1961). For a low level reader, who has repeatedly experienced school failure, to believe that a difficult task like applying time intensive test taking strategies will result in success is far diminished (Bandura, 1977, 1986, 1997; Eccles et al, 1983; Nicholls, 1984, 1990). As discussed in chapter two, Mehan (1979) finds there is an implicit form that students are expected to integrate with the content in order to gain proficiency in the task of schooling. Students need to know with whom, when, and where to speak and act while using speech and behavior appropriate for the context. One significant form of schooling is test taking, and

as discussed, this requires persistent application of particular strategies. Yet, knowledge of these strategies, and particularly, the importance of tenacity of their application, is often implicit, or hidden, for struggling readers. This study found the importance of making these skills explicit.

To be persistent on a difficult task, like test taking, requires motivation. One motivating factor for student learning is the presence of a teacher-student relationship (Webb & Palinscar, 1996). In this study, relationships were built between students and the teacher through regular small group lessons. These relationships made it effective to have low level readers take the reading tests with the researcher from whom they had learned the language and test-taking strategies as opposed to taking the test in the mainstream classroom where it may not have been explicitly taught.

Low level readers benefit from additional explicit teaching of content objectives while interweaving language patterns

While language objectives were developed throughout the study from the language arts content objectives taught in the mainstream, the main focus of the pull-out reading intervention lessons was teaching the academic language that was embedded in the content curriculum. However, as the study progressed, it was clear the students needed more explicit instruction, a double dose, in teaching the content objectives. They were coming to the lessons without a working knowledge of the comprehension skills; thus, being proficient in the comprehension skill language patterns was not enough for students to then be proficient in the skill itself. Low level readers require more explicit teaching of content objectives while interweaving language patterns. This finding is supported in the

sheltered instruction work of Cantoni-Harvey (1987) where the importance of concurrently teaching content with language is emphasized.

An SFL approach is more effective with low level readers when the scope of its application is narrowed

The evolution of applying an SFL approach in this study began with a large scope: include both the pedagogies of teaching register and genre of language. However, as described in the limitations of the study, maintaining a commitment to weaving genre theory into the SFL guided reading lessons proved to be difficult and cumbersome. As a result, the scope of the lessons narrowed to only include a focus on the register of language. Then, after analyzing the teacher journal data at the end of the study, it became clear that low level readers who have experienced significant school failure would benefit from the lessons breadth to taper even more for a short six to eight week unit. By focusing on just the target comprehension skills in a unit, or a just a few language features would provide more time for students to become independent in applying the strategies.

Limitations

This study involved a handful of limitations including,

1. a shortened schedule
2. a change in the study's participants
3. a de-emphasis on the genre-theory aspect of the study
4. transcriptions of student text analysis proved to be a richer data source than teacher reflections

As a study taking place within a pull-out reading program, a significant limitation of the study was the classroom teachers' schedule that varied between students. The school district in which this study took place set a two week testing window in which classroom teachers may have administered the benchmark test. In planning the lessons, it was intended that students would take the test later in the testing window to ensure the maximum lessons taught. To facilitate this, an option to classroom teachers was offered for the study's participants to take the test with the researcher on a particular day that was at the end of the testing window; however, some teachers did not opt for this arrangement which caused some students to take the benchmark test before completing all of the lessons.

A second limitation of the study involved one of the study's participants. This student's severest literacy need was in writing rather than reading. In an attempt to address this unique need, the same functional principles applied to the reading lessons were applied to writing. However, her lessons fell drastically behind those of the others. Additionally, this participant had other needs that were quite discrepant from the other participants which took more time away from meeting the study's objectives. This resulted in gathering very limited applicable data, and this participant was removed from the study.

The study's design was to focus more heavily on genre theory, but it became difficult to carry through on this. Causes for this include the difficulty of locating text within a student's reading level that also fit the intended genre and practice tests that were from a particular genre but also tested the skills of the content objective.

Finally, the main source of qualitative data was intended to be the teacher reflections included in the teacher journal. A supplemental source of data was planned to be the samples of students analyzing text during practice tests. However, it proved that the students transcriptions were a much richer data source than the journals in that they included easily quantifiable objective evidence of students' independence level, teacher scaffolding, and overall development of the students' habit of mind when approaching difficult academic text.

Implications

This study implies that a functional approach to teaching reading comprehension is a worthwhile pedagogy for teachers. It provides practitioners a practical tool to understand text by unpacking the language. However, this language instruction is not enough. It is necessary to draw a strong connection between the comprehension skills and the language by asking, “How does the language give functional meaning to the text?”

Furthermore, the teacher must always focus on independence for low level readers, particularly in a pull-out program. How do teachers ensure students are independently applying taught strategies when they return to the mainstream classroom after leaving the context of a highly supported pull-out lesson? Once the metalanguage is established, it is vital to carefully craft guiding questions that promote independence and build a habit of mind that is present regardless of educational setting.

Finally, as a teacher who is not a linguist and is also new to SFL, it was easy to feel intimidated by the grammar and language. However, an implication for teachers is to not avoid this language teaching for a lack of linguistic knowledge as the focus of SFL is

not on form. Using guiding questions when teaching functional grammar reinforces the concept that a functional pedagogy is about interpreting the *meaning* of the form of the text, not simply identifying the form alone.

Further Research

This study uncovered the need to probe further into low level readers and academic language and develop questions for later research:

1. In the language analysis of this study, particular functional guiding questions were used. Considering this, what additional key language patterns could be found that may not have been uncovered if other guiding questions were used?
2. As discussed earlier, creating independence for low level readers is crucial to increasing their success in the mainstream classroom. What are key ways to scaffold student comprehension that develops independent habit of mind?
3. This study used the questions from the benchmark test to guide the lesson objectives. Without using the assessment questions to guide to the lesson objectives, how else can the learning be mapped?

Conclusion

Students must be explicitly taught language in order to access the content. This is necessary for all students as the content curriculum becomes increasingly complex, but it is particularly important for low level readers whose home language may not reflect the language of school. This explicit teaching must be applied to all aspects of schooling, including the test questions that are used to assess knowledge of the content. Using a

functional approach that focuses on meaning is an effective method that provides students a tool to unpack the linguistic density of the question and make the content accessible.

APPENDIX A

Guiding Principles of Functional Language Analysis

Achugar, M., Schleppegrell, M., & Oteiza, T. (September 01, 2007). Engaging Teachers in Language Analysis: Functional Linguistics Approach to Reflective Literacy. *English Teaching: Practice and Critique, 6,* 2, 8-24.

- Learning is a semiotically mediated activity
- Language and content are inseparable
- Language users make choices based on their linguistic repertoires and these choices are related to the situations they participate in.
- Second language development is an expansion of the meaning making resources.
- Academic language features can be recognized across languages.
- Learning about language by developing a meaning-based metalanguage allows language users to be reflective about the meaning and power of the linguistic choices that others and they themselves make.
- Focused work on analyzing texts allows users to become aware of the meaning and power of language choices.
- Learning is socially distributed and occurs in communities of practice.

APPENDIX B

A Guide to Functional Language Analysis

adapted from: Fang, Z., Schleppegrell, M., & Lukin, A. (2008). *Reading in secondary content areas: A language-based pedagogy*. Ann Arbor: University of Michigan Press.

Guiding Question	Functional Language Analysis Strategy	Language Pattern to Analyze	Common Content Area to Apply
How is this text organized?	• analyze patterns of thematic progression • analyze process type • analyze cohesive devices	• Theme & rheme structure • process types • construction of time and cause	• science • history • math • reading
What is this text about? What does what to whom, how, when, and where?	• analyze clause participants • analyze attributes, processes, circumstances	• participant • attribute • process • circumstance	• science • history • math • reading
What is the author's perspective and how is that perspective infused into the text?	• analyze process types & participant roles • analyze word choice	• process type • nominalization • word choice	• science • history • reading
What information is implicit or missing from this text?	• analyze ellipses • analyze conjunction • analyze nominalization	• reference • ellipses • conjunction • nominalization	• science • history • math • reading
What are the key concepts or characters developed in this text?	• analyze lexical and referential chains	• lexical and referential chains	• reading
How does the author of this text interact with the reader? How do the characters interact with each other?	• analyze speech functions and mood • analyze modality	• speech function • mood • modality	• math • reading

APPENDIX C

Basic Educational Genres and their Sub-Genres

Derewianka, B. (January 01, 2003). Trends and Issues in Genre-Based Approaches. *Relc Journal, 34,* 133-154.

Social Purpose	Genre	Sub-Type
To provide information about a particular person, place or thing	description	objective description
To provide information about a class of things	information report	descriptive report taxonomic report class/subclass part/whole compare/contrast report
To tell someone how to do something	procedure	instructions experiment directions regulations
To tell what happened	recount	personal recount factual recount biographical recount autobiographical recount historical recount
To explain how or why a phenomenon takes place	explanation	sequential explanation causal explanation factorial explanation consequential explanation exploration
To explore the human condition through story	story genres	narrative moral tale or fable anecdote
To respond to a literary text or artistic work	response genres	personal response review interpretation
To mount an argument	exposition	critical response persuasion discussion/debate

APPENDIX D

Outline: Genre-Theory - Lesson Plan Structure

adapted from: Derewianka, B. (January 01, 2003). Trends and Issues in Genre-Based Approaches. *Relc Journal*, *34*, 133-154.

A. Develop an understanding of the field (content)
    a. Develop students' knowledge base
    b. Extend students' research skills
    c. introduce relevant vocabulary
    d. Probe across cross-cultural differences
B. Familiarize students with the genre
    a. briefly introduce the genre by immersing them in sample texts
    b. model the text
        i. display the model text and have students reflect on the following:
            1. for what purpose do we use text such as this? what job does such a text do?
            2. where would we find such texts?
            3. who do you think would write a text? for whom?
            4. have you read or written texts like this before? why?
        ii. discuss the way the text is structured and why it is structured like this
        iii. explore the language features of the genre through modeling or guided reading or guided writing conferences
            1. what words give us the who, what, when, where, why, how in this procedure? what would happen if we omitted these words?
            2. where are the time markers in this sequence? how do they help you follow the sequence of events?
            3. what tense is this narrative written in? what would be the effect if we changed it to present tense?
            4. what words express the writer's personal judgment in this argument? are they convincing? too emotive or emphatic?
            5. how is language being used to create a vivid image in this description?
        iv. develop control over the genre
            1. write a joint construction of the text
        v. independent construction
        vi. extend and critique
            1. look at model texts for optional states/moves to identify:
                a. less typical stages
                b. other ways of ordering stages
                c. identify how one genre might have been embedded in a stage of another genre
                d. mixed genres that have dual purposes
            2. creative exploitation of the genre

APPENDIX E

Template: Functional Language Analysis of Test Questions

GRADE:

LINGUISTIC GENRE OF THE TEXT: LANGUAGE ARTS SKILL ASSESSED: QUESTION TYPE: SPEECH FUNCTION:

CLAUSE	THEME	RHEME	ATTRIBUTION	Interrogative Pronoun	NOUN GROUP EXPANSION	PARTICIPANT/ PARTICIPANT ROLE	PROCESS/ PROCESS TYPE	CIRCUMSTANCE	COHESION Referring Word, Signal Word, Ellipses, Word Associations, Density, Nominalization, Abstraction	CONJUNCTION	MODALITY

APPENDIX F

Sample Questions: Language Arts Benchmark Test: Third Grade

What happened first in the story?
A. The man tried to catch the dove.
B. The ant fell into the fountain.
C. The dove flew to the tree.
D. The ant bit the man

Which of the following is important to the events of the story?
A. the fountain
B. the playground
C. the path
D. the sun

Which of these best describes the dove?
A. She bit people.
B. She was clever.
C. She could swim well.
D. She was tricky.

How were the ant and the dove alike?
A. They were good at solving problems.
B. They enjoyed swimming and other sports.
C. They were proud of their good looks.
D. They were quiet and patient.

Short answer: On another sheet of paper answer this question:
This story teaches a lesson, or moral. It was: *One good turn deserves another*.
Explain how the characters in the story show this lesson.

How did the ant feel when he saw the man with the net?
A. tired
B. foolish
C. concerned
D. shy

Why did the ant bite the man?
A. to get the food he needed
B. to stop the man from crushing the ant
C to show the dove how brave he was
D. to repay the dove for helping the ant.

APPENDIX G

Sample Questions: Language Arts Benchmark Test: Fourth Grade

Reread Paragraph 3. The main idea of this paragraph is that American Indians
A. dried blueberries and made blueberry powder.
B. made and ate blueberry mush.
C. taught settlers about blueberries.
D. used blueberries in many ways.

Compared to the earlier versions of the mush, the later versions made by the settlers were probably
A. thicker.
B. warmer.
C. sweeter.
D. saltier.

Which sentence in the first paragraph is a statement of opinion?
A. The blueberry deserves the title of all-American berry.
B. The blueberry has been growing in North America for thousands of years.
C. Almost all the blueberries grown in the world are grown here in the United States.
D. Americans grow about 300 million pounds of blueberries every year.

In making blueberry mush, when do you cover the pan?
A. as soon as you turn on the heat
B. just before you add the cornmeal
C. just after you add the cornmeal and salt
D. when you take the pot off the stove

Why did the author probably include the recipe for blueberry mush?
A. It is a very popular dessert for people to eat.
B. It lets the reader share the settlers' experience.
C. It is the best way to celebrate National Blueberry Month.
D. It is a convenient way to store blueberries for later use.

Which of the following statements is supported by information from the selection?
A. North America produces most of the world's blueberries.
B. Blueberries will only grow in North America.
C. Americans eat more blueberries than any other fruit.
D. Pancakes are the most popular way to eat blueberries.

APPENDIX H

Sample Questions: Language Arts Benchmark Test: Fifth Grade

According to the selection, which of the following events occurred first?
A. The computer Deep Blue was created.
B. The computer Deep Thought was created.
C. A world champion chess player lost a game to a computer.
D. Garry Kasparov agreed to a chess match with a computer.

The phrase "Six years later" in the third paragraph helps the reader understand
A. a cause-and-effect relationship
B. the difference between a fact and an opinion
C. the author's purpose
D. the sequence

Based on the selection, how were Deep Blue and Kasparov alike?
A. They were both programmed by scientists.
B. They had both defeated Deep Thought.
C. They were both highly skilled at chess.
D. They could both analyze thousands of plays per second.

Kasparov can best be described as
A. nervous.
B. clever.
C. generous.
D. doubtful.

Which of the following is a theme of the story?
A. Computers have endless capabilities.
B. Humans are more intelligent than machines.
C. Kasparov is the world's chess champion.
D. Machines are as smart as people.

What is the author's purpose for including this fact in the writing?
"The average person can only consider one or two chess positions per second."
A. To express their feeling about how people play chess.
B. To persuade the reader to learn chess.
C. To inform the reader of a fact to better understand the game.
D. To entertain the reader.

Short answer: Compare what happened in the first match that Kasparov had with Deep Thought to what happened in the second match with Deep Blue. Tell how the matches were the same and how they were different.

Where did Kasparov play the games against Deep Blue?
A. Soviet Unction
B. Pennsylvania
D. Around the world.
D. Russia

APPENDIX I

Template: SFL Guided Reading Lesson Plan Template

Weekly Progress Sheet – Literacy Intervention **Student: _____Week of: _____**

SFL Guided Reading Lesson

Day 2	Day 3	Day 5
☐ **Self-Selected Reading - (5 min)** ☐ Classroom Books: ☐ Home Books:	☐ **Self-Selected Reading - (5 min)** ☐ Classroom Books: ☐ Home Books:	☐ **Self-Selected Reading - (5 min)** ☐ Classroom Books: ☐ Home Books:
☐ **Before Reading (5 min)** Text: Genre: Level: Application to Classroom Skill: ☐ Develop understanding of content ☐ Introduce relevant vocabulary: ☐ Probe cross-cultural differences: ☐ Familiarize students with the genre ☐ Briefly introduce genre ☐ Immerse in sample texts: ☐ Model exploration of language features/Introduce metalanguage ☐ Model exploration of stages	☐ **Before Reading (5 min)** Text: Genre: Level: Application to Classroom Skill: ☐ Develop understanding of content ☐ Introduce relevant vocabulary: ☐ Probe cross-cultural differences: ☐ Familiarize students with the genre ☐ Briefly introduce genre ☐ Immerse in sample texts: ☐ Model exploration of language features/Introduce metalanguage ☐ Model exploration of stages	☐ **Before Reading (5 min)** Text: Genre: Level: Application to Classroom Skill: ☐ Develop understanding of content ☐ Introduce relevant vocabulary: ☐ Probe cross-cultural differences: ☐ Familiarize students with the genre ☐ Briefly introduce genre ☐ Immerse in sample texts: ☐ Model exploration of language features/Introduce metalanguage ☐ Model exploration of stages
☐ **During Reading (10-15 min)** ☐ Read text pages _____ **Word ID:** o Accuracy Rate: _____ Frustration/Instructional/Independent o Cueing Strengths: Semantic/Syntactic/Visual o Cueing Errors: Semantic/Syntactic/Visual o Prosody score: _____ (see attached rubric) o **Comprehension** Retell score:: _____ (see attached rubric) ☐ Guided exploration of language features ☐ How is this text organized? ☐ What is this text about? ☐ What does what to whom, how, when, and where? ☐ What is the author's perspective and how is that perspective infused into the text? ☐ What information is implicit or missing from this text? ☐ What are the key concepts or characters developed in this text? ☐ How does the author of this text interact with the reader? How do the characters interact with each other? ☐ Develop control over genre with joint construction of text	☐ **During Reading (10-15 min)** ☐ Read text pages _____ **Word ID:** o Accuracy Rate: _____ Frustration/Instructional/Independent o Cueing Strengths: Semantic/Syntactic/Visual o Cueing Errors: Semantic/Syntactic/Visual o Prosody score: _____ (see attached rubric) o **Comprehension** Retell score:: _____ (see attached rubric) ☐ Guided exploration of language features ☐ How is this text organized? ☐ What is this text about? ☐ What does what to whom, how, when, and where? ☐ What is the author's perspective and how is that perspective infused into the text? ☐ What information is implicit or missing from this text? ☐ What are the key concepts or characters developed in this text? ☐ How does the author of this text interact with the reader? How do the characters interact with each other? ☐ Develop control over genre with joint construction of text	☐ **During Reading (10-15 min)** ☐ Read text pages _____ **Word ID:** o Accuracy Rate: _____ Frustration/Instructional/Independent o Cueing Strengths: Semantic/Syntactic/Visual o Cueing Errors: Semantic/Syntactic/Visual o Prosody score: _____ (see attached rubric) o **Comprehension** Retell score:: _____ (see attached rubric) ☐ Guided exploration of language features ☐ How is this text organized? ☐ What is this text about? ☐ What does what to whom, how, when, and where? ☐ What is the author's perspective and how is that perspective infused into the text? ☐ What information is implicit or missing from this text? ☐ What are the key concepts or characters developed in this text? ☐ How does the author of this text interact with the reader? How do the characters interact with each other? ☐ Develop control over genre with joint construction of text
☐ **After Reading (10 min)** ☐ Independent construction of text	☐ **After Reading (10 min)** ☐ Independent construction of text	☐ **After Reading (10 min)** ☐ Independent construction of text

REFERENCES

Achugar, M., Schleppegrell, M., & Oteiza, T. (September 01, 2007). Engaging teachers in language analysis: Functional linguistics approach to reflective literacy. *English Teaching: Practice and Critique, 6,* 2, 8-24.

Allington, R. (January 01, 1984). Content coverage and contextual reading in reading groups. *Journal of Literacy Research, 16,* 2, 85-96.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84,* 191-215.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice Hall.

Bandura, A (1997). *Self-efficacy: The exercise of control.* New York: W.H. Freeman.

Cantoni-Harvey, G. (1987). *Content-area language instruction: Approaches and strategies.* Reading, MA: Addison-Wesley.

Cazden, C. B., In John, V. P., & In Hymes, D. H. (1972). *Functions of language in the classroom*. New York: Teachers College Press.

Chomsky, N. (1965). *Aspects of the theory of syntax*. Cambridge: M.I.T. Press.

Christie, F. In S.Tchudi (Ed.) (1985). *Language, schooling and society.* Upper Montclair, NJ: Boynton/Cook.

Clark, H. H. (January 01, 1969). Linguistic processes in deductive reasoning. *Psychological Review, 76,* 4, 387-404.

Cobb, C. W., & Douglas, P. H. (March 01, 1928). A theory of production. *The American Economic Review, 18,* 1, 139-165.

Coffin, C., Donohue, J. P. English for academic purposes: Contributions from systemic functional linguistics and academic literacies. (March 01, 2012). Academic literacies and systemic functional linguistics: How do they relate?. *Journal of English for Academic Purposes, 11,* 1, 64-75.

Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, N.J: Merrill.

Cummins, J. (December 01, 1979). The language and culture issue in the education of minority language children. *Interchange, 10,* 4, 72-88.

Cummins, J. (June 01, 1980). The cross-lingual dimensions of language proficiency: Implications for bilingual education and the optimal age issue. *Tesol Quarterly, 14,* 2, 175-187.

Cummins, J. (2000). *Language, power, and pedagogy: Bilingual children in the crossfire*. Clevedon [England: Multilingual Matters.

Derewianka, B. (January 01, 2003). Trends and issues in genre-based approaches. *Relc Journal, 34,* 133-154.

Donaldson, M. C. (1963). *A study of children's thinking*. London: Tavistock Publications.

Eccles, J.S., Adler, T.F., Futterman, R., Goff, S.B., Kaczala, C.M., Meece, J.L., & Midgley, C. (1983). Expectancies, values, and academic behaviors. In J.T. Spence (Ed.), *Achievement and achievement motivation* (pp. 75-146). San Francisco:

W.H. Freeman.

Edwards, D., & Mercer, N. (1987). *Common knowledge: The development of understanding in the classroom*. London: Methuen.

Eggins, S. (1994). *An introduction to systemic functional linguistics*. London: Pinter Publishers.

Fang, Z., & Schleppegrell, M. (2008). *Reading in secondary content areas: A language-based pedagogy*. Ann Arbor: University of Michigan Press.

Fang, Z., & Schleppegrell, M. J. (April 01, 2010). Disciplinary literacies across content areas: Supporting secondary reading through functional language analysis. *Journal of Adolescent & Adult Literacy, 53,* 7, 587-597.

Feather, N. T. (1961). The relationship of persistence at a task to expectation of success and achievement related motives. *The Journal of Abnormal and Social Psychology, 63, 3,* 552-561.

Halliday, M. A. K. (November 01, 1969). Relevant models of language. *Educational Review, 22,* 1, 26-37.

Halliday, M. A. K. (1985). *An introduction to functional grammar*. London: E. Arnold.

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

Halliday, M. A. K., & Hasan, R. (1989). *Language, context, and text: Aspects of language in a social-semiotic perspective*. Oxford: Oxford University Press.

Harvey, S., & Goudvis, A. (2007). *Strategies that work: Teaching comprehension for understanding and engagement*. Portland, Me: Stenhouse Publishers.

Heath, S. B. (1983). *Ways with words: Language, life, and work in communities and classrooms*. Cambridge: Cambridge University Press.

Hughes, C. (October 01, 2009). Assessment as text production: Drawing on systemic functional linguistics to frame the design and analysis of assessment tasks. *Assessment & Evaluation in Higher Education, 34,* 5, 553-563.

Maslow, A. H. (January 01, 1943). A theory of human motivation. *Psychological Review, 50,* 4, 370-396.

Mehan, H. (1979). *Learning lessons: Social organization in the classroom*. Cambridge, Mass: Harvard University Press.

Merriam, S. (1992). *Qualitative research and case study applications in Education.* San Francisco: Jossey-Bass Publishers.

Nicholls, J. G. (1984). Achievement motivation: Conceptions of ability, subjective experience, task choice, and performance. *Psychological Review, 91,* 328-346.

Nicholls, J. G. (1990). What ability and why are we mindful of it? A developmental perspective. In R. J. Sternberg & J. Kolligian (Eds.), *Competence considered* (pp. 11-40). New Haven, CT: Yale University Press.

Oller, J. W. (1979). *Language tests at school: A pragmatic approach*. London: Longman.

Palinscar, A. S., & Brown, A. (March 01, 1984). Reciprocal teaching of comprehension: Fostering and comprehension-monitoring activities. *Cognition and Instruction, 1,* 2, 117-175.

Perfetti, C. A. (1985). *Reading ability*. New York: Oxford University Pres

Raphael, T. E., Highfield, K., & Au, K. H. (2006). *QAR now: Question answer relationships*. New York: Scholastic.

Rose, M. (2005). *Lives on the boundary: A moving account of the struggles and achievements of America's educationally underprepared.*

Schleppegrell, M. (2004). *The language of schooling: A functional linguistics perspective*. Mahwah, N.J: Lawrence Erlbaum Associates.

Schleppegrell, M. J., Achugar, M., & Oteíza, T. (April 01, 2004). The grammar of history: Enhancing content-based instruction through a functional focus on language. *Tesol Quarterly, 38,* 1, 67-93.

Stanovich, K. E. (October 01, 1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly, 21,* 4, 360-407.

Stoller, F. L. (January 01, 2004). 12. Content-based instruction: Perspective on curriculum planning. *Annual Review of Applied Linguistics, 24,* 1, 261-283.

Walberg, H. J., & Tsai, S.-L. (January 01, 1983). Matthew effects in ejducation. *American Educational Research Journal, 20,* 3, 359-373.

Webb, N. M., & Palincsar, A. S. (1996). Group processes in the classroom. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 841-873). New York: Macmillan.

Wells, C. G. (1986). *The meaning makers: Children learning language and using language to learn*. Portsmouth, N.H: Heineman