

**Combating the Matthew Effect for English Language Learners:
Making Thinking Visible in the Secondary English Classroom**

by

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In his novel *Disgrace*, Nobel Laureate JM Coetzee's main character states: "[T]he one who comes to teach learns the keenest of lessons" (2000: 5). I concur and would like to acknowledge the students who participated in this study. They worked hard every day to ensure their academic success. From them I learned lessons in determination and positive thinking that will stay with me. I would also like to thank Professor Brenda Spencer for her support and encouragement despite the great distance and international moves. Finally, I am grateful for the help of my husband Craig and daughters Sarah and Claire, who enthusiastically support my passion for teaching and for my students wherever we are in the world.

Abstract

This study sets out to answer the call for explicit instruction in critical thinking for ELL. Using action research and qualitative methodology, I examine the effect of implementing the cognitive apprenticeship paradigm with ELL studying in a mainstream secondary English class using the American curriculum. I center instruction on authentic texts and scaffold critical literacy and thinking tasks for instructional interventions. The data generated by the study includes written responses and reflections by the participants. This data is analyzed using research into cognitive theory and critical thinking pedagogy. The results support the cognitive apprenticeship model as one means for improving the higher literacy of ELL, regardless of level and background. The findings of this study contribute to the discussion of how to bridge the achievement gap between ELL and their native speaking peers and provide an avenue to advance their academic success.

Key Terms:

TESOL, English Language Learners, Cognitive Apprenticeship, Critical Thinking, Cognitive Theory, English Language Arts, Higher Literacy, Critical Literacy, Higher order thinking, scaffolding, critical thinking pedagogy.

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Chapter 1: Overview

1.1 Introduction

1.1.1 Educational Context

In 2001 the United States enacted federal legislation entitled *No Child Left Behind* (NCLB). This legislation was implemented to address the needs of the diverse learning populations in the US, including those of English Language Learners (ELL).¹ Included in the legislation was the need to “bring ELL students into the same context of standards and accountability as their native English-speaking peers” (Reed and Railsback 2003: 9). In addition, NCLB ensured that ELL were “part of each state’s accountability system and their academic progress ... followed over time. States [had to] develop standards for [ELL] and link those standards to academic content standards” (2003: 9). This legislation has had a profound impact on mainstream content teachers of ELL who must now target instruction to both content standards and English language proficiency.

In most US school districts, ELL are enrolled in mainstream content classes and supported by ESL instruction in a separate course. Therefore, many mainstream teachers do not see the need for additional support for these students within their classrooms. As one of my past colleagues noted, “That’s why they [meaning ELL] are in an ESL class. They get what they need there.” NCLB, however, has made it imperative for “mainstream teachers [to] gain a better understanding of the programs, theories, principles, and strategies that have proven successful in educating ELL students” (Reed and Railsback 2003: 9).

The issues of this study, critical thinking and ELL instruction, are especially prevalent in discussions about secondary English and Language Arts (ELA) in US schools. US school districts give critical thinking primary importance. Teachers in South Carolina, for example, attend seminars on critical thinking and workshops on instructional strategies for critical thinking throughout the year. Secondary schools also hear from universities and businesses about the importance of critical thinking as a means of helping students “develop their abilities to navigate the [increasingly] complex world in which we live and ... as a way to help students succeed in school” (Buffington 2007: 19).

Despite the critical thinking goals established for ELL by NCLB, those goals are often not met in the mainstream English and Language Arts (ELA) curriculum. ELA is geared toward

¹In this study ELL refers to ESL students and EAL students. ELL is the preferred designation within the American curriculum. The terminology is employed because of the American context of this study.

improving cognitive ability and developing high literacy. Yet ELL are often enrolled in English as a Second Language (ESL) classes that stress rote learning and grammar instruction and are often taught by under-qualified instructors. Blatt (2008) reports “more ESL teachers are uncertified in their discipline than [in] any other teaching area” (1). Furthermore, Blatt (2008) suggests that the lack of training of mainstream content teachers in effective ELL strategies is one determinant in their poor achievement. Most content teachers have been trained to work with ELL “through workshops or in-service rather than through ongoing, sustained professional development or coursework in their pre-service certification programs (Blatt 2008: 1). The result is the support ELL receive from both ESL classes and from their mainstream content teachers, while often well intentioned, can also be inadequate. Also achievement gaps for ELL grow as language difficulties are exacerbated by educational practice that fails to help them grapple with complex grade level content. A persistent achievement gap for ELL has been documented by Fry (2007) who reports that “51% of all 8th grade ELL are behind in reading and math” (1). Adding to the urgency of this problem, the ELL population in the US is the fastest growing student group in US schools. *The Mid Continent Research for Education and Learning Policy Brief* published in 2005 estimates that ELL “will comprise over 40% of [US] elementary and secondary students by 2030” (Flynn and Hill 2005: 1).

This burgeoning population of students faces increasing difficulty despite the fact that they are crucial to the success of any school in which they are enrolled. NCLB requires that schools administer standardized tests that measure whether or not each student has achieved Adequate Yearly Progress (AYP). State Education Departments across the nation test ELL each year, and they must show AYP. In schools where ELL fail to show AYP, the administration and faculty face loss of federal funding and the possibility of being deemed a failing school.² The needs posed by this situation present a serious dilemma for mainstream content teachers. For example, state law requires that English teachers in South Carolina have a maximum of 150 students. That means the ELA curriculum requires each English teacher to develop the critical thinking and critical literacy skills of 150 diverse students many of whom have “learning difficulties intertwined with factors such as cultural background, language barriers, learning disabilities, emotional disturbances, family disruption, teenage pregnancy, fear of failure, and

² The full NCLB legislation and the Title III section dealing with Language Acquisition, Language Enhancement, and Academic Achievement is published on the US Department of Education website at <<http://www.ed.gov/policy/elsec/leg/eseq02/pg40.html>>

peer pressure” (Stringer and Mollineaux 2003: 71). Combined with the other stress factors present in public schools, teachers sometimes make expedient choices which can come at the expense of the individualized instructional needs of ELL. Salvatori (2000), however, contends that “we can view [such] difficulties as opportunities for growth and transformation” (84). This study takes Salvatori’s view by seeking new ways to address the instructional needs of ELL within a mainstream context.

1.1.2 Context and Rationale of this Study

In 2006, I had a unique opportunity to examine my practice on the teaching of ELL when I began teaching in a small American International School in Pretoria, South Africa. Through an intense focus on seven students, I gained a deeper understanding of how best to use the most current research into critical thinking pedagogy in the instruction of the ELL. D’Avanzo and Morris (2008) term this type of pedagogical scholarship *practitioner research*, “the goal of which is to explore pedagogical dilemmas . . . in depth and obtain information” (3). The information I sought to obtain is “how to teach the complex strategies involved in interpreting rich literature” to ELL (Lee 1995: 608). Therefore, this study examines if specific instructional interventions lead to measurable advances in the critical thinking of the ELL focuses on where the two educational issues of critical thinking and ELL meet in the secondary ELA classroom.

Beginning with an investigation into how critical thinking pedagogy informs the literacy instruction of ELL, I report the results of instructional interventions based on the principles of cognitive apprenticeship. I contend that the cognitive apprenticeship provides an effective pedagogy for addressing the problems ELL face with critical thinking. Finally, I conclude that the cognitive apprenticeship is also a means of providing the “meaningful, engaging, grade level content” that the research shows promotes high literacy³ in ELA, while at the same time “supporting the language development needs” that the research shows ELL need (Reed and Railsback 2003: 33).

1.2 Problem Statement

³ High literacy refers to the critical literacy skills secondary students need to navigate increasingly complex content. The National Council for Teachers of English notes that secondary “students encounter academic discourses and disciplinary concepts in such fields as science, mathematics, and the social sciences that require different reading approaches from those used with more familiar forms such as literary and personal narratives. These new forms, purposes, and processing demands require that teachers show, demonstrate, and make visible to students how literacy operates within the academic disciplines” (*NCTE Statement on Adolescent Literacy* available at <http://www.ncte.org/collections/adolescentliteracy>).

ELL must deal with demanding academic content in a language they may not have mastered, and they face great challenges in the secondary English classroom. First, in the US ELL “are likely to come from disadvantaged socioeconomic backgrounds, attend low-income schools, and have parents with limited English proficiency” (Kinsella et al 2007: intro.). By the same token, they are also more likely to have lower levels of literacy. Second, studies show that if ELL have completed less than five years of schooling in English, they have difficulty with the critical thinking necessary to navigate the high school curriculum and gain access to postsecondary education (Kinsella et al 2007: intro.). Third, ELL are increasingly likely to be taught in a mainstream classroom by a teacher with little or no training in how to give them the instructional support they need to master the cognitive demands of academic content (Meltzer and Hammon 2005: 4). The result is that across the United States, in all school districts, ELL lag well behind their native speaking peers in all academic areas.

Poor instruction widens the gap further. The majority of ELL students in the United States are placed in low track remedial courses. Koelsch (2007) states that in many low track courses, teachers “typically address the increasingly diverse linguistic needs of students by taking a reductive approach of simplified content and a focus on isolated basic skills” (2). The research shows that for all students to achieve high literacy, especially for ELL to achieve high literacy, they must have an *enriched* curriculum that emphasizes critical thinking and reasoning. Yet teachers of ESL courses tend to rely on instruction in “mechanical skills” and the use of “abridged or excerpted text” (Koelsch 2007: 2). Harklau (1994) contends that this approach results in content that is “conceptually simplified” (255). Conceptually simplified English Language Arts courses ignore “literature’s role in the development of the sharp and literate mind” (Langer 1992: 2).

In addition, the *State and National Standards for English and Language Arts (Appendix A)* require students to engage the text on anything but a simple level. The curriculum fosters open inquiry and demands that students search for patterns, problems, and solutions. They have to deal with complexity and construct their own knowledge. In other words, they are required to think creatively, logically, and critically. Yet in a current nationwide study of ELL and ELL instruction in public schools, the *Alliance for Excellence in Education at Brown University* reports “an estimated] six million middle and high school students are reading below grade level and are ‘at risk’ or ‘struggling.’ This is more than a quarter of the current [US] student population in grades 6-12” (Meltzer and Hammon 2005: 3). *The Alliance* attributes this abysmal

situation to its finding that many ELL are not developing the ability to read and write and discuss text on a substantive level. Koelsch (2007) argues that a reductive approach to the content causes “the gap between where [ELL] are and where they should be to remain consistent” (2). *The Alliance* study highlights that ELL start out behind, and as a result of reductive instruction, they remain behind resulting in a downward spiral termed *The Matthew Effect*. First attributed to Merton (1968), *The Matthew Effect* alludes to a biblical parable from the book of Matthew and refers to the phenomenon of “the rich getting richer and the poor getting poorer.” In a later study, Stanovich (1986) co-opted the term *Matthew Effect* to describe the educational achievement of good readers versus that of struggling readers. According to Stanovich (1986), those with “rich” literacy backgrounds get “richer” as they move from elementary to middle and secondary school, while those with “poor” literacy backgrounds get “poorer.” The reason, he argues, that the gap between good and struggling readers widens is that struggling readers lose access to grade level content as the reading and cognitive tasks get more complex in higher grades. Carlo et al (2004) note a similar *Matthew Effect* in their work with ELL in mainstream classrooms and state that “closing this gap has high priority if US education is to fulfill its goal of reducing inequities in access to successful school achievement” (191).

The achievement gap is evident in the participants in this study, most of whom have had a great deal of instruction that addresses the mechanics of English, but little instruction that addresses thinking and reasoning in English. While several of the participants have become relatively fluent in conversation, they experience great frustration in dealing with abstract or complex material in all areas of the curriculum. In short they are successful with what Cummins (1999) terms “cognitively undemanding communication” (1). But they struggle with “cognitively demanding curriculum which requires them to analyze and synthesize information and concepts” (Reed and Railsback 2003: 19).

In his research, Cummins (1999) suggests a distinction between “*basic interpersonal communication skills* (BICS) and *cognitive academic language proficiency* (CALP)” (2). He also states that “the conceptual distinction between BICS and CALP highlights misconceptions about the nature of language proficiency that ...contribute directly to the creation of academic failure among [ELL] (1999: 2). When “ELL have developed neither their academic vocabulary nor their discourse knowledge, their full participation in instructional activities is postponed” (1999: 3). Without their full participation, gaps in their knowledge can and will occur. Therefore, it is imperative to bridge that gap. Cummins recommends that instructional programs for ELL

address the components of CALP. To do so, the instruction should first be “cognitively challenging” and require students to use higher order thinking skills (1999: 6). Second, content should be “integrated with language instruction” (1999: 6). More recent research from scholars like Tsui (2002) furthers Cummins’ point. Tsui (2002) notes:

Higher-order cognitive skills, such as the ability to think critically, are invaluable to students' futures; they prepare individuals to tackle a multitude of challenges that they are likely to face in their personal lives, careers, and duties as responsible citizens. Moreover, by instilling critical thinking in students, we groom individuals to become independent lifelong learners -- thus fulfilling one of the long term goals of education (741).

To achieve in secondary English and to gain access to post-secondary education, there is no question that ELL must learn to think critically and to give voice to their thoughts. To ignore critical thinking instruction takes away the opportunity public school is meant to provide and results in an impoverished education – and a *Matthew Effect* – for those students. This study sets out to answer the call established by research into ELL and their academic achievement for direct explicit instruction in critical thinking and reasoning as one way to close the achievement gap.

1.3 Purpose of the Study

In her research into critical thinking pedagogy and college students, Tsui (2002) attributes the paucity of research into the “impact of instructional factors” on critical thinking to three factors. The first she notes is “the difficulty of attaining direct indicators” of critical thinking as many studies rely on “self-reported data” rather than “observational data” (742). The second is the fact that much of the research conducted is contradictory. Therefore, “little consistency emerges from the empirical research as to specific instructional techniques that effectively enhance students’ abilities to think critically” (Tsui 2002: 742). Finally, because of an over-reliance on “quantitative data” gleaned from multiple-choice tests, questionnaires, and surveys” the researcher’s ability to evaluate results is limited (Tsui 2002: 742). Tsui’s (2002) attempts to expand the methodology of traditional research into critical thinking by using case studies and qualitative methods that lead to “rich contextual evidence of the types of pedagogy that are associated with the reported enhancement of students’ abilities to think critically” (742). My study builds on this idea by conducting a qualitative study grounded in research and based on the cognitive apprenticeship paradigm.

My goal is to explore instructional strategies that help secondary ELL students deal with the cognitively demanding material they face in the secondary English and Language Arts (ELA) classroom. To accomplish this, I research (1) cognition and critical thinking, (2) English literacy and ELL, (3) content-based language instruction, and (4) the cognitive apprenticeship model in an attempt to discern the credible learning strategies that inform ELA instruction to ELL. I provide an overview of the existing theory regarding cognition, learning, and abstract thinking before describing heuristics for improving critical thinking for ELL in the secondary English. The heuristics scaffold critical reading and writing skills that allow students to demonstrate their critical thinking and fall into two main categories:

1. Scaffolds that facilitate learning. These strategies provide “procedures or steps to follow” and “eliminate the I-don’t-know-how-to-get-started problem” many students face with new and complex tasks (Benson1997:127).
2. Scaffolds that model expert thinking. These strategies “display ...expert thinking skills to allow ‘less capable students’ to follow complex or difficult procedures” (Benson 1997: 127).

The interventions are centered on literature that addresses three genres encountered in the secondary English curriculum: narrative poetry, drama, and prose. The interventions designed, selected and implemented employ instructional strategies to improve how students deal with text and how they communicate their thinking and were designed, selected, and sequenced by the researcher. The interventions are recursive in nature; therefore, subsequent units build on one another and help the students develop their critical reading and writing skills. An overview is provided for each of the three units to help other teachers use the strategies with their own students.

1.4 Central Theoretical Statement

The State and National Standards for English and Language Arts (Appendix A) are geared toward making students think – toward cognitive ability rather than rote learning. In order for ELL to be successful in secondary classrooms and to gain access to postsecondary education, ELL must meet challenging reading and writing standards. Therefore, teacher instruction must give students support to grapple with grade level content. That support cannot be reductive, but must make the complex thinking required to complete these tasks visible and explicit. What follows is a discussion that delineates the conceptions of teaching and literacy that guided and influenced my decision to utilize the cognitive apprenticeship paradigm in this study.

1.4.1. Conceptions of Teaching

Freeman and Richards (1993) assert the importance of a general conception for Teaching English to Speakers of Other Languages (TESOL). They believe that the way an instructor conceives of TESOL shapes teaching by shaping the pedagogic choices of the teacher. These researchers discuss three conceptions of language teaching: 1) science/research conceptions, 2) theory/philosophy conceptions, and 3) art/craft conceptions.

Science/Research Conceptions of TESOL are grounded in “research and ... supported by experimentation and empirical investigation” (Freeman et al 1993: 195). This stance attempts to provide a means of establishing useful teaching behaviors that make a difference to student learning and assumes that teachers are more effective if their practice is grounded in research. It can be divided into theories of teaching which “operationalize learning principles,” theories of teaching “which follow a tested model,” and theories of teaching which are based on the best practices of effective teachers (Freeman et al 1993: 195). The categories these researchers delineated are summarized below:

- 1) *Teaching Based on Learning Principles* applies research into the psychological factors that assumes that “choosing a suitable teaching style, methodology, and course organization” helps students learn (1993: 194). Teachers who take this pedagogical stance transfer research findings into a set of principles that steer classroom practice.
- 2) *Teaching Based on a Test Model* argues for the “[development of] models of effective classroom practice based on logical reasoning and previous research” (1993: 196). If a certain teaching behavior seems to help students, adherents to this model conclude that teaching behavior should be made into a model for other teachers to follow.
- 3) *Teaching Based on the Best Practices of Effective Teachers* gathers the data for effective teaching from the students’ standardized test scores. If the test scores are high, this model assumes that the teacher’s practice is effective and views teaching “as a process which generates learning as its product” (1993:198). It also assumes that all classrooms are similar and therefore ripe for the implementation of “teaching as defined by scientific findings” (1993: 198).

Theory/Philosophy Conceptions of teaching have a divergent view. Freeman and Richards (1993) state that these conceptions are based on “general philosophies of teaching and learning instead of empirical investigations” (199). For example, instead of looking to data and statistics to justify pedagogical decisions, a teacher with this conception of teaching would argue

that their pedagogical decision is right. If the teacher bases his/her argument on what should work in theory, that teacher has a conception of teaching that is *theory based*. If the teacher bases his/her argument on what is morally right, that teacher has a conception of teaching that is *values based*.

In theory based teaching, methods are justified with theory and that theory is extended into classroom practice. Proponents of this conception of teaching justify their practice with evidence from “classroom discourse, pragmatics, and social interaction” rather than with evidence gathered from empirical research and experimentation (Freeman and Richards 1993: 199). In teaching that is *values based* pedagogy is determined by the teacher’s philosophy about the role of education in society. It assumes, for example, that a particular type of teaching or pedagogic decision serves a particular moral, ethical or political end. The researchers view this conception as highly subjective but argue that is not necessarily a weakness given the subjective nature of teaching itself. They also argue that a values based conception of teaching can be justified by action research where individual teachers research areas of concern with their individual groups of students. Action research, by definition, incorporates two conceptions of teaching: the belief in the importance of grounding practice in research and the belief in the importance of the individual teacher and what he/she values.

The final way of conceiving of teaching is to see it as “an *art* or *craft*, as something which depends upon the individual teacher’s skills and personality” (Freeman and Richards 1993: 205). In other words, effective practice is based on a teacher who “assesses the needs or possibilities of a situation and creates and uses practices that have promise for that situation” (1993: 205). Because the practice depends on the specific teaching situation and the specific teaching skills of the teacher, it is not transferable and not generalizable. It relies on the self-assessment and reflection of the individual teacher who has the “responsibility to think carefully and critically” about practice and outcomes (1993: 205).

1.4.2 Implications of Conceptions of Teaching on This Study

All three conceptions of teaching shape this investigation. By combining multiple conceptions in a real life context, this study attempts to overcome the intrinsic biases and myopia that can result from focusing on one conception. Such an integrated approach makes sense for several reasons. First, research and theory can and should inform a teacher’s choices. It is not possible or responsible to make pedagogic decisions based solely on instinct and individual preferences. Yet problems arise when teaching is examined from only one perspective. Effective

strategies can be overlooked or discounted by over-reliance on one approach. The individual context of the teaching situation also must come into consideration. In 1762, Jean Jacques Rousseau presented his principles for a new form of education in his famous text *Emile*. He wrote:

Since, then, education is an art, it is almost impossible that it should be successful, for the circumstances necessary to its success are determined by no one person. All that one can do with the greatest care is, more or less, to approach the goal, but one needs good luck to reach it (Rousseau 1762: 38).

His wisdom resonates. Teaching must be conceived as responsive to context while remaining informed by purpose, and the cognitive apprenticeship embraces just such a complex conception of teaching.

Therefore, this study describes theories of cognition and critical thinking and the framework for the cognitive apprenticeship paradigm and argues that the results of this study support the theory that the cognitive apprenticeship model provides one instructional paradigm for meeting the critical thinking goals in the curriculum. Furthermore, this model can be adapted by mainstream ELA teachers to help make the ELL in their classrooms successful academically. The instructional interventions are designed to use what the proponents of the cognitive apprenticeship model term scaffolding to support the participants as they engage in critical literacy and critical thinking tasks. The scaffolding techniques are based on the assumption that English teachers have a unique opportunity to help students learn to think critically – and that students learn critical thinking by engaging in it. Studies show that the development of critical thinking is also “likely to be linked to an emphasis on writing and rewriting [and on] a focus on the synthesis, analysis, and refinement of ideas through the medium of writing” (Tsui 2002: 748-749). Furthermore, like Lee (1995), this study assumes that “there is a powerful set of strategies specific to certain problems in the interpretations of [literature], and that these task-specific strategies can productively support ... students” to read and write with more insight (1995: 611). Unlike Lee, however, the focus is on **ELL** and their **specific instructional needs**, as well as the **instructional interventions** modeled on the cognitive apprenticeship paradigm and employed to improve their thinking. The participants’ statements are analyzed along with their writing assignments in an attempt to find evidence of increased levels of higher order or critical thinking. The assessment is based on the achievement standards in ELA that address critical thinking, and the results and their implications are discussed in terms of future pedagogical decisions.

1.4.3 Conceptions of Literacy

In addition to determining a conception of teaching to guide this study, it was important to determine a conception of the central focus of the ELA curriculum: i.e. literacy. Daniell (1999) summarizes the competing theories of the writing process and the way those theories have shaped composition instruction. She traces the roots of the argument to controversial debates over literacy in the United States during the 1980s. One of those controversies arose from Hirsch's (1987) "claim that a body of common cultural facts would solve the problems of American education, which he saw as failing both minority students and the body politic" (Daniell 1999: 394). Critics of Hirsch's argument saw this proposal as culturally insensitive. The second literacy debate Daniell (1999) highlights what she terms the "*great leap or great divide theory*" (394). *The Great Leap Conception of Literacy* posits that if we understand the origins of "literacy ... then we will know how literacy changes the thinking of human beings and will understand how individuals progress and how cultures advance" (1999: 394). The theory recognizes that literacy helps individuals develop more complex thought and knowledge – thus literacy represents the great leap to complex culture. From the discussion linking literacy, culture, and knowledge, the notion of literacy as a *tool for liberation* arose. Here Paulo Freire's *Pedagogy of the Oppressed* becomes pivotal. According to Daniell (1999), Freire's work with the illiterate poor, and his persuasive argument that literacy can be used as a tool for liberation, resonated with instructors in composition classrooms. The instructor's goal, however, is educational rather than political: "to help students learn to read and write critically" so that they can be successful (1999: 401). Freire's model requires that teachers treat individuals "as if [they] are worthy, as if [their lives] are important as if what [they have] to say is significant and deserving attention" (Daniell 1999: 402). The model recognizes that students want to be heard and know that what they say is honored and reflected upon. Finally, beyond the *great leap conception of literacy* and the *tool for liberation conception of literacy*, Daniell also describes the benefits of researchers focusing their study on individual teacher practice and into individual student literacy. This approach recognizes the diversity of language experiences as students attempt to both understand and express complex thought.

1.4.4 Implications of Conceptions of Literacy on this Study

The debate over conceptions of literacy deals with a concern of benefit to this study. First, it highlights the fact that "schooling in the US [often] serve[s] the status quo making few allowances for students whose home experiences with language and literacy deviated" from

those of their native speaking peers (Daniell 1999: 399). Second, it highlights the importance of the relationship between language, literacy, and culture. Third, it helps us focus on literacy as an individual act operating within a specific context.

The fact remains that literacy is a form of complex thinking and by giving students the tools they need to understand and to express complex thought, we open the door to their future success. This study provides one perspective on learning critical thinking skills in a literature classroom. While mindful of the demarcation between a traditional and reductive approach to instruction of ELL and an enriched curriculum focused on critical thinking and literacy, the study captures the complexity of literacy in actual practice with actual students – from beginning to intermediate ELL. It looks at the teaching and learning of ELL and the literacy skills learners develop in a particular setting with a particular model. The cognitive apprenticeship paradigm provides these students with the support the participants need to develop their literacy abilities.

1.5 Delineations and Limitations

There are a number of limitations to this study. First, this study lacks what Tsui calls “an objective and direct measure of the ability to think critically” (Tsui 2002: 327). While the learners’ testimony in the structured interviews attests to the participants own perceived growth in their critical thinking (i.e. Student D’s comment that she is getting “more clever”), interview responses are not quantifiable. To account for this limitation, the analysis has been quantified by the standards and rubrics provided by the national curriculum and designed to measure growth in critical thinking. Second, the focus of this study is not on the ethical ramifications of teaching critical thinking. Instead, it is assumed that critical thinking skills are crucial and required for ELL to succeed in ELA. Third, the interventions do not address all critical thinking skills, but rather focus on those elicited by the literature used in the units of instruction. The literature selection is driven by the curriculum and the content of the textbooks.

Another limitation is that although the study offers some explanations for how to improve critical thinking for ELL, it needs to be replicated in larger settings in order to have more general curricular relevance. Because there were only seven participants in the study, I was able to focus on student writing and respond to student thinking with a turn around time and thoroughness that is frankly not possible with a class of thirty-five students, the average class size for secondary English classrooms in the US. Furthermore, in addition to receiving such intense instructional support from the teacher, the participants were also highly motivated and exhibited a maturity and effort that not every student will demonstrate.

While this study does not argue that the cognitive apprenticeship works for all students in all settings, it provides a compelling argument for how to improve the critical thinking and to promote the higher literacy of ELL, regardless of level and background. This in itself contributes to the debate on how to bridge the achievement gap between ELL and their native speaking peers and to provide an avenue to advance their academic success.

1.6 Terms

Alliance for Excellence in Education at Brown University

- This organization serves as a think tank for the US Department of Education and maintains a website devoted to the most current research on pedagogy in the ELA.

AYP

- AYP is the acronym for Adequate Yearly Progress and refers to the results of the standardized testing required by the *No Child Left Behind* legislation. Each subgroup of the school's population must make AYP which is tied to federal funding.

BICS

- BICS is a term originally coined by Cummins (1979) to describe basic interpersonal communication skills of ELL.

CALLA

- The Cognitive Academic Language Learning Approach (CALLA) is an instructional model designed by Chamot and O'Malley (1996). It is based on cognitive learning theory and provides a model for integrating content instruction with language development. Proponents of the model feel that it fosters the academic development of ELL students and is an "approach that can be adopted by teachers with mixed classes of native and non-native English speakers" (Chamot and O'Malley 1996: 259).

CALP

- CALP is a term originally coined by Cummins (1979) to describe cognitive academic language proficiency of ELL. CALP is set in opposition to BICS and describes the nature of language proficiency in academic settings. Differences between BICS and CALP may contribute to the academic failure of ELL, many of whom are conversant in English yet lag behind academically.

Critical Thinking

- The National Council of Teachers of English (NCTE) Committee on Critical Thinking and the Language Arts defines critical thinking as a “process which stresses an attitude of suspended judgment, incorporates logical inquiry and problem solving, and leads to an evaluative decision or action. [The term] refers to a way of reasoning that demands adequate support for one’s beliefs and an unwillingness to be persuaded unless the support is forthcoming” (Tama 1989: 1).

ELA

- ELA is the acronym for English/Language Arts and refers to the National secondary English curriculum adopted by most State Education Departments in the United States. The National ELA Standards are listed in *Appendix A* of this document.

ELL

- ELL refers to English Language Learners who are defined as “students who regularly use languages significantly different from what counts as academic English.” (Galguerra 2001). In this study I use this term as a synonym for what some researchers term L2 students (i.e. second language students).

High Literacy

- High literacy refers to the critical literacy skills secondary students need to navigate increasingly complex content. The National Council for Teachers of English notes that “it involves purposeful social and cognitive processes. It helps individuals discover ideas and make meaning. It enables functions such as analysis, synthesis, organization” (*NCTE Principles* 2006: 5).

Higher Order Thinking

- For the purposes of this study, this term is used interchangeably with critical thinking.

HSAP

- HSAP is the acronym for the High School Assessment Program. This assessment is used to measure the higher literacy of high school students in the state of South Carolina, the researcher’s home state in the US. The HSAP is administered at the end of 10th grade. Students are required to receive a passing grade on the mathematics and English sections in order to receive a high school diploma.

NCLB

- NCLB is the acronym for *No Child Left Behind*, the federal legislation enacted by the Bush administration which attempts to ensure educational accountability for all students. NCLB includes provisions for periodic and systematic standardized testing to assess where students stand in relation to the achievement standards of each discipline. Students are divided into populations that reflect the demographic make up of the school based on gender, race, ethnicity, possible disabilities, economic status, and language background.

NCTE

- NCTE is the acronym for The National Council for the Teaching of English and is the professional organization for Secondary English Teachers in the United States. This organization makes recommendations about curriculum and standards to the Department of Education and serves as an expert resource for professional publications and current research.

National Standards

- These are the content achievement standards established by the NCTE and adopted by most states in the ELA. Each of the subject areas such as math, science, and social studies, has standards for the secondary curriculum.

NERPPB

- The National Educational Research Policy and Priorities Board (NERPPB) is a part of the US Department of Education and responsible for reviewing research priorities and evaluation standards. They publish the *ELL Functioning Level Table* as a guide in establishing literacy levels of ELL. This study uses the categories and descriptors of this table in describing the participants and their literacy levels. The relevant descriptors are summarized in *Appendix H*.

SAT

- SAT is the acronym for the Scholastic Aptitude Test. This test is given to eleventh and twelfth grade students in the American curriculum and is required by most colleges and universities for admission. More selective colleges and universities require higher scores. Published by the College Board, the test has traditionally included math and critical reading and vocabulary. Since 2006, however, an essay has been added. The rubric (*Appendix B*) illustrates the test's new emphasis on critical thinking and reasoning. The

stated purpose of the test is to determine the student's potential for success with a rigorous university curriculum.

TESOL

- TESOL refers to the Teaching of English to Speakers of other Languages. In this study the term is also used as a synonym for ESL (English as a Second Language) instruction.

1.7 Significance

The purpose of the instruction described in this study is twofold: to help the participants learn to read complex texts with understanding and to help them learn to write prose complex enough to honor their thoughts. The primary goal was to develop and implement instruction in explicit transferable critical thinking skills in ELL while using the literature and resources typical to a mainstream secondary ELA classroom. Furthermore, the instructional interventions hone the participants' awareness of the author's purpose and how that purpose guides the author's choices which in turn guide the reader's reactions. These literacy goals require that students use higher order thinking skills as they encounter rich texts and a rigorous curriculum. Those are lofty goals for ELL who have only been speaking English for one to two years. But they are not impossible goals. In fact, many researchers (Cummins 1986, Chamot and O'Malley 1996, and Gibbons 2002) would argue that they are necessary goals if these students and ELL like them are to be prepared for success in challenging secondary and postsecondary courses. They must learn to write effectively and confidently. To do that, they must be challenged. Therefore, instruction must move beyond simple recall of subject matter to address critical thinking skills.

This purpose could be criticized as unoriginal; most teachers want to help their students succeed and many other researchers (Langer 1992, Lee 1995, Marzano 2001, and Paul and Elder 2007) recognize the need for critical thinking instruction. The contribution lies in the fact that the cognitive apprenticeship model makes the process concrete. Research about cognition and the building of literacy is integrated with knowledge of the mainstream secondary ELA curriculum. Real literature required by the curriculum is used to address the needs of students with varied backgrounds and divergent levels of prior learning.

This study shows that the cognitive apprenticeship and thinking skills are not just for advanced students but address the instructional needs of all students. This study reinforces the argument for using cognitive apprenticeship as a teaching paradigm and asserts that the participants make advances in their critical thinking. In addition, the study serves as a resource for other teachers in implementing a teaching paradigm for addressing the increasingly diverse

literacy needs of students in the mainstream secondary English classroom. The study is practical because it deals with a group of learners whose make up is comparable to the average secondary English classroom in the United States.

1.8 Chapter Overview

Chapter 1: Introduction

This chapter frames the study by establishing the importance of the topic and its pedagogical concerns. First, the context that creates the need for critical thinking instruction for ELL within a mainstream secondary English classroom is explained with specific focus on how fostering critical thinking is crucial to the academic success of ELL. Next, the conceptions of teaching and literacy are explained that shape the instructional decisions of the interventions and that led to the central theoretical statement that guides the entire study -- namely that the cognitive apprenticeship paradigm can be used as an effective means of teaching ELL critical thinking skills in the secondary English classroom. Finally, after defining the relevant educational terminology, this chapter lays out the delineations and limitations of the study and considers its contribution to ELL and their instruction.

Chapter 2: Literature Review of Cognitive Theory and Critical Thinking

In this chapter the literature pertinent to critical thinking for ELL in the secondary English classroom is reviewed. Beginning with theories of cognition and critical thinking, the pedagogical concerns of ELL are then discussed along with how the theory forms the basis of the cognitive apprenticeship model and informs pedagogical decisions in relation to ELL. Next, the chapter establishes why high literacy skills are particularly cogent to the ELA curriculum. Finally a discussion of why the cognitive apprenticeship paradigm makes the most theoretical sense for teaching critical thinking skills to ELL concludes the chapter. The cognitive apprenticeship model is outlined and three case studies implemented the model are presented. Then the specific domains of knowledge within the secondary English classroom are defined.

Chapter 3. Research Methodology

This chapter explains the qualitative research used in the study and gives a rationale for its suitability and relevance for the ELL who participated in this study. The different methods used to create student profiles are outlined along with the assertion that the need this group of students has for improving their critical thinking has been clearly established. *The National Standards for English and Language Arts* published by the *National Council of Teachers of English* and adopted by the majority of US states illustrate the clear demand for critical thinking

in the secondary English classroom. The student profiles and the standards work in tandem to guide the units of instruction described in the chapter. Overviews of the Units of Instruction are presented along with a discussion of the theoretical framework used in scaffolding the literature and academic tasks of the units.

Chapter 4 Teaching Interventions Results and Analysis

In this chapter, the seven teaching interventions are described. Results are presented and student responses are transcribed and analyzed for evidence of development in each student's critical thinking and for proof of the success of the cognitive apprenticeship paradigm. This chapter also presents the summative assessment used to measure the growth in the critical thinking of the participants after the seven teaching interventions. The chapter discusses the data generated by the student responses in light of the research questions:

- *What happens when students are guided with a strategy targeted to improve thinking?*
- *What aspects of learning influenced those results?*
- *What are the implications for curriculum design in other contexts?*

Results are charted and insight provided into why and how the interventions lead to growth in critical thinking and thereby inform instruction.

References

This section lists the sources of this study along with publication details.

Appendices

The appendices contain documents that are referred to in the body of the study, but that may not be readily available to the reader.

Appendix A State and National Standards for ELA

Appendix B SAT Rubric

Appendix C Assessment #1

Appendix D Assessment #2

Appendix E Assessment #3

Appendix F Assessment #4 HSAP Release Items Excerpted Responses

Appendix G HSAP Rubric

Appendix H Excerpts from the National Reporting Service ELL Functioning Level Table

Appendix I Summative Assessments Excerpts

Appendix J Permission for Study

Chapter 2 Review of Literature

2.1 Introduction

Due to NCLB and the implementation of National Achievement Standards in the United States, secondary English and Language Arts (ELA) teachers face the challenge of making academic content and academic discourse accessible and meaningful for English Language Learners (ELL). The following survey analyzes key theories and related published works that help teachers address this challenge.

The ELA secondary standards include the demand for critical reading and writing skills. Langer and Flihan (2000) assert that the scholarship dealing with reading and writing theory has been “shaped by extensive research on cognitive processes” (1). The reason for the overlapping lines of inquiry between cognitive processes and reading and writing processes, these researchers argue, is that “writing and reading are both meaning-making activities [that require the mind to] anticipate, look back, and form momentary impressions that change and grow as meaning develops” (Langer and Flihan 2000: 2). Therefore, three theoretical fields are pertinent to this examination. The first is the cognitive theory which drove the secondary ELA curriculum and the development of its standards in the United States during the 1980s and 1990s. The second is critical thinking, including research into the instructional strategies effective in fostering critical thinking in literature classes. The third line of inquiry is the teaching of ELL. Therefore, this literature review begins by outlining cognitive theory with particular reference to Piaget, Dewey, and Vygotsky, and the influence on their ideas on ELA pedagogy. This is followed by an exploration of the development of critical thinking that is grounded in cognitive theory and an explanation and examination of recent notions of critical thinking influential in ELA practice. Finally, this study delves into how those notions of critical thinking have influenced pedagogy in TESOL and concludes with a description of the cognitive apprenticeship paradigm and its effectiveness in fostering the academic development of secondary ELL students.

2.2 Cognitive Theory

Piaget developed the constructivist theory of knowing in the 1970's. His theory is based on the idea that knowledge is constructed by building cognitive structures or schemas for understanding concepts. In fact, “[learners] use schemata to give meaning to events, to understand language, and to solve problems” (Andre and Phye 1986: 7). Schemata build in complexity as learners develop mentally through consecutive stages culminating in *The Formal Operations Stage*, which is characterized by conceptual reasoning or the ability to deal with

abstractions. Piaget theorizes that most individuals reach this stage in early adolescence. Furthermore, Piaget asserts that there are several principles for promoting the development of cognitive structures. First, if a learning experience is not new to the child, then the information is easily incorporated into the child's existing schemas. If a learning experience is new, however, it requires the development of a cognitive structure (or schema) to accommodate the new information.

Schema theory has had an impact on teaching and learning. As students encounter new information, they develop new schema. In this way, cognitive reasoning grows increasingly more sophisticated. *Cognitive theory*, therefore, "suggests that the goals of education [should be] to make changes in the cognitive structures (schemata) of students" (Andre and Phye 1986: 16). For cognitive theorists, "education consists of allowing/encouraging active mental exploration of complex environments" (1986:2). The US curriculum's focus on cognitive theory is apparent in the development of *Secondary National Academic Standards* that require higher order thinking and reasoning across the content areas. The focus is especially apparent in the *National ELA Standards (Appendix A)*. The standards were developed by ELA researchers and practitioners in the United States in the early 1990s and revised in 2003. They demand that students demonstrate critical, creative, and logical thinking while developing high levels of literacy.

2.3 Social Constructivism

Another theory central to this study is *Social Constructivism* which is grounded not only in the work of Piaget but also in the work of Dewey. Hirtle (1996) notes that Dewey asserted that the "psychological and social sides of education are organically related" (91). He saw cognitive growth as depending on more than a developmental stage. Hirtle explains that, according to Dewey, cognitive growth also occurs as a result of interactions with the environment. He conceived of education as a result of the learners interacting within a social context as they go through the process of learning to define themselves as a member of a specific community. Thus social context and community are essential to the learner's construction of knowledge. Because social context is central to learning, Dewey saw the means of social contact – language – as its central tool. Language, therefore, allows learners to "collaborate with their own and others' thoughts and feelings" in order to construct knowledge (Hirtle 1996: 91).

Dewey's theories led to the development of *Social Constructivism* which sees learning as a way of constructing knowledge through inquiry. In other words, learners construct knowledge through the search for and the engagement with knowledge. *Social Constructivists* acknowledge

that the ways in which “knowledge is mediated and created are as dynamic and important as the knowledge itself” (Hirtle 1996: 91). They feel that learners must actively seek knowledge, not passively receive it. They conceive of language as a way for the learner to shape and transform new knowledge – a decidedly interactive and responsive model for learning.

Vygotsky’s theories were also influential in *Social Constructivism*. In the course of Vygotsky’s study of child development, he conceived of the social development theory of learning. Like Dewey, he posited that social development influences cognitive development and defined the process as the *Zone of Proximal Development (ZPD)*. In writing about thought and language, Vygotsky described the ZPD as

the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers (Riddle 1999: 1).

He argued that learning occurs in this zone. When students have to stretch and struggle with new concepts, they learn – but they must be supported in that struggle. The teacher can serve as both a source of support as well as a model for developing and internalizing new information or concepts. Then, according to Vygotsky, cognitive growth occurs because students have reached just beyond what they can do to what they have the potential to do. He believed that “learning which is oriented toward developmental levels that have already been reached is ineffective from the viewpoint of the child’s overall development” (Riddle 1999: 2). This reinforces a tried and true educational stance: if teachers push students, students struggle; and this struggle leads to growth.

Vygotsky’s theory also gave rise to the idea of scaffolding to access the ZPD. Scaffolding requires the teacher to “provide students the opportunity to extend their current skills and knowledge” and make unmanageable and difficult tasks manageable. Vygotsky believed that the interaction that occurs in the process of learning breeds cognitive development as the individual learner “internalizes” patterns and strategies for “problem solving and thinking” (Hirtle 1996: 91). In other words, Vygotsky, as well as social constructivists, conceive of learning as transformative because it is also a dialectic; a give and take between the learner and the world of knowledge. The learner and the teacher work in tandem as teachers provide learners with support that allows them to work at a level just above what they can do without assistance. Social Constructivists contend that instruction that ignores the ZPD is not effective pedagogy.

Another Vygotsky theory relevant to this study is his idea concerning “inner speech.” Cazden (1994) highlights Vygotsky’s theory in her study of ESL Literacy in South Africa. She describes Vygotsky’s idea that through social interaction, speech is internalized and an “inner speech” develops. Cazden (1994) states:

Internalization occurs through a series of transformations during which inner speech acquires its special characteristics, especially ‘the preponderance of the sense of a word over its meaning’ (173).

Vygotsky theorizes that through “further transformations, inner speech becomes... inward thought,” and Cazden (1994) describes his metaphor for the whole sequence as a “wind that puts into motion the cloud that gushes a shower of words” (173). Social interaction is the wind that puts thoughts in motion; thought, in turn, leads to speech. In applying the theory to ELA in the secondary classroom, the tenor of Vygotsky’s metaphor is as nebulous as its vehicle. To extend it, the teacher must determine the source of the wind and hope that clouds form and that the shower of words develops. Cazden (1994) argues that one purposeful means for eliciting the “shower of words” is writing instruction. She states that “writing requires the transcription, and usually the revision, of inner speech ... for some purpose and audience (1994: 173). Thus, by encouraging students to engage in oral discussion and extensive writing, they gain both skills and confidence.

Here Galguerra’s (2001) discussion of Bruner’s work provides insight into how to harness “the wind.” Bruner observed mothers and their infants and described the mother’s actions as “**scaffolding**, supporting the infant’s growth into the ZPD” (in Galguerra 2001). The term has grown in significance in the secondary ELA curriculum and refers to three instructional applications:

1. “Scaffolding is, first, a *design* to provide support for students ... [and] build on what students already know to arrive at something they do not know.” In other words, scaffolding can frame the knowledge for students (Benson 1997: 126).
2. Scaffolding is also an *accommodation* and helps students fill in gaps in their learning so that they can “reach a new concept” (Benson 1997: 126). Here, scaffolding acts as a support for students in gaining new knowledge.

3. Scaffolding, finally, is a means of “bridging the gap between present knowledge to possible knowledge” acting as a *guide* for future learning (1997: 126).

2.4 Impact of Cognitive Theory and Social Constructivism on This Study

Cognitive Theory and *Social Constructivism* demonstrate the central underlying assumptions of this study. First, in addition to providing the basis for the curriculum standards that need to be addressed in ELA instruction, these two theoretical stances support the assumption that pedagogy can enhance the development of critical thinking, specifically the skills of analysis, synthesis, and evaluation. *Cognitive Theory* and *Social Constructivism* have established that schemata are essential to cognitive development. This study links that theory to the content area of this research, i.e. the study of challenging literature and the development of high literacy skills within the ELA classroom.

In order to demonstrate high literacy students must develop the ability to relate what they read to their own knowledge or schemata, both formal and content schemata. Formal schemata include “the background knowledge of the general organizational structures used in various types of texts” (Vermillion 1997: 28). Content schemata include “the background knowledge in the specific content area of the text” (1997: 29). Students must use their background knowledge about formal and content schemata to understand how the text and its ideas are structured. Therefore, instruction that helps students both organize the information they learn from the text and build on it will “likely result in an increased quality of thinking” (1997: 29).

Second, schema theory suggests that for students to be able to synthesize their own ideas with those in the text, they need to understand the patterns and parts of the text upon which the main idea is built. Appropriate pedagogical strategies can promote cognitive growth by developing “connections among schemata” and encouraging the “acquisition of new schemata” (Andre and Phye 1986: 3). Therefore, cognitive development results from the systematic use of heuristics or paradigms for thinking. In addition, instructional strategies that provide students with patterns for their thinking and writing are a powerful means of connecting to and acquiring new schemata.

Finally, *Cognitive Theory* and *Social Constructivism* hold that students construct or create their own meaning and contend that learning is interactive and must be within an authentic, meaningful situation. These ideas have influenced the development of the ELA secondary curriculum and what researchers and practitioners in the discipline know about promoting high

literacy and critical thinking. The next section focuses on research on critical thinking and its history and development to provide a theoretical context for this study.

2.5 Critical Thinking and Education

Critical thinking is not new to education, and contributions to philosophies of critical thinking began when Socrates argued that his students must learn to think clearly, to seek evidence, and to examine reasoning. Two disciplines have contributed to the understanding of higher order or critical thinking: philosophy and psychology.

Lewis and Smith (1993) note that “philosophers promote an approach designed to discipline thinking and to guard against the propensities of humans to accept fallacious arguments and draw inappropriate conclusions” (1). A philosophical approach to critical thinking has influenced the curriculum in almost every discipline – including ELA. For example, Lewis and Smith (1993) describe *The Philosophy for Children Program* which introduces critical thinking skills using literature. The program assumes that “when philosophical issues are stated in terms that children understand rather than in the formal jargon of the professional philosopher, children find them intrinsically interesting” (Lewis and Smith 1993: 1) Through the discussion of novels, Lipman encourages students to “develop philosophical reasoning skills including commitments to impartiality and objectivity, relevance, consistency, and the search for defensible reasons for behavior” (1993: 1). Other philosophers also address the addition of critical thinking to the curriculum and have contributed to defining critical thinking as “thought characterized by logic, depth, completeness, significance, fairness, and adequacy” (1993: 2).

Psychologists, however, are less interested in what critical thinking is and are more concerned with its process. They want to know how critical thinking helps an individual “make sense out of their experience by constructing meaning and imposing structure” (Lewis et al 1993:2). Because of the “process” nature of their work, psychologists focus on “problem solving rather than reflective thinking and logic” (1993:2). This approach has also influenced the curriculum leading to standards that reward “demonstrations of good reasoning even more than students’ ability to find correct answers” (1993: 2). Taken together, the findings of research from both philosophy and psychology, indicate that in order to promote critical thinking in our instruction, teachers must draw on the “problem solving strategies derived from psychology and the disciplined thinking represented by philosophical thought” (Lewis and Smith 1993: 2). The two perspectives need to be integrated to promote student achievement.

2.5.1 Critical Thinking in ELA

As long ago as 1962, Devine recognized the need for the teaching of critical thinking in the ELA national curriculum for the U.S. He stated that the topic had already been “in and out of vogue for several decades” (359). From our perspective in 2008, his idea seems prescient as the teaching of critical thinking is now a seminal component of the ELA curriculum threading through the ELA standards that require interpretation, evaluation, analysis, and synthesis. In fact, the *Scholastic Aptitude Test (SAT)*, published by the College Board in the United States and required for admission to most major colleges and universities in the U.S., is now subtitled *The Test of Critical Thinking and Reasoning*. The stated purpose of the test is to predict each student’s potential for success with a rigorous university curriculum. Adding *critical thinking and reasoning* to the test’s nomenclature indicates that critical thinking and reasoning have become centerpieces in the secondary curriculum. With two sections of the SAT dealing with critical reading and critical writing skills, those centerpieces have been placed firmly on the secondary ELA table. Critical thinking and reasoning now permeate the learning goals of the entire secondary curriculum in the United States. Buffington (2007) states:

Among the contemporary conceptions of thinking in schools, ... the concept of critical thinking (generalizable, higher order thinking, such as logic, analyzing, planning, and inferring) is the most common” (2).

Buffington (2007) adds, critical thinking is also a “means to help students develop their abilities to navigate the complex world in which we live and, in addition, a way to help students succeed in school” (2). Even though the critical thinking and reasoning trend has been firmly entrenched in the secondary ELA curriculum and secondary ELA instruction for more than a decade, the discussion of critical thinking and reasoning becomes more convoluted when we examine critical thinking instruction for ELL.

In the 1990s, despite the central role of critical thinking in the mainstream curriculum, many researchers still posed a version of the question they were asking in 1962, "Can we really teach critical thinking in the English class?" (Devine 1962: 360) The question, however, was rephrased; “Can we really teach critical thinking **to ELL** in the English class?” One group of scholars (Langer 1992, Gieve 1998) contend that critical thinking can and should be taught to ELL in the secondary ELA curriculum, while another group of scholars (Atkinson & Ramanathan 1995, Atkinson 1997) question the cultural validity of such an approach. Central to the debate were definitions of critical thinking. In the next section, definitions of critical

thinking are presented along with the argument for both sides of the debate. The discussion concludes with an assessment of critical thinking and the critical thinking skills that should be emphasized with ELL.

2.5.2 Defining Critical Thinking

Critical thinking has been explored by researchers such as Bloom (1956) who define it as evaluative, reflective, reasoned, and logical thinking. Regardless of the particulars of their definition, researchers agree that there are three components to critical thinking: analysis, synthesis, and evaluation. These three components describe what has traditionally been called higher order thinking skills. Buffington's (2007) review of critical thinking traces the development of the concept and identifies what she sees as "four distinct phases in the ideas that constitute critical thinking" (2). The first had its roots in the views of Dewey and his work on "scientific method as the basis of thinking and inquiry" (2007: 2). In the second phase, critical thinking came to be viewed as "judging the accuracy of statements, while the third focused on "evaluating a statement as correct or incorrect and teaching students to come to 'correct' conclusions based upon given information." Finally, Buffington argues that the most current phase is concerned with "higher order thinking, problem solving, and metacognition" (2007: 2). In this section, the most influential theories that have defined and described critical thinking are presented.

First, researchers distinguish between lower and higher order thinking skills. In 1933, Maier described higher and lower order thinking as "reasoning and productive behavior" and "learned behavior or reproductive thinking" respectively (Lewis and Smith 1993: 3). The distinction between reproductive and productive thinking is important because productive thinking is used in solving problems. In his research, Maier found that "learned behavior came from contiguous experiences with previous repetitions of the relationships involved in the learned behavior pattern" (in Lewis and Smith 1993: 3). In a math class, for example, this might mean a student learns one way to solve problems and follows that pattern without thinking about whether or not the pattern makes sense in the context of the problem. While reproductive thinking is necessary for students to recall their times tables, productive thinking is more important in problem solving. They must learn to put together information in a new way and use what they already know to create new solutions. In other words, while reproductive learning emphasizes retelling and recall, productive thinking emphasizes the integration of new knowledge with prior knowledge. Using this definition, productive thinking becomes a central

goal of the ELA curriculum standards. Promoting productive thinking requires that teachers recognize that learning is more than just a response to a stimulus. Instead, it requires a more interactive, contextual, and less mechanical form of teaching than traditional language teaching has emphasized. Both creative and critical thought require that the students construct a fresh and original interpretation of what they read and write. For example, as *The National ELA Standards (Appendix A)* require analysis and evaluation, students must learn to analyze the impact of figurative language on theme and purpose. It is not enough to recall the plot – students must learn to look at meaning and to produce their own interpretations using higher order thinking.

Bloom et al (1956) researched higher-order thinking skills and as a result constructed *Bloom's Taxonomy* for critical thinking. The taxonomy attempted to articulate a way of expressing educational objectives and classifying the goals of the U.S. educational system (1956: 1). *Bloom's Taxonomy* identifies six levels of cognition with knowledge, comprehension, and application, defined as lower order thinking skills, while analysis, synthesis, and evaluation are defined as the higher order thinking skills. *Figure 2.1* provides an explanation of each.

Figure 2.1 Bloom's Taxonomy

Knowledge	Knowledge refers to thinking skills and tasks that “emphasize the remembering, either by recognition or recall, of ideas, materials or phenomena” (62).
Comprehension	Comprehension refers to translation, interpretation, and extrapolation of new information. Whereas translation involves “the identification of the literal structure”, interpretation involves “a reordering of ideas into a new configuration in the mind.” Extrapolation then extends the reordering into “inferences and predictions” that are then woven into each learner’s prior knowledge (90).
Application	Application is defined in terms of comprehension of a specific type of knowledge – abstractions. Bloom states that in “comprehension, the emphasis is on the grasp of the meaning and intent of the material. In application it is on remembering and bringing to bear upon given material the appropriate generalizations or principles” (144). Furthermore, application is demonstrated when a student can use the abstraction in a new situation independently (120).
Analysis	Analysis refers to the ability to break down material into its component parts so that its structure can be understood. This could involve the identification of parts, the analysis of the relationship between parts, and the recognition of how the parts are organized.
Synthesis	Synthesis refers to the “ability put together elements and parts as to form a whole” (162). While similar to comprehension, analysis and application, synthesis involves creative activity and the ability to put together new patterns and as such is greater in scope.
Evaluation	Evaluation refers to the ability to “use criteria as well as standards for appraising the extent to which particulars are accurate, effective, economical, or satisfying. The judgments may be quantitative or qualitative and the criteria may be either those determined by the student or those which are given to him” (185). Evaluation is a form of decision making that is conscious and thoughtful – considered – to judge the value of material for a given purpose. The judgments are based on definite criteria that may be internal to what is being examined (i.e. organization) or external (i.e. relevance).

*Taken from Bloom et al (1956)

Lewis and Smith (1993) explain that Bartlett (1958) builds on the ideas of Maier and Bloom by using the term “gap-filling” to describe the integration of past experience in higher order thinking. Bartlett’s definition focused on interpolation, extrapolation, and reinterpretation. Interpolation involves “the filling in of information that is missing from a logical sequence,” while the process he termed extrapolation involves “extending an incomplete argument or statement”. Reinterpretation involves the “rearrangement of information to effect a new interpretation” (Lewis and Smith 1993: 3). Therefore, Bartlett sees critical thinking and reasoning as a process of filling in gaps in evidence (Lewis and Smith 1993: 4). His idea is a precursor to later work that views critical thinking and critical thinking instruction as a means of helping students engage with issues on their own terms. It also correlates with the ELA curriculum demands that students interact with text on a personal reflective level.

The hierarchical framework for critical thinking has made a strong contribution to the U.S. educational system, yet it has also been the subject of much criticism by researchers who have argued “that [it] oversimplified cognition and learning [by assuming] superordinate levels involved more difficult cognitive process than did subordinate levels” (Marzano 2001: 8).

Marzano (2001) argues:

[There is] a well-established principle in psychology that even the most complex of processes can be learned at the level at which it is performed with little or no conscious effort. [Therefore,] the difficulty of a mental process is a function of at least two factors – the inherent complexity of the process in terms of steps involved and the level of familiarity one has with the process (11).

The idea of the hierarchical relationship between cognitive tasks has not been held up by recent research. Bloom et al (1956) noted this shortcoming stating: “It is quite possible that the evaluation process will in some cases be the prelude to the acquisition of new knowledge, a new attempt at comprehensions or application or a new analysis and synthesis” (Bloom et al 1956: 185).

Finally, the terms critical thinking and higher order thinking have been used inconsistently in the research and this contributes to confusion of the meaning of the term. The terms have been assigned what Lewis and Smith (1993) call “three distinct meanings:”

1. Critical thinking as problem solving
2. Critical thinking as evaluation and judgment
3. Critical thinking as a combination of evaluation and problem solving (5).

Facione (2007) furthers this argument with his proposal that critical thinking encompasses dispositions that go beyond cognitive ability. These dispositions are listed below and highlight both the critical (evaluative) and creative (active) nature of critical thinking:

- Inquisitiveness with regard to a wide range of issues.
- Concern to become and remain well-informed.
- Alertness to opportunities to use critical thinking.
- Trust in the processes of reasoned inquiry.
- Self-confidence in one's own abilities to reason.
- Open-mindedness regarding divergent world views.
- Flexibility in considering alternatives and opinions.
- Understanding of the opinions of other people.
- Fair-mindedness in appraising reasoning.
- Honesty in facing one's own biases, prejudices, stereotypes, or egocentric tendencies.
- prudence in suspending, making or altering judgments,
- Willingness to reconsider and revise views where honest reflection suggests that change is warranted (Facione 2007: 9).

Facione (2007) argues that “creative or innovative thinking is the kind of thinking that leads to new insights, novel approaches, fresh perspectives, whole new ways of understanding and conceiving of things” (120). Thus, higher order thinking is both critical and creative, and the standards of all secondary disciplines now recognize that thinking skills encompass both problem solving and evaluative judgment.

In 1990, the American Philosophical Association (APA) published the results of a two year research project that included the input of experts across all academic disciplines. That work, entitled *Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction*. *Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction* stated:

We understand critical thinking to be purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual considerations upon which that judgment is based. CT is essential as a tool of inquiry. As such, CT is a liberating force in education and a powerful resource in one's personal and civic life ... Educating good critical thinkers ... combines developing CT skills with nurturing those dispositions which consistently yield useful insights (APA 1990: 2).

Higher order and lower order thinking have also been distinguished in the US *National Standards for English and Language Arts (Appendix A)*. The *Standards* state that in critical reading, for example, students are required to “comprehend, interpret, evaluate, and appreciate

texts”. In order to accomplish this goal, students must “draw on their prior experience, their interactions with other readers and writers, [as well as] their knowledge of word meaning and of other texts” (*Appendix A*). In their analytic essays, they are required to “effectively and insightfully develop a point of view on [an] issue and demonstrate outstanding critical thinking, using clearly appropriate examples, reasons, and other evidence to support [a] position” (*Appendix A*). These achievement goals indicate the importance of higher order or critical thinking skills which students must develop to evaluate critically what they read and to write creatively and, in turn, have implications for instruction. In the next section, models for describing critical thinking and reasoning are discussed.

2.6 Models for Describing Critical Thinking and Reasoning

2.6.1 *The Reflective Judgment Model*

Kitchner and King (1994) developed the *Reflective Judgment Model* to describe how people think critically about “the nature of knowledge and make judgments based on their understanding” (in Owen 2005: 2). The concept is rooted partially in Dewey’s theory of knowledge. Dewey argued that “reflective thought is an ‘active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support, and further conclusions to which it tends’” (Owen 2005: 22). According to Dewey, reflective thinking occurs when the learner encounters “problems that have a degree of uncertainty, require inquiry, and typically have more than one solution” (2005: 22). In their work, Kitchner and King call these types of problems ill-structured. Kitchner and King’s model is also influenced by the work of Perry (1968) who examined the intellectual and ethical development of college students.

In his study Perry (1970) describes nine stages of *epistemological development* where students move from what he calls “absolutist or dualistic view to a commitment in their personal lives of a relativistic and contextual view of knowledge” (in Owen 2005: 22). Perry’s work describes a scheme where students move through the following stages:

1. Students see *knowledge as a collection of discrete facts*.
2. Then, they begin to *recognize conflict, doubt, and subjectivity*.
3. And progress to the realization that *there are varying levels of quality in opinions and reasons must support good opinions* (in Vermillion 1997: 16-17).

Perry's description of the development of critical thinking is consistent with the *Cognitive Complexity Model* (**Figure 2.2**) which Kitchner and King establish to provide a context for the *Reflective Judgment Model* and to show the levels of cognition within the individual.

Figure 2.2: Cognitive Complexity Model

Level One: Daily Thoughts	Thought you have that you may not be aware of (i.e. reading, talking, driving)
Level Two: Metacognition	Ability of a person to monitor his/her progress when engaged in basic cognitive tasks.
Level Three: Epistemic Cognition	A person's view about the nature of knowledge.

*(Kitchner and King as reported in Owen 2005: 6)

The *Reflective Judgment Model* serves as a means to “illuminate” and describe the development of epistemic cognition as learners face what the Kitchner and King call “multiple potentially valid responses or ill structured problems” (in Owen 2005: 6). The model contains seven stages that are summarized in **Figure 2.3**.

Figure 2.3: Reflective Judgment Model

Stage 1/Stage 2	Pre-reflective Stages These stages describe learners who “rely heavily on authorities for answers, view knowledge as certain and are typically able to make decisions based on authorities' positions or personal experiences.”
Stage 3	Transitional Stage This stage reflects elements of both Stage 1, Stage 2, and Stage 4.
Stage 4/Stage 5	Quasi-Reflective Stages These stages describe learners who recognize that “knowledge is always uncertain, [that] solutions are usually idiosyncratic and decisions are at times difficult due to the ambiguity of knowledge.”
Stage 6/Stage 7	The Reflective Stages These stages describe learners for whom the “process of knowledge acquisition occurs through thoughtful and critical analysis of knowledge from experts and personal experience.”

*(Kitchner and King as reported in Owen 2005: 7)

Since the goal of this study is to improve and develop the critical thinking of ELL, the *Reflective Judgment Model* has implications for two main reasons. First, the model implies that learners can progress in the complexity of their thinking. Second, the model suggests that instruction and practice in critical thinking promotes growth in critical thinking. Furthermore, the model is consistent with the goals and achievement standards of the secondary English classroom which call for students to read critically, to write critically, and to evaluate and to interpret literature. Owen (2005) asserts in her study that the study of literature requires the reader to interpret events and decisions and solve problems for which there is a “high level of

uncertainty and ambiguity” (25). Therefore the development of critical literacy skills required to deal with ambiguity is by definition also the development of the critical thinking skills necessary to demonstrate *Reflective Judgment*.

2.6.2 A New Taxonomy for Educational Objectives

The research reviewed in this study establishes the link between critical thinking and ELA. It has also established the importance of ELA instruction for ELL that is grounded in academic content and standards. Marzano and Kendall (1998), however, argue that “within the current [US educational] structure, schooling would have to be extended [from] kindergarten through grade 21 ... to meet the requirements of the various standards documents” in the US curriculum (5). These researchers point to two options for addressing this problem: 1) increase instructional time or 2) decrease the number of standards. Neither option has proved to be palatable to American educators. How then are teachers to make decisions regarding what constitutes the most valuable instruction in ELA especially for ELL whose achievement levels already lag behind those of their native speaking peers? To answer this question, Marzano (2001) established a *New Taxonomy of Educational Objectives* as a means of organizing “subject-matter content into a spiral curriculum” (109). Marzano (2001) states:

The fundamental principle underlying the concept of a spiral curriculum is that students should be introduced to new knowledge in its most rudimentary form. During subsequent encounters with the knowledge, however, more skill and depth of understanding should be expected (109).

The New Taxonomy, therefore, gives instructors a way to focus instruction on knowledge essential to their discipline.

Marzano’s taxonomy uses a theoretical model that presents three systems of thought learners use to engage knowledge. The first system is the *self-system* which determines the level of motivation used to approach learning tasks and whether or not the learner will engage a learning task. Once the self system has decided to engage, the *metacognitive system* becomes “responsible for designing strategies for accomplishing a given goal once it has been set” (Marzano 2001: 12). This system interacts with the *cognitive system* constantly during the completion of any learning task which is “responsible for analytic operations such as making inferences, comparing, classifying, etc.” (2001: 12).

Marzano argues that the *New Taxonomy* improves on *Bloom’s Taxonomy* because it provides educators with a theory of human thought to “predict behavior rather than merely

describe characteristics of a phenomena” (2001: 12). Second, it recognizes the interaction between domains of knowledge, cognitive processes, and self-regulatory skills in the learning process. Instead of conflating the three systems of thought with types of knowledge, Marzano “postulates that three types of knowledge are operated on by the three systems of thought and their component elements” (2001:16). He terms the three types of knowledge the *Domains of Knowledge* and organizes them into three general categories: *information*, *mental procedures*, and *psychomotor procedures*. Marzano (2001) argues that “any subject area can be described in terms of how much of these three types of knowledge it comprises” (170). For example, the *information* specific to the subject of ELA might include vocabulary related to the interpretation of literature, while the ability to analyze the meaning of figurative language requires knowledge of *mental procedures* such as analysis, comprehension, and synthesis. *Psychomotor procedures* are not as significant in ELA, but would include, for example, the physical skills students must master to produce documents. The *Domains of Knowledge* cut across and interact with six cognitive processes creating a two dimensional model that distinguishes between the ability to recall detail and the ability to recognize patterns and generalizations. **Figure 2.4** summarizes the content of each domain, while **Figure 2.5** summarizes the six cognitive processes.

Figure 2.4: Marzano’s Domains of Knowledge

<p style="text-align: center;">The Domain of Information</p>	<p>Knowledge of Details or declarative knowledge such as facts, vocabulary, episodes time sequences and cause and effect sequences.</p> <p>Knowledge of Organizing Ideas or principles and generalizations such as broad classifications and relationships between ideas in declarative knowledge.</p>
<p style="text-align: center;">The Domain of Mental Procedures</p>	<p>Knowledge of Mental Procedures is acquired in three progressive stages.</p> <ol style="list-style-type: none"> 1. The cognitive stage. The learner can verbalize the task by describing how it will be done and try to do it. 2. The associative stage. The learner rehearses the task and identifies and corrects procedural errors. 3. The autonomous stage. The learner refines the procedure is and it becomes automatic. <p>Knowledge of How to Execute Mental Procedures.</p> <ol style="list-style-type: none"> 1. Macroprocedures are the highest in the domain of mental procedure. The employment of macroprocedures generates a variety of outcomes and uses a wide variety of subcomponents. Writing is one example of a macroprocedure because it requires <i>controlled execution</i>. <p>Processes require controlled execution thus</p>

The Domain of Psychomotor Procedures	<p>macroprocedures are processes.</p> <ol style="list-style-type: none"> 2. Tactics are general rules for the execution of processes. Tactics “do not generate the variety of products possible from macroprocedures and do not incorporate the wide variety of subcomponents” (25). 3. Algorithms do not vary in application but may include a variety of subcomponents. 4. Single rule mental procedures such as capitalization are always applied in the same way. <p>Skills are executed with little conscious thought. Tactics, algorithms, and single rule procedures are skills.</p>
	<p>Foundational Physical Abilities are the basis for more complex physical processes and skills.</p> <p>Knowledge of Physical Processes</p>

*From *A New Taxonomy for Educational Objectives* (Marzano 2001)

Figure 2.5 Cognitive Processes

Level 1-4 Cognitive System

<p>Level 1 Retrieval. The process of retrieval is similar to the knowledge level of Bloom’s Taxonomy. It includes remembering information or procedures and transferring knowledge from permanent memory to working memory. “There is no expectation that student[s] will know the knowledge in depth.” Instead they must recognize “accurate but not necessarily critical information about a knowledge component” (60).</p> <p>Level 2 Comprehension. Whereas retrieval requires “recall or execution,” comprehension requires “the identification and representation of the more important versus less important aspects of that knowledge” (64). The process of comprehension within the cognitive system is responsible for translating knowledge into a form appropriate for storage in permanent memory. Comprehension includes two related processes: synthesis and representation. Synthesis is “the process of distilling knowledge down to its key characteristics” (34). Synthesis requires the deletion of unnecessary information and the restructuring of the information into more general propositions that illustrate the crucial elements of that knowledge. Representation “is the comprehension process of creating a symbolic analog of the knowledge”(35). This analog can take the form of graphic organizers that capture the organizational pattern of the knowledge.</p> <p>Level 3 Analysis. Analysis is the “reasoned extension of knowledge that has been comprehended [and] involve[s] examining knowledge in fine detail and, as a result, generating new conclusions” (71). This process is in line with Piaget’s idea that information is integrated into our knowledge through assimilation and accommodation. In other words, the learner engages in five general processes called matching, classification, error analysis, generalizing and specifying in order to integrate new information into our existing knowledge base and to change our existing knowledge base if necessary. Level 3 incorporates three levels of Bloom’s taxonomy including analysis, synthesis, and evaluation.</p> <p>Level 4 Knowledge Utilization. This refers to the processes for using new knowledge in the completion of a task. The four processes of knowledge utilization are: 1) decision making, 2) problem solving, 3) experimental inquiry, and 4) investigation. This process seems most closely related to synthesis. In knowledge utilization “the student’s mental activity is focused on a specific situation that is enhanced as a result of the knowledge” (83).</p>
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Level 5 Metacognitive System

“The metacognitive system has been described by researchers and theorists as responsible for monitoring, evaluating, and regulating the functioning of other types of thought” (48). There is no analogous category in Bloom’s Taxonomy. It functions in determining goals, monitoring processes, as well as monitoring clarity and accuracy. It describes a learning disposition of mindfulness and focus and highlights the instructional necessity of strategies and heuristics for learning.

Level 6 Self System

“The self-system consists of an interrelated system of attitudes, beliefs, and emotions. It is the interaction of these attitudes, beliefs, and emotions that determines both motivation and attention. Specifically, the self system determines whether an individual will engage in or disengage in a given task.” (50). It includes the processes of examining the extrinsic information such as the importance of new information and its efficacy, as well as examining our own intrinsic emotional responses to the new information. Overall motivation in the self system is determined by the interaction between the importance, the necessity, and the emotions associated with the knowledge component. The self system brings into focus the instructional necessity of helping students filter knowledge components and monitor their competence in their own learning. There is no analogous category in Bloom’s taxonomy.

*From *A New Taxonomy for Educational Objectives* (Marzano 2001).

Marzano’s *New Taxonomy* contributes to this study by reinforcing the importance of metacognitive and self-system thinking to the learning process. Marzano (2001) states:

Specifically in their analysis of some 22,000 studies on 30 instructional variables, Wang, Haertel, and Walberg (1993) found that instructional strategies that focus on metacognitive and self-system processes were second in terms of their effect on student achievement, [yet] “these areas seem to be systematically excluded from education practice despite their importance. [Furthermore], “enhancing metacognitive and self-system thinking is central to developing self-regulation which some psychologists assert should be a fundamental goal of education (197).

It also recognizes differences in the complexity of knowledge across domains and overtly addresses the components of knowledge more fully and comprehensibly.

2.7 Models of Teaching Critical Thinking and Reasoning

Looking back at Devine’s (1962) study of the critical thinking in ELA is once again informative. He noted the following:

[In] the present state of investigation. . . , it may be said that the [critical thinking] process seems to be a composite of as many as thirty, separate abilities, that these abilities remain, at the present time, postulates or mental constructs, and that they are affected in operation by attitudes. Fortunately, it is very often possible to see these abilities as function because almost all of the postulated critical thinking abilities function in a verbal setting, and most of them can be taught as language abilities (362).

The complexity of his view remains, yet so does the possibility. By treating critical thinking as critical literacy skills, it is possible, then, to teach critical thinking. For example, instructors cannot read a student's mind to determine if he/she is able to make inferences, they can determine if the student is able "to recognize a *writer's* inferences" (Devine 1962: 363). The instructor can also teach a student that skill, and in turn develop the student's critical thinking. The secondary ELA curriculum provides instructors with a unique opportunity to foster the development of critical thinking in the students we teach. As Devine (1962) states:

Students are not going to learn to think critically by having discussions about the importance of critical thinking; they are going to learn to think critically by having practice in using important critical thinking skills and abilities (364).

A new area of research in education arose in the 1970s and 1980s – cognitive strategy instruction. Rosenshine (1997) explains that Gagne and Weinstein began to use the term *cognitive strategy instruction* in 1976 to describe strategies for teaching "important educational tasks for which each step cannot be specified" (2). Gagne used the term in reference to *problem solving* while Weinstein used the term to describe *study strategies*. Rosenshine (1997) notes the research into problem solving and study strategies then delved into those academic tasks requiring higher order thinking skills: i.e. reading comprehension, math and science problem solving, and writing. Furthermore, the research is "primarily based on intervention studies in which learning has been the outcome measure" (1997: 1).

One instructional contribution growing out of the research is the use of heuristics in the form of *concrete prompts* and the *instructional scaffold* (Rosenshine 1997: 1). Cognitive strategy instruction does not provide students with a set of steps to follow – instead the focus is on heuristics or what Rosenshine calls "guides that support [student] efforts" as they develop "appropriate internal structures" to accomplish complex cognitive tasks (1997: 2). He describes, for example, the strategy of providing students with the words "who" "what" and "where" to guide them in generating more complex comprehension questions in their reading. In discussing heuristics, the use of the word *guide* is key to understanding the concept. Heuristics act as a starting point and as a conceptual map to finding an answer – they do not provide an answer.

A second instructional contribution coming from cognitive strategy research is the development of a means of identifying useful heuristics by "identify[ing] the strategies that experts use and then teach[ing] these strategies to students" (Rosenshine 1997: 1). This approach has led to the development of *scaffolds* and *thinking aloud* by the teacher, both of

which support students as they accomplish increasingly complex tasks with decreasing teacher support (1997: 2). The research Rosenshine points to (Kintsch and Van Dijk 1978, Bereiter and Bird 1985, Scardamalia and Bereiter 1985) provides strong evidence that “students of all abilities, even high-achieving students, have benefited from being taught these cognitive strategies” (1997: 2). Furthermore, the research indicates that the best means for teaching cognitive strategies is through “explicit teacher-led instruction” (1997: 3). Rosenshine does concede that the issue of choosing heuristics and scaffolds needs more research. Criticism of the approach grew in the mid 90’s (Atkinson and Ramanathan 1995) as conceptions of learners and their role in the learning process shifted to a more learner-centered model. Yet the criticism was counterbalanced by the overwhelmingly positive nature of the results in this field. *Cognitive Strategy Instruction* has made its way from the ELA instruction to ELL instruction, yet the reception has not always been welcome.

2.8 The Political Implications of Critical Thinking Instruction

Atkinson’s (1997) article, entitled *A Critical Approach to Critical Thinking in TESOL*, sparked much debate about whether or not critical thinking should be taught to ELL. In his article, Atkinson cautions against using critical thinking pedagogy with ELL. He centers his argument in the social constructionist view that “complex cognitive skills are ... ultimately learned in high-context, inherently motivating situations in which the skills themselves are organically bound up with the activity being learned and its community of expert users” (Atkinson 1997: 87). His premise reveals his alliance with social constructionists who see “critical thinking [as] social practice” as well as intellectual practice (Gieve 1998: 124). Research shows the validity of this premise, with cognitive psychologists like Rogoff (1994) documenting evidence of this view in studies of child development in indigenous cultures. The validity of his premise is illustrated by this study which shows that students learn more when there is a *context* and when there is guidance. Like Atkinson (1997) this researcher assumes that learning happens when the teacher and student participate in discourse. Furthermore, the researcher sees the secondary English classroom as a “community of practice where learners are apprenticed into the culturally privileged and valued ways of using language [and] thinking” (Hawkins 1998: 129). Yet this study and Atkinson’s ideas diverge when he also “convincingly argues that critical thinking skills are a form of tacit, unexamined, culturally learned behaviors and that experts have not been able to produce an agreed-upon definition, thereby rendering such skills unteachable” (Hawkins 1998:129). He argues that one cannot teach unconscious behaviors

or social interaction. Furthermore, Atkinson (1997) takes issue with the "exclusive and reductive nature" of critical thinking instruction (72). Hawkins (1998) notes:

[Atkinson] ably shows that critical thinking entails a specific, privileged 'way of knowing,' one that devalues other, culturally based ways of knowing and may further 'marginalize alternative approaches to thought' ... especially those more appropriate to and representative of culture and gender differences (129).

Yet Hawkins' objection rings more true than Atkinson's assertion – i.e. "any single mode of reasoning, if it is used in isolation", excludes "alternative approaches to thought" (Hawkins 1998: 129). Exposing ELL to another approach to thought does not indoctrinate them into that way of thought. Instead, it gives them a means to examine issues more fully and with increased awareness. It also gives them a means to "fully participate in our educational ... institutions while mitigating against cultural hegemony" (Hawkins 1998: 129). Hawkins (1998) states:

What [TESOL] teachers are doing, after all, is giving their learners access to new cultural discourses and communities; teaching about cultures and cross-cultural awareness and differences; and rendering transparent the workings of status and power through cultural and educational practices, language use, and behaviors. These seem to me important goals, attainable through viewing classrooms as communities of learners and viewing learning as the sum of what happens when these learners, who vary linguistically, culturally, and educationally in their beliefs, viewpoints, and ways of interacting and behaving, come together to discover and explore the richness and diversity of a language and its world (132).

In a further criticism of critical thinking pedagogy and the teaching of analytical essays, Atkinson also argues that the term *critical thinking* is not definitive, and a contested term can not translate into either a coherent pedagogy or a coherent curriculum. Finally, Atkinson centers his objection to teaching critical thinking pedagogy and analytical writing in a political argument when he states that critical thinking pedagogy is

based on assumptions and habits of mind that are derived from Western – or more specifically – US culture, and that this way of thinking is considered the most sophisticated, intelligent, and efficient by only a tiny fraction of the world's peoples (Atkinson 1997: 75).

He believes that indoctrinating ELL into a form of discourse that is radically different from that of their home culture negates their individuality and is, therefore, antithetical to our educational goals for ELL.

I strongly disagree. First, his argument assumes analysis and analytic writing to be Western. As an American teacher, teaching in English in Africa to African, Asian, European,

and Middle Eastern students, I find the idea that Western culture cornered the market on critical thinking to be patronizing. While the students may differ in their experience with critical thinking, my classroom experience shows that the differences have more to do with their prior education than with culture. I do not think that critical thinking and analysis are uniquely Western. Therefore, I do not find the teaching of critical thinking and analysis to be cultural hegemony on the part of the Western teachers, nor do I see the teaching of critical thinking and analysis as a means of indoctrinating ELL into Western thought. Instead, I see it as a way of exposing students to a discourse community that honors their reflection by exposing them to ways of interacting with text and structuring their thoughts in their writing. It is liberating rather than indoctrinating and acts as an aide in supporting ELL's academic success.

In his refutation of Atkinson, Gieve (1998) suggests that while he agrees with much of Atkinson's argument, Atkinson misses the mark when he dismisses critical thinking for ELL. He states:

It is necessary to locate the debate on critical thinking within a wider social-theoretical landscape before one can make principled practical decisions about how to deal with the issue of critical thinking in educational situations with particular reference to ...TESOL (Gieve 1998: 124).

Furthermore, Atkinson's argument overlooks the features of critical thinking that call for the ability to consider various viewpoints. Gieve (1998) points to the work of Blaire (1988) who "defines critical thinking as both an 'intellectual virtue' including skills and understanding and a 'virtue of character' including the 'habit of critical reflection on one's own and others' problematic assumptions and the valuing of reasoned support for beliefs and actions'" (124).

In Gieve's (1998) own work with ELL studying in a British University, he found that the students in his study report that "the most striking demand made on them [by the curriculum] was that of critical thinking" (1998: 126). The participants in the Gieve study defined critical thinking in the following way:

[For them critical thinking is a] style of teaching that persistently asked them to examine the reasons for their actions, their beliefs, and their knowledge claims, requiring them to defend themselves and question themselves, their teachers, experts, and authoritative texts both in class and in writing (Gieve 1998: 126).

In other words, the ELL in Gieve's study see critical thinking as a give and take – they do not see it as a passive intake of Western thought. Instead, critical thinking is dialectic and a form of discourse that demands their participation.

Gieve (1998) makes a strong case for the differences between what he calls “monologic critical thinking (informal logic)” and “dialogic critical thinking (social awareness/dissent)” (Benesch 1999: 575). Monologic critical thinking forms the basis of “US skills-based school curricula” and is characterized by a “wish to make education a matter of accumulating decontextualised cognitive skills” (Gieve 1998: 124). Dialogic critical thinking stands in firm contrast as a means of forming what Gieve calls “dialogical discourse in which the taken-for-granted assumptions and presuppositions that lie behind argumentations are uncovered, examined, and debated” (1998:125). Gieve notes: “This type of thinking is a powerful tool for dissent across cultures and classes, not just in the West or among the middle class” (Benesch 1999: 576). With this type of thinking, students are able to examine differing perspectives as they search for their own voice. Benesch (1999) sees the ultimate goal of this type of exchange as “promoting tolerance and social justice” within the university students that she teaches (576). Benesch is an adherent to what Gieve calls the “critical pedagogy school for whom thinking is an opportunity and a challenge for students to examine social structure with its inequalities and systems of power relations” (Gieve 1998: 124). While I see the merit of such goals, the political considerations do not touch on the practical consideration of what works with students to help them develop academic skills. This study, therefore, reflects the primary goal of promoting thinking within the specific academic discipline of ELA.

The perspective on critical thinking has influenced instructional and curricula decisions in both the secondary and postsecondary setting. In their examination of the modes of discourse in University Writing/Language Programs, for example, Atkinson and Ramanathan (1995) found a marked difference in the approaches taken by postsecondary programs designed to support ELL in learning academic essay writing and similar postsecondary programs designed for native speakers. The researchers determined that the ELL programs tend to “promote ‘workpersonlike’ prose” that is “formulaic, stilted, mechanical, and predictable,” while the mainstream program emphasizes rhetoric, “complexity of thought, and critical ‘insight’” (Atkinson and Ramanathan 1995: 560). It would seem that these two programs “do in fact promote very different conceptions of academic writing” (1995: 562). In other words, the ELL programs seem to emphasize communication skills rather than critical thinking skills. They tend to focus on the immediate writing needs of the ELL students in their program almost exclusively. Furthermore, the researchers also describe the differing expectations in each program, stating that in the mainstream curriculum students are “tacitly expected to have considerable familiarity with native

patterns for structuring discourse, knowledge of native norms of communicative behavior, and some understanding of writing ... as a heuristic, self-defining activity” (1995: 563). When these students transition to more demanding courses, therefore, they also must transition from a reductive curriculum dealing with straightforward communicative usage of English to a more academic setting, yet they are unprepared for this challenge.

The scenario these researchers describe is reminiscent of Stanovich’s (1986) description of the Matthew Effect in literacy and mirrors the experience of many secondary ELL who must transition from ELL programs which are simplified and condensed to the critical thinking focus of the mainstream secondary English curriculum. Cummins points out in his studies of immigrant students in Canada (1986) that reductive instruction fails to recognize the difference between *basic interpersonal communication skills* (BICS) and *cognitive academic language proficiency* (CALP). Cummins argues that ELL typically learn conversational skills in English (BICS) in approximately two years but typically needed 5-7 years of English in school to learn CALP. He attributes the cause for this gap to differences in both *task difficulty* and *context*.

With BICS language use is supported with context and is usually about familiar topics. With CALP the academic language of the classroom is more abstract because that context and that familiarity are absent. Cummins asserts, therefore, that is “not surprising students learning a second language need more time to acquire academic language than to acquire social language” (Chamot et al 1996: 260). Because the ELL programs in the Atkinson and Ramanathan (1995) emphasize BICS while the mainstream program emphasizes CALP, their instructional programs have entirely different conceptions of both literacy and English proficiency. Furthermore, by excluding critical thinking, the ELL program ignores one of the main facets of the mainstream curriculum. Therefore, it makes sense that ELL struggle with skills and cognitive tasks to which they have not been exposed. What is successful for teaching ELL grammar etc. does not necessarily provide the key to success with higher literacy tasks. While this research does not suggest that the demand for clear grammatical structures is not valid, it does suggest that it is inadequate. A *developmental approach* that takes into account the need to foster thoughtful skillful writing is also important. The work of Atkinson and Ramathan (1995) clearly suggests the two approaches must be coupled in order to foster greater success in ELL. Furthermore, Collier (1987) conducted studies of age and rate of language acquisition for 1,548 language minority students in the United States. She found that “arrivals at ages 12-15 experienced the greatest difficulty and were projected to require as much as 6-8 years to reach grade level norms

in academic achievement” (Collier 1987: 1). These findings are significant to this study for several reasons. First, the subjects are secondary students like the participants in this study. Second, the results highlight the urgency of supporting ELL in the content areas so that they do not fall even further behind their native speaking peers who “are moving ahead with increasingly complex academic courses” (Chamot and O’Malley 1996: 260).

2.9 Critical Thinking Instruction and ELL

In the late 1990s the cognitive theory and critical thinking pedagogy that shaped the ELA curriculum have begun to have more influence on the instruction of ELL within the ELA curriculum. Short (1999) translated these theories into general guidelines for TESOL. *Figure 2.6* summarizes what her research indicates regarding integrating language instruction and content:

Figure 2.6 What Instructors Can Do to Help ELL

1. Connect content with prior knowledge and background schema.
2. Teach “expressions of the discourse” so that ELL can learn the language of the discipline.
3. Train students to recognize “academic text structures.”
4. Model and demand critical thinking in the completion of academic tasks.
5. Use graphic organizers as a “study framework” to “provide a means to familiarize students with the structure of the text and rhetorical styles.”
6. Provide “multiple pathways to demonstrate their understanding of the content.”

*Short 1999: 125-129.

Short’s recommendations adhere to the central tenets of cognitive theory and recognize that learners select and organize knowledge by relating it to what they already know. Thus she emphasizes schema theory and the building of background knowledge. Short (1999) also realizes that learners retain what they consider to be important and highlights the necessity of student engagement. In this section, programs that attempt to implement cognitive strategy instruction are described.

2.9.1 Substantive Reading and Writing in ELA

Research into cognitive processes intersects with research into ELA significantly with the work of Paul and Elder (2003, 2004, 2006, 2007) who describe four domains of critical thinking in ELA similar to Marzano’s *domains of knowledge*. These include elements of thought, ability, dispositions, and intellectual standards. Paul and Elder (2006) advocate “self critical thinking,” referring to the importance of the metacognitive domain through which students recognize the quality and depth of their thinking. Furthermore, the two researchers feel that critical thinking can progress in stages and can be encouraged with exercises that demand engagement (*i.e. self system thinking*) from students and modeling and scaffolding from the teacher. They believe that

students can develop critical thinking, but their critical thinking is dependent on the individual's level of commitment and to the intellectual quality of their instruction. That implies that high quality, demanding instruction that provides students with a learning stretch promotes critical thinking.

The findings and theories of these two researchers are also significant in that they link creative and critical thought. They state: "when engaged in high quality thought the mind must simultaneously produce and assess, generate and judge ... in short sound thinking requires both imagination and intellectual standards" (Paul and Elder 2006: 34). Critical thinking and creativity work together to focus the "endless stream of unanalyzed associations" that we create in our imaginations (2006: 34). Paul and Elder argue that the two types of thought cannot be separated. They state:

Critical thinking without creativity reduces to mere skepticism and negativity and creativity and without critical thought reduces to mere novelty. When students develop their rational critical capacities they develop their creative capacities. When students develop their creative capacities, they develop their critical capacities (2006: 35).

Because their work emphasizes *substantive* reading and writing as the primary means of demonstrating critical thought, it is relevant to any discussion of ELA. First, Paul and Elder (2007) link *critical thinking* to the "*Art of Substantive Writing*." This connection evokes the central tenet of their approach – that creative thinking (i.e. the art) is intrinsic to critical thinking (i.e. the substantive) and that learning to "write is essential to learning" (Paul and Elder 2007: 36). They see writing as

the mechanism through which students learn to connect the dots in their knowledge [because it demands that students] struggle with the details, wrestle with the facts, and rework raw information and dimly understood concepts into language they can communicate to someone else (Paul and Elder 2007: 36).

Yet their research points to a 2003 study on the teaching of writing in American secondary schools and colleges which reveals that most schools tend to ignore writing and that "most [college] freshmen [can] not analyze arguments, synthesize information, or write papers" (2007: 36). Despite these facts, Paul and Elder (2007) feel that with direct instruction in substantive writing and an understanding of critical thinking this situation can be reversed.

In addition to substantive writing, Paul and Elder (2004) also focus their attention on the theory of close reading. They believe that students must go beyond "impressionist reading" to

gain an understanding of the author's purpose and meaning. To do so, they need to be able not only to "determine the key ideas within the text," but also to see connections within the text (2004: 36). This approach requires students to understand how text is constructed and the purpose that construction serves.

2.9.2 The CALLA Model

One study on elementary age school children has attempted to address the instructional needs created by differences in BICS and CALP in ELL. The Cognitive Academic Language Learning Approach (CALLA) is an instructional model for elementary school teachers designed to improve the achievement of ELL. "CALLA fosters the achievement of ELL students by integrating content-area instruction with language development and explicit instruction in learning strategies" (Chamot and O'Malley 1996: 260). What follows is a description of the model along with a discussion of its theoretical basis.

CALLA is based on cognitive learning theory. CALLA is also grounded in research that established the distinction between declarative and procedural knowledge and the need for learners to acquire both. As Marzano (2001) described, *declarative knowledge* refers to what a learner knows – it is factual and conceptual. For example, in literature a student might be able to summarize the main ideas of a passage and identify rhetorical devices. *Procedural knowledge* refers to what learners know how to do (Chamot and O'Malley 1996: 262). This theoretical distinction has profound implications on instructional decisions.

Declarative knowledge is learned most effectively by building on existing concepts and organized units (schemas) of declarative knowledge [whereas] *procedural knowledge* is learned best by meaningful applications (in contexts) of complete skills that achieve a goal (Chamot and O'Malley 1996: 263).

That means that while traditional approaches with ELL which emphasize acquisition, rote learning, and grammar exercises emphasize declarative knowledge, such limited approaches ignore the procedural knowledge essential to the academic discipline of ELA. Furthermore, researchers posit that there is an "interaction between declarative and procedural knowledge," especially in more complex tasks requiring higher order thinking skills. Chamot and O'Malley (1996) established the CALLA model for second language by considering the instructional implications of this theory on ELL, and they assert that "language ... has [both] important declarative components" [as well as] "procedural conventions" (262).

How does this theory translate into a pedagogic stance? First, Chamot and O'Malley assert the importance of providing ELL with [frequent] instructional opportunities to learn *meaningful* language that can be applied in a context to accomplish goals important to the student" (1996: 263). That means that the content topics within the discipline/content area must be meaningful to both academic success and "academic language development" (1996: 263). Furthermore, teachers must recognize the necessity of helping ELL to "acquire the vocabulary and linguistic structures" they need to deal with challenging content (1996: 263). Second, these researchers assert that a second language is learned most effectively when ELL wrestle with "authentic interactive contexts" while relying on "more proficient age peers as well as the teacher" to interpret and analyze and evaluate content (Chamot and O'Malley 1996: 263). Such a pedagogical stance assumes that academic content is not reduced or simplified by the teacher. Instead, the student is supported as they attempt a learning stretch with complex content. Third, the CALLA model assumes that "explicit instruction in learning strategies...can help students understand and remember both the content and the language" (1996: 263). Such an approach is of primary importance to ELL who are "trying to deal with both content and academic language at the same time" and can help them "cope with this double demand" (1996: 264).

The CALLA model proposed by Chamot and O'Malley is relevant to this study because it suggests several concrete instructional techniques that help ELL meet demanding academic goals. First, the model recommends an approach that is mindful of students' metacognitive processes. In other words, teachers must encourage "students [to] reflect on and identify their own abilities and approaches to learning" (Chamot and O'Malley 1996: 264). In order to encourage students to use metacognitive processes, teachers must provide students with "planning, monitoring, and evaluating strategies" (1996: 264). Students must have an academic goal, plan how to achieve it, and evaluate their success. By focusing their learning in this way, students also become conscious of and thereby engaged in their own learning process. As these researchers note, students then "come to understand that they have power over their own learning and can choose to be successful by expending effort and using appropriate strategies" (1996: 266). They are no longer helpless and passive when given a complex task.

Related to these metacognitive strategies are cognitive strategies which students need to accomplish academic and language tasks. Some of the most useful the model promotes are: 1) how to elaborate on prior knowledge and 2) how to make inferences. Both techniques make cognitive skills explicit and therefore attainable. Critical thinking is thus demystified and

students develop skills, competence, and confidence. Finally, “the social-interactive basis for CALLA illustrates another aspect of the theory underlying the approach: a social-cognitive theory of motivation” (Chamot and O’Malley 1996: 263). Because the model gives teachers a means of addressing meaningful and challenging content, both declarative and procedural, it is valuable to students in general and ELL in particular who need to develop their transferable academic skills.

The CALLA model has an instructional model that follows five stages. The stages are recursive in nature and therefore are not always followed in strict sequence. They are described in *Figure 2.7*.

Figure 2.7 Instructional Stages of CALLA

Stage	Description	Techniques
Preparation	In this stage learners become aware of their prior knowledge of a topic and the strategies they are already using for the type of task to be accomplished. Students develop metacognitive awareness of the relations between their own mental processes and content (267). The teacher elicits what students already know so they can participate in the dialectic.	1.Class discussion 2.Group Interviews 3.Individual Interviews 4.Small group discussions 5.Questionnaires 6.Checklists 7.Journal entries
Presentation	“The focus of this stage is on conveying new information to students, including new concepts, new language, and new strategies. The new information should be presented in a meaningful context and with substantial support from extralinguistic cues such as visuals and demonstrations. New content should be scaffolded or presented with ample contextual supports such as realia, hands-on experiences, and visual or verbal cues for successful task performance.” (268)	1.Modeling “that supports and empowers students to be independent learners.” (269)
Practice	“In this stage, students have the opportunity to use the new information actively, practice oral and written academic language and apply learning strategies with a classroom activity” (269). “As students describe [and practice] their strategic mental processes to other students they gain control over and internalize effective learning procedures” (269)	1.Independent practice 2.Heterogeneous group practice 3.Collaboration
Evaluation	“The main purpose of this stage is to provide students with opportunities to evaluate their success, thus developing metacognitive awareness of their learning processes and accomplishments” (270).	1.Debriefing discussions 2.Learning logs 3.Checklists of content 4.Open-ended questionnaires
Expansion	In this stage students have opportunities to relate their learning to prior knowledge and apply what they have learned.	1.Use of language and learning strategies in other classes.

*From Chamot and O’Malley (1996) *The Cognitive Academic Language Learning Approach*

2.10 Implications of Cognitive Strategy Instruction on This Study

Paul and Elder (2006) apply cognitive theory and cognitive strategy instruction to instruction aimed at improving the substantive reading and writing skills of university students. Chamot and

O'Malley (1996) apply cognitive theory and cognitive strategy instruction to instruction aimed at elementary age ELL. This study, however, investigates the application of that theory to the instruction of a group of secondary ELL in the context of the ninth grade ELA curriculum. Here a description of Hegelian Unity proves beneficial. Hegel believed that understanding what something **is not** helps us to better understand what it **is** – his idea is often explained as thesis, antithesis, and synthesis. If we understand a concept (or a *thesis*), we can learn more about the thesis by examining its opposite (*antithesis*). Through this process we come to a higher level of understanding of both the thesis and its antithesis (*synthesis*). To apply Hegel's proposal to my teaching practice, the ELL programs in South Carolina in the United States focus on language acquisition support in their instruction, a stance that is appropriate for beginning and intermediate students (*thesis*). Yet this stance fails to meet the needs of students who must to develop their critical thinking skills in order to improve their academic achievement. As I have pointed out earlier, recent research into the acquisition of literacy skills is closely tied to research on second language acquisition. In the most current review of strategies for addressing the needs of adolescents in developing higher literacy, Shanahan and Shanahan (2008) state:

The idea that basic reading skills automatically evolve into more advanced reading skills and that these basic skills are highly generalizable and adaptable is partially correct: the basic literacy and decoding skills. . . are entailed in virtually all reading tasks (2008: 40-41).

Yet the secondary English curriculum is anything but basic, and higher literacy requires more than decoding skills. As learning progresses into the secondary grades, the content becomes more complex and contextual. Students in ELA classes, for example, must gain meaningful understanding of concepts such as metaphor, paradox, and aesthetic. They must also interpret those concepts within authentic texts. Obviously, language acquisition instruction does not address these instructional goals. Therefore, I offer an *antithesis* to the traditional pedagogic stance taken with ELL in South Carolina and in the majority of school districts in the United States. I offer an antithesis that deals with instructional strategies more appropriate to the complex demands ELL face in the mainstream ELA curriculum. I understand that ELL do not need more basic instruction in language acquisition in the ELA class. Furthermore, they also do not need to deal with more reductive, simplified text and objectives. They have instructional needs that native speakers do not have and gaps in their education and background knowledge that must be addressed in order for them to develop as true students of the discipline. The next

section describes the cognitive apprenticeship which I contend is a *synthesis* between the two approaches and establishes a valid approach for helping ELL develop their academic skills within a mainstream classroom.

2.11 Cognitive Apprenticeship Paradigm

2.11.1 Introduction

In a 1991 issue of *American Educator*, Collins et al published a study entitled *Cognitive Apprenticeship: Making Thinking Visible*. Still influential today, the article argues that despite the increased demand for critical thinking in all subject areas of our national curriculum, many students still have difficulty transferring thinking and reasoning skills to other contexts. The authors explain that students have no idea how to go about the complex processes involved in academic tasks such as writing, reading comprehension, and problem-solving. They attribute this failing of American schools to the fact that most “standard pedagogical practices render key aspects of expertise invisible to students” (Collins et al 1991: 1). Their study advocates the use of an apprenticeship model for teaching critical thinking. Using a teaching paradigm they call *cognitive apprenticeship*, the authors argue that while apprenticeship has a long history of transmitting knowledge from expert to novice in many crafts and trades, the model also provides a natural way for teachers to transmit complex thinking skills to students. They state: “In schooling, the processes of thinking are often invisible to both the students and the teacher. Cognitive apprenticeship is a model of instruction that works to make thinking visible” (Collins et al 1991: 1).

This study applies the cognitive apprenticeship paradigm to the secondary English curriculum and to a group of ELL who exhibit gaps in their ability to communicate critical and creative thinking and reasoning in English. The learners in this study represent a microcosm of the diverse challenges of both language fluency and school background presented to mainstream content teachers of ELL. The instructional interventions used in this study implement the four important “features of traditional apprenticeship” adapted by the cognitive apprenticeship paradigm (1991: 2). Collins et al propose a paradigm for instructional practice that uses “modeling, scaffolding, fading, and coaching” (1991: 2). In *modeling*, learners observe the instructor engaged in a cognitive task. The instructor “explicitly shows” the learner what to do to help students “build a conceptual model of the processes that are required to accomplish the task” (1991: 2). Then students carry out a similar task, while the instructor provides learners with the support they need to carry out the task. This support is known as *scaffolding*. These

supports can be suggestions or graphic organizers that provide an “intermediary step” the student needs to complete the task. As learner proficiency grows, the instructor removes the supports and places increasing responsibility on the learner to complete the task. In other words, the scaffolding gradually “fades.” Throughout the process, the instructor engages in what the researchers term *coaching*. Coaching includes:

choosing tasks, providing hints and scaffolding, evaluating ... and diagnosing ... , offering feedback, structuring activities, and working on particular weaknesses ... The aim of coaching is to bring novice performance closer to expert performance (Collins et al 1991: 2).

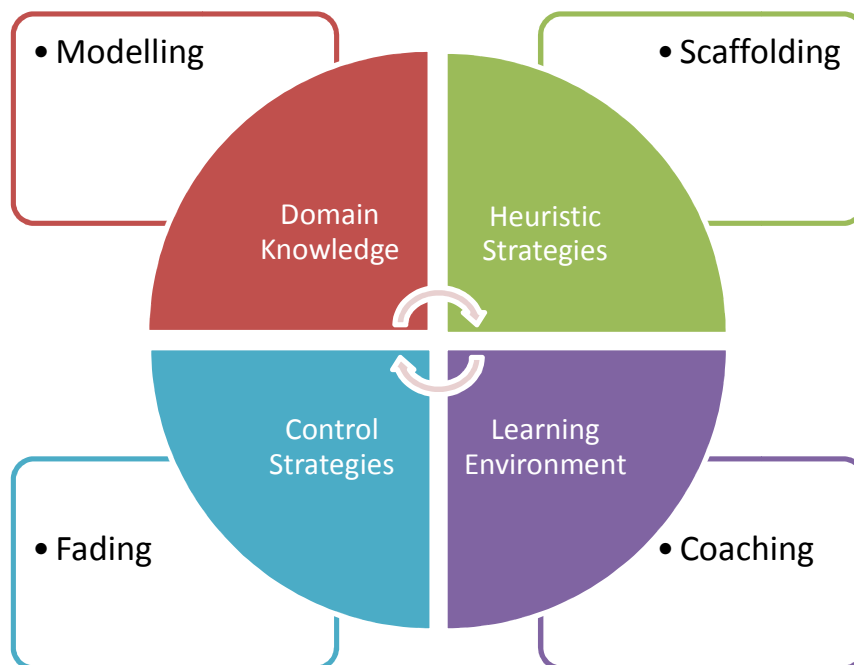
2.11.2 Framework of Cognitive Apprenticeship

In order to frame the instructional strategies within a cognitive apprenticeship, Collins et al (1991) posit that teachers must consider four issues in designing instruction: domain knowledge, heuristic strategies, control strategies, and learning environment. Domain knowledge is specific to academic content and “includes the concepts facts and procedures explicitly identified with a subject matter” (1991: 13). Second, teachers must provide students with heuristic strategies. These strategies are the “effective techniques and approaches for accomplishing tasks” (1991: 13). Third, instruction must include control strategies. These strategies refer to “metacognitive strategies” students need in order to deal with difficulties and monitor their own learning (1991: 13). Finally, learning strategies are central to the cognitive apprenticeship. These strategies help students learn content and transfer that learning to other domains. The methods of cognitive apprenticeship paradigm are “designed to give students the opportunity to observe, engage in, and invent or discover expert strategies in context” (1991: 13). Modeling, coaching, and scaffolding are the central methods of instruction guiding the approach. These methods help students learn the skills they need for complex cognitive tasks. As in a traditional apprenticeship, novices learn through “observation and guided practice” by an expert. Articulation and reflection help students focus the skills they’ve gained and become more conscious of their learning, while exploration encourages the transfer of thinking skills to other contexts. **Figure 2.8** depicts the instructional strategies that center instructional practice.

The work of Collins et al (1991) on cognitive apprenticeship unifies the instructional interventions in this study, while The National ELA Standards provide the context. The purpose of this study is to investigate the development of critical thinking in ELL as they engage in instructional interventions designed to promote critical thinking in the ELA. Research has

shown that critical thinking can be explicitly taught and has an impact on what students understand and how they can use knowledge. Therefore, I investigate instructional strategies that make explicit some of the thinking skills needed to read critically and to write substantive text. I report the results of three units of instruction designed to improve and reinforce the critical thinking of a group of ELL and use the cognitive apprenticeship as a framework for synthesizing several seemingly competing needs: 1) the need to help students develop their English versus the need to help them develop academically as critical thinkers and 2) the needs of ELL within a curriculum that demands that they perform at the same level as their native speaking peers versus the additional need to address all students in a diverse population.

Figure 2.8: Cognitive Apprenticeship Paradigm



Finally, the research shows that critical thinking can be improved and that ELA lends itself to critical thinking instruction. This study contends that critical thinking skills can be improved for ELL and for all students with the systematic use of heuristics or paradigms for thinking in conjunction with challenging literature. The cognitive apprenticeship is just such a paradigm, and instructors can use it to help and to guide students' critical thinking. First, the cognitive apprenticeship draws on schema theory which suggests that for students to be able to synthesize their own ideas with the ideas in the text, they need to understand the patterns and parts of the text upon which the main idea is built. Cognitive apprenticeship provides a means for teachers to provide students with models of how to structure the knowledge they are learning and how to ask

questions about it. Second, constructivism holds that students construct or create their own meaning – they are **not** passive receptacles for teachers to fill with knowledge. The theory also assumes that learning is interactive and that learning must be within an authentic meaningful situation. From this assumption, “situated cognition” or the cognitive apprenticeship, which is based in a large part on Vygotsky’s theories, has evolved. “The intellectual goal of ... cognitive apprenticeship is acquiring cognitive skills and strategies” (Hendricks 2001: 302). With cognitive apprenticeship “students are able to see how experts tackle problems, and they learn to solve problems in the same way by learning through guided experience” (Hendricks 2001:302). The model assumes that for students to attain critical thinking skills – they must receive direct instruction in those skills by an expert who not only exhibits those skills but also describes and sequences them to make them attainable to the novice. In the next section, three studies that used cognitive apprenticeship as a teaching model are described followed by a discussion that integrates the model with current ELA standards. This chapter concludes with overviews of the units of instruction that are implemented in the research study.

2.12 The Cognitive Apprenticeship Model Applied

The research of Collins and his colleagues focuses on three studies that apply their paradigm to specific instructional contexts. The first focuses on the use of cognitive apprenticeship to improve critical reading skills. The second uses cognitive apprenticeship to improve critical writing skills, while the third deals with incorporating heuristic strategies in problem solving. All three contexts deal with skills critical to academic achievement in the ELA curriculum.

2.12.1 Cognitive Apprenticeship and Critical Reading Skills

In the secondary ELA classroom reading and comprehending complex text is a central tenet of the curriculum. Collins et al (1991) describe the reciprocal teaching method used to teach reading to elementary school students. Like the participants of this study, the elementary age students struggle to comprehend text. Using reciprocal teaching, the teachers Collins et al (1991) describe model questions that expert readers ask themselves in the process of comprehending text. They then cede more and more of the process to students as they gain expertise in reading and comprehending. Collins et al attribute the “dramatic effects” of this instructional intervention to the fact that the “method engages students in a set of activities that help them form a new conceptual model of the task of reading” (1991: 5). In other words they recognize the active role readers must take in constructing meaning. Another factor to which research

attributes the success of reciprocal teaching is that the “teacher models expert strategies in a shared problem context” while students observe knowing they will soon engage in the same task on their own (1991: 6). Finally, the scaffolding the teachers employ is very important. It breaks down the complex task of constructing meaning into observable explicit strategies students can use themselves. The method also requires that students articulate how they acquired knowledge, aiding in the transfer of these cognitive skills to other reading tasks.

2.12.2 Cognitive Apprenticeship and Critical Writing Skills

Collins et al (1991) also describe the use of the cognitive apprenticeship paradigm for teaching writing. “Based on contrasting models of novice and expert writing strategies the approach provides explicit procedural supports in the form of prompts, that are aimed at helping students adopt more sophisticated writing strategies” (Collins et al 1991: 6). The researchers state that “novice writers” engage in what they call “knowledge telling strategies.” In other words novice writers tell everything they know about a topic staying on the summative and surface level. Novice writers like the participants in this study do not transform (i.e. analyze and interpret) information to make it their own. The cognitive apprenticeship seeks to improve student thinking as exhibited in the “nature and quality of student writing” (1991: 6). Again Collins et al attribute the success of the model to the fact that it helps students “build a new conception of the writing process” that illustrates the complexity and higher order thinking necessary to produce “high level text” (1991: 8).

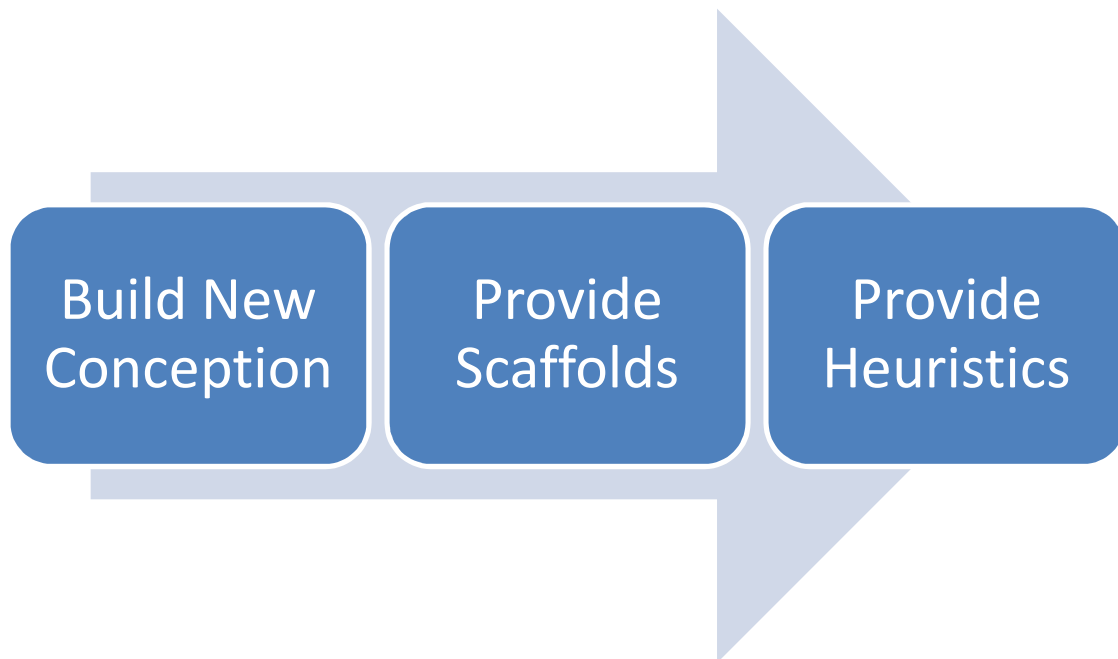
2.12.3 Cognitive Apprenticeship and Problem Solving Skills

Finally, though not in the same domain as ELA, describe the use of the paradigm to teach problem solving in mathematics. The approach uses heuristic strategies to give novice problem solvers a way to attack demanding cognitive tasks. The teacher models the approach and closely monitors student responses as “they gain control over reflective and metacognitive processes in their problem solving” (Collins et al 1991: 9). Furthermore, students dissect the problems and skills they incorporate as well as their effectiveness and applicability to other problems.

Figure 2.9 highlights the cognitive apprenticeship paradigm helps students improve critical thinking in three main ways. First, the methods help students gain a new and better understanding of domain knowledge. Second, the methods help students by supporting them as they try to achieve difficult and complex goals. Third, the methods help students by providing them with heuristic and learning strategies that can help them transfer their knowledge. Therefore, cognitive apprenticeship provides a concrete process for teaching abstract concepts.

This study investigates the extent to which such a purposeful and strategic approach can bring about real growth in the nature and quality of the thinking of ELL in the academic discourse of ELA.

Figure 2.9 Critical Thinking and Cognitive Apprenticeship Paradigm



2.13 Critical Thinking in ELA (Domain Knowledge)

Reading and interpreting literature is much more complex at the secondary level than at the elementary level; so is writing, which focuses on the academic essay and analysis. Therefore, the approach to the text and the approach to writing required in secondary ELA require students build a new conception of reading and writing. Langer (1992) explains this new conception. She argues that conceptions of how to teach critical thinking in the secondary English classroom fall short of their goals. As evidence, she points to curriculum guides and the research into practice that show that teachers assume students must learn a correct interpretation of literature. She argues that this approach to ELA leads to overly simplified “convergent ways of thinking” (Langer 1992: 3). The solution to this problem rests in developing what Langer calls “literary understanding” (1992: 1). She characterizes literary understanding as “exploring a horizon of possibilities” through which students learn to “explore multiple interpretations” and expand the “complexity of their understanding” (Langer 1992: 4). Her approach requires engagement with the text – not just the absorption of surface details. In literary reading, students must integrate

ambiguity and complexity as they “form interpretations [and deal with] alternative views” (1992:

6). Specifically she recommends that the teachers in ELA:

1. treat students as thinkers
2. foster the search for meaning
3. center discussion on multiple interpretations and connections

For Langer, these principles ensure that “students are supported to explore, think, explain, and defend their understanding” (1992: 10). The principle of literary understanding also ensures that the purpose of reading and writing in the ELA moves away from reductive responses to writing that “explores possibilities ... and presents information” in the student’s individual voice (1992: 11). Langer’s research implies that a generic approach to critical thinking instruction is not sufficient. Instead, critical thinking must be targeted to ELA and the types of thinking and reasoning employed in the English classroom. Because the participants in this study struggle to comprehend text at a higher level, this study is aimed at providing insight into how cognitive apprenticeship can help ELL improve their thinking and move beyond the reductive, simplistic responses that characterize their work. The primary goal of this study is to use the cognitive apprenticeship model to implement instruction in explicit and transferable critical thinking skills.

2.14 Critical Thinking and ELL

The emphasis on complex and critical thinking for adolescent literacy is also relevant in developing the literacy of ELL. Meltzer and Hamman (2005) state that ELL “require explicit instruction in the genres of academic English” used in the content areas (Meltzer and Hamman 2005: 1). They recommend that ELL be exposed to “domain-specific” language to “facilitate content-area understanding” (2005: 1). Furthermore, the authors assert that research stresses that pedagogy must not be reductive. Instead, instruction must recognize the “interdependence and synergy of reading, writing, speaking, listening, and thinking skills” in the development of high literacy (Meltzer and Hamman 2005: 1). Indeed, they argue that this approach is especially true for ELL because of their achievement gap. These authors see the necessity of merging what we know about helping native speaking students develop high literacy with what we know about helping ELL develop English literacy. Merging these approaches, has helped Meltzer and Hamman (2005) pinpoint effective strategies that help ELL develop the high literacy demanded by the ELA curriculum. In so doing, they are able to examine what “teachers should be doing in classrooms on a regular basis to ensure content learning and literacy development of students

who struggle with ... text” (2005: 3-4). Furthermore, they are also able to examine what teachers should be doing to help ELL who struggle in those same areas.

2.14.1 *Developing Critical Thinking and Metacognitive Skills*

Meltzer and Hamman (2005) present five sets of practices that work in promoting high literacy for adolescents in general and ELL in particular. Their research is based on the assumption that literacy and thinking cannot be separated and that promoting literacy also promotes critical thinking. They recommend developing critical thinking and metacognitive skills, two critical components of the *Cognitive Apprenticeship Paradigm*. Their review of the literature on literacy development and content-area learning highlights “the importance of interacting with and actively processing text in order to improve reading comprehension. That is, students are required to do something with the text, not just pass their eyes over the words, unsure of where to focus” (2005: 5). These assertions echo Langer’s (1992) description of the demand for critical thinking in ELA curriculum – a requirement also placed on ELL. They also illustrate the importance of directly addressing higher-order, critical thinking in the English classroom.

What do these researchers mean when they say that teachers require students to “do something with the text”? This is best answered by explaining what the researchers do not mean. Research into classroom practice indicates that while most teachers of ELA stay on the surface level and teach literacy and thinking skills in isolation, such an approach is reductive. In most lower-track high school classes, the classes most likely to contain ELL, activities are more likely to focus on “short answer activities and other similar tasks that limit writing practice” (Meltzer et al 2005: 28). Yet there is clear evidence that indicates that there are differences between “better readers” and “poorer readers” in both their metacognitive ability and their critical thinking skill, and these differences can be addressed with effective instructional methods. These methods include an emphasis on:

1. Explicit Teaching (modeling)
2. Guided Practice (scaffolding)
3. Literacy Strategies (heuristic strategies)

All of these approaches are used in the Cognitive Apprenticeship teaching paradigm. Because the requirements of ELA are complex, it is imperative that the skills necessary for success be made visible (*modeling*) for ELL. It is also imperative that they receive the support

they need to complete the complex tasks (*scaffolding*). In this way they can attain skills that are necessary for academic success in secondary English. Furthermore, “the research also supports the efficacy of explicit instruction” of critical thinking skills in the reading of literature (Meltzer and Hamman 2005: 23). *Cognitive Strategy Instruction* provides a means to teach critical thinking skills explicitly. Meltzer and Hamman (2005) state:

Cognitive Strategies are guided learning procedures for internalizing new information and performing higher level thinking operations.... These strategies must be taught, modeled, and practiced ... and are necessary for deep understanding of content (36-37).

Students must be asked to question and analyze text in order to truly comprehend it. Based on this research, each unit of study must:

1. Develop students’ literary understanding and ability to form interpretations.
2. Require that students interact with text.
3. Promote critical thinking through the direct instruction in critical thinking skills.

2.14.2 *Sequencing of Instruction*

Now that the study has defined what is important to teach, it is important to think about where instruction should start. Collins et al (1991) state that in giving students complex tasks teachers must provide structure while maintaining rigor and meaningfulness. This principle draws from the ideas of Vygotsky and the *zone of proximal development* (ZPD). Vygotsky’s research showed that students make more progress when they work within their ZPD than when they do not. In other words, instructional strategies that support students as they stretch to complete tasks beyond their current level help them advance. Vygotsky’s theory requires a different pedagogical approach than the traditional approach that underlies much ELA academic instruction and suggests that effective scaffolding and effective instructional interventions should be (1) graduated, (2) contingent, and (3) dialogic. That means that instruction should be sensitive to both learners’ levels and to the levels of help they need (De Guerrero and Villamil 2000: 53). Furthermore, because of the recursive nature of ELA reading and writing tasks, the learner’s needs must guide instruction. Scaffolding is a concrete way the teacher can meet those needs and “extend [each learner’s] current skills and knowledge” (Riddle 1999: 2). Wood and Wood (1996) suggest that the instructional support of scaffolding should have the following features:

1. It should “provide a bridge between a learner’s existing knowledge and skills and the demands of the new task” (6).
2. It should “provide a structure to support the learner’s problem solving” (6).
3. It should “involve what is initially, for them, ‘out of reach’ problem solving while guided participation ensures that they play an active role in learning and they contribute to the successful solution of problems” (6).

2.14.3. *Implications for Instruction*

How do instructors translate what researchers know about ZPD into instructional practice? First, it is important that students build a conceptual map of the task. That means that teachers must make the big picture of the cognitive task clear and concrete. When the task is clear and concrete, students can understand the task even when they need help to complete portions of the task. Second, tasks must be sequenced so that they build in complexity and require more and more cognitive ability and critical thinking. Thus sequencing is a form of scaffolding as it ensures understanding of concrete ideas that support the acquisition of abstract concepts. Third, tasks should not only be sequenced so that build in complexity but so they also require a “wider and wider variety of strategies or skills” necessary for students to complete the task (Wood and Wood 1996: 6). Not only must the task be more complex, but the student’s response must be more complex. In short, they must bring more and more to a more demanding text. To summarize, effective instruction using the cognitive apprenticeship paradigm requires that the teacher:

1. Articulate clear and concrete tasks – especially those dealing with abstract concepts and critical thinking.
2. Sequence activities so that students take in increasingly complex information.
3. Provide strategies and instructional support that helps students demonstrate increasingly complex thinking.

2.14.4 *Discourse Features of Secondary English*

Next, the cognitive apprenticeship paradigm requires that teachers recognize the modes of discourse for the content they teach. Modes of discourse are the types of communication used to convey information. Within the content domain of this study, English Language Arts, this study assumes that instruction must deal with two distinct types of discourse that students must engage in: those specific to interpreting text and those pertinent to the production of academic writing. As Benjamin and Schwartz (1994) note in their position paper on the development of

national ELA standards, attempting to quantify English is challenging. The researchers attribute this difficulty to the fact that “language may and does vary with community mores, audience, and purpose. No parallel can be drawn for the force and emotion of language in the content of any other academic discipline” (Benjamin and Schwartz 1994: 28). While the ELA national standards reflect the belief that the processes involved in reading and writing are intricately linked, even woven together, effective instruction and learning requires focus. Therefore, the standards are divided into categories; i.e. reading standards, writing standards, communication standards, and research standards. In addition, the English curriculum is influenced by the fact that much of our assessment is subjective with “shades of quality [which] are open to subjective ... interpretation” (Benjamin and Schwartz 1994: 29). Though subjective, assessment also provides a means to focus instruction and identify gaps. Thus each instructional unit in this study provides students with specific scaffolds meant to improve specific skills in both interpreting text and academic writing.

2.14.5 Standards and Academic Content.

While *Cognitive Theory* and Vygotsky’s ZPD provides the justification for the instructional interventions, the ELA standards give us a means to establish “the nature of the guidance and collaboration that promotes development [and helps] specifies what gets learned” (Wood et al 1996: 5). In other words the standards establish what the teacher does and what the students learn. They also establish “the most significant principles and concepts in the field of ELA which ... make intelligible everything” the classroom teacher does (D’Angelo 1976: 142).

The National Council of Teachers of English standards emphasize the need for students to develop a deep understanding of text beyond merely establishing validity and truthfulness – the hallmark of reading in other academic disciplines. Instead, students must identify the meaning of text and recognize how the text represents a view or comment on life. In addition to understanding the meaning, students must also recognize the rhetorical devices and language features of text and how they are used to create meaning. Also, these standards demand that students begin to write well-reasoned arguments that clearly state their opinions and to use rhetorical devices appropriate to their purpose and audience. In other words, they must learn to analyze what they read and use that analysis to help them build their own writing style and develop their own voice.

2.14.6 Standards and Critical Thinking

Finally, students must think about literature creatively, logically, and critically. That means that students must learn to understand the abstract concepts that underlie text. Clearly, this is often difficult for ELL and for those who struggle with reading. The instructional challenge is to help students learn the abstract thinking skills necessary to comprehend text in a *complex* way, without frustrating and discouraging them. Research into language acquisition and instruction has shown the importance of teaching students in Vygotsky's zone of proximal development. This means targeting instruction between a student's actual development level and his/her potential development level. Krashen (1981) further develops Vygotsky's theory with his emphasis on relevant and challenging materials rather than the excerpted and simplified text that research shows many teachers of ELL use in their instruction. Krashen recommends centering instruction on complex text and providing scaffolds that link prior knowledge to more complex new knowledge (Krashen 1981: 103). In order to think creatively, logically, and critically, students need direct instruction in those processes that make the thinking and the reasoning explicit. Furthermore, for those thinking processes to make sense to students, the instruction must be grounded in concrete examples. By using the cognitive apprenticeship model in each instructional unit, the interventions in this study are intended to give students the tools they need to understand content-rich material at a higher level.

2.14.7 Learning Environment

The final parameter that the research establishes in structuring cognitive apprenticeship has to do with the learning environment. Collins et al 1991 argue that cognitive skills can't be divorced from content and that the learning environment must contain the following critical characteristics:

1. **Situated learning.** Situated learning is defined as learning that ensures students understand the purpose of what they are learning. They also must actively apply the knowledge and realize the contexts in which the knowledge can be applied. This promotes the abstraction of knowledge that helps students transfer what they've learned to other contexts.
2. **Community of Practice.** Here the researchers contend that students must be engaged in the skills they need.

3. Intrinsic Motivation. Students need to have a goal that they are working toward. To accomplish that instruction must focus on the stakes and treat students as thinkers.

These recommendations emphasize that the learning environment must keep students engaged and purposeful. To accomplish that, the instructional units of this study center on literature selected for both *thematic relevance*, as well as *instructional relevance*. Thematic relevance refers to literature which deals with concepts and themes relevant to the students – literature that they can connect with. The instruction is then focused on the universal nature of those texts that cuts across age and culture and attempts to engage them personally. Such an approach is intended to help students tap into the joy of literature.

Second, features of the literature used in this study lend themselves to instructional interventions that highlight analysis and interpretation. Developing the ability to understand text on a deeper level requires inferences and interpretation as well as integrating text with background knowledge. Though preassessments used in the research study established that the participants in this study can, in general, summarize the text and retell a version of the events in narrative and expository texts they read, they also establish that participants are limited by their inability to go “beyond what [is] explicitly expressed in order to analyze how and why it is expressed and the implications that expression draws” (Vermillion 1997: 2). In other words, they think concretely about what they read. They do not think abstractly about what they read. That is the gap – in order to succeed academically they must learn to think abstractly and critically. Accomplishing this requires instruction that meets students where they are and moves them beyond that point. Therefore these lessons are put in concrete terms with the complex tasks of reading and writing broken down into recognizable and explicit steps; the lessons also support students at their individual achievement level and make them believe in their ultimate success. So while the intervention and teaching strategies can be replicated, their implementation must be responsive to individual students and to individual strengths and weaknesses to remain purposeful.

Finally, in addition to providing purpose and meeting needs, the cognitive apprenticeship paradigm establishes the importance of *intrinsic motivation*, something that by its very definition must come from the student. While there is no way to force intrinsic motivation, the learning environment can be conducive to developing student motivation. First, the classroom and the lessons must be demanding. Teachers must expect a great deal from students. The classroom

must be a place where students learn to value themselves academically. Respect for students as critical thinkers and as individuals must guide our instruction. A teacher must understand each student's academic life: how each student thinks, how each student learns, and how each student can achieve. We must set high goals and demand hard work so that students become true students of English. We must challenge students with each lesson and ensure that each assignment is rigorous and creative. This study uses the cognitive apprenticeship paradigm to give teachers a means to demonstrate that we take our students seriously as thinkers, so they will do likewise. Because the English curriculum is demanding, many students, not just ELL, struggle. In turn, teachers must work to capture their hearts and minds and motivate them to learn. Motivating students does not always mean making learning fun. It does, however, mean making learning valuable and that generates motivation.

In order to make learning valuable, the interventions in this study foster open inquiry. The units of instruction teach students about the concepts that critics and scholars have brought to bear on the text. They ground the text in the humanities and in the hallmarks of English. The approach is coupled with the demand that learners engage the text on their own terms and search for their own patterns, problems, and solutions. The cognitive apprenticeship paradigm requires students to deal with complexity and to construct their own knowledge. It also gives them the opportunity to think.

2.15 Summary and Conclusions

The review of the literature pertaining to cognitive theory and critical thinking instruction highlights the importance of critical thinking in ELA. It also highlights the importance of instruction that emphasizes metacognition and heuristics in order to foster the academic achievement of ELL. The literature reveals how "readers construct meaning from the information presented in the text and from their own goals, prior knowledge, and schema" (Fagan 1999: 116). It also illustrates that instruction that supports ELL in sifting through the text for the important information and helps them recognize text features and map concepts exposes students to strategies that support cognitive development. The cognitive apprenticeship provides teachers with a means of leveling the playing field. While still demanding interaction with the text, the cognitive apprenticeship bridges the gaps in background knowledge to the ideas in the text by emphasizing not only what learners read but how and why they read it.

The next chapter discusses the implementation of these theories and the cognitive apprenticeship paradigm on a group of secondary ELL students enrolled in an international

American mainstream ELA class in South Africa. It then examines the impact of instruction intended to improve critical thinking and the academic achievement of those students. The study focuses on three units of instruction, each centered on a grade level text of a specific genre: poetry, drama, and prose. The national ELA standards focus academic discourse and achievement goals. Within the units of instruction, instructional interventions gathered from research into the best practices for both ELA instruction and ELL instruction are used. These interventions provide the modeling, scaffolding, coaching, and fading ELL need to achieve those goals. Thus, the framework for each intervention is the cognitive apprenticeship.

Chapter 3: Research Description

3.1 Introduction

This study addresses the needs of ELL students whose ability to participate in academic discourse is restricted not only by limited English proficiency, but also by a lack of experience with English as a tool for thinking and reasoning. The purpose of this study is to teach critical thinking to ELL within the traditional ELA curriculum. To accomplish that goal, I use the cognitive apprenticeship as the theoretical framework for designing the instructional interventions. The interventions reflect a model of teaching and thinking that recognizes both theories of cognition and the complexity of the ELA curriculum by not attempting to simplify the content. Instead, the interventions scaffold the content of a mainstream secondary ELA course and support students as they encounter increasingly complex literature and engage in increasingly complex academic tasks across three instructional units. Those instructional units are centered upon rich, authentic text used in mainstream ELA secondary curriculum in the United States.

In this chapter, I explain the choice of methodology, provide a rationale for the theoretical framework used in designing the interventions, and establish instructional profiles for each of the participants at the beginning of the study. The instructional profiles establish a starting point for the instructional interventions; they identify the core concepts and the thinking and reasoning skills the participants lack to produce high quality text and to read and interpret text at a complex level. The profiles also set the context for the interventions that follow and show a clear “sense of progression and some sense of sequence” to connect instructional activities between units (D’Angelo 1976: 148). Finally, the profiles work, in conjunction with the language functions and academic content of the ELA curriculum, to establish the goals of instruction in the unit overviews provided.

3.2 Methodology

3.2.1 Purpose

The primary purpose of this study is to investigate how to improve the critical thinking and reasoning of ELL. Current research shows that ELL struggle to catch up with the demanding secondary curriculum. In her “year-long ethnographic case studies following US immigrants in their last year of secondary school and first year in a two-year community college,” Harklau (2000) asserts that most of the ELL “classroom interactions and identity construction in high school [is] derived from participation in mainstream classrooms” (Harklau 2000: 50).

Furthermore, those US teachers with whom ELL have the most contact tend to misconstrue the students' lack of English ability with a lack of "innate ability," seeing the ability to speak two languages as a hindrance rather than a "special talent".⁴ In other words the teachers in her case study tend to "conflate English proficiency with cognitive ability" and "question ESOL students' intellects" (Harklau 2000: 50). Therefore, a study of the instructional strategies for promoting critical thinking and reasoning of ELL in a mainstream ELA classroom is valuable and necessary.

The instructional interventions in this study sought to help the participants learn to assert their intellects and demonstrate their thinking through their responses to complex texts and through the composition of substantive texts. Because I investigated a real pedagogical problem for ELL, I used the principles of action research. Namely, I intervened instructionally then reflected on the results to inform subsequent instruction. This type of informed planning mirrors the recursive nature of ELA instruction. But I also recognized that the critical thinking and reasoning objectives addressed in this study are difficult to quantify. Therefore, I coupled action research with qualitative methodologies. This choice made logical sense for several reasons. First, the participant group was small with only seven students. This means that the results can be examined in order to understand and gain in depth perspective on how the learning objectives were achieved. Second, the participant group was representative of the diverse population of ELL in mainstream classrooms across the United States. This fact adds resonance to the results of the study as they reveal detail and information about varied participants and their individual learning objectives. Third, the interpretive nature of qualitative methodologies aided my attempt to describe the central outcomes and make recommendations about future instruction.

To improve the credibility of the study, I also made use of quantifiable measures. Student achievement levels by assessing students with standardized testing designed to measure the critical literacy skills addressed by the interventions. This step was vital in establishing the instructional level of the students as accurately as possible. In the next section, the theoretical framework for designing the interventions is described to provide further rationale for the researcher's approach.

⁴ This comment refers specifically to the American context of this study where multilingual ability is not a norm as it is in South Africa.

3.2.2 Theoretical Framework for Designing Interventions

In this study, I have taken what Davis (1995) describes as a “theoretically based research perspective” (1995: 434). *Cognitive Theory* and the *Cognitive Apprenticeship Model* frame the discussion of the interventions undertaken. Because the goal of the interventions was to improve the participants’ ability to demonstrate critical thinking and reasoning in English, the interventions are analyzed in terms of cognitive theory. This analysis is used in the formulation of “a paradigm sensitive to real world conditions” that helps determine what is valuable and transferable for other teachers with other groups of ELL (Edge and Richards 1998: 234).

NCLB and its demand for quantifiable data certifying the AYP of each student, has led to “closer scrutiny” of the “scientifically based research in education” (Dillon 2005: 108). The National Educational Research Policy and Priorities Board (NERPPB) issued a policy statement emphasizing the value of case studies and other qualitative data for the causal analysis necessary in making instructional decisions (Dillon 2005: 108). Furthermore, researchers (Reinking and Bradley 2003, Dillon 2005) tout the value of “qualitative methods of observation and interviewing” to set instructional contexts for interventions (Dillon 2005: 108). After interventions are designed and implemented, the “results [can] indicate whether an intervention works or not” (2005: 108). This establishes the value of qualitative intervention research in designing systems for practice, extending our knowledge of the effect of practice, and observing the effects of practice on a group of participants. In fact, Dillon (2005) argues that there is a “vital need for high quality qualitative studies of individual teachers, students, and classrooms” (111). This study addresses that need by taking the existing teaching paradigm of cognitive apprenticeship and attempting to extend what is known about the effects of that paradigm on the critical literacy skills of a group of ELL. In so doing, another qualitative study of ELL was used as a source for this study. Hirvela and Sweetland (2005) studied the value of portfolio assessment for two ELL in a university setting for “penetrat[ing] into pedagogy in ways not easily achieved through quantitative measures” (4). Hirvela and Sweetland (2005) justified the approach by quoting Creswell (1998) who “asserts that qualitative research consists of an intricate fabric composed of minute threads, many colors, different textures, and various blends of material” (in Hirvela and Sweetland 2005: 4). The weaving metaphor applies to the present case study as well. Because there are so many variables in the participants’ backgrounds and thus in what they are able to bring to the discussion, this study attempts to weave together an approach that focuses on the strategies that work across those learning variables. Though a study

of seven students cannot be generalized, it is representative of the many different ELL levels found in US secondary schools. Furthermore, it provides real world conditions through which to focus on exploring, explaining, and improving practice. Because the study is grounded in theory, it provides an “opportunity to observe from close range a situation” where a diverse group of learners encounter the standards (Davis 1995: 445). Thus this study also contributes to our understanding of the pedagogy that helps students develop their thinking and reasoning in English.

3.2.3. Findings

Findings have been gathered from the textual analysis of writing assignments in response to specific instructional interventions. Accepted rubrics based on the standards for ELA were used to evaluate written work while semi-structured interviews regarding the participants thinking and reasoning (metacognition) were conducted at the end of each intervention to explore the participants’ thoughts about their learning. The interviews consisted of a series of questions that include the following:

1. What is the most important thing you have learned from studying this book (play, poem, etc.)
2. What is the best part of your writing?
3. What is something you could improve or still need help on?

The purpose of these questions was to help students develop metacognitive awareness – a key aspect of the cognitive apprenticeship. The interviews also gave me insight into what the participants viewed as relevant and significant in their learning. I then discuss results and use thick description to explain each aspect of the student responses and their teaching context to interpret results and take into account all “relevant theoretically salient information” (Davis 1995: 445).

3.2.4. Limitations

One limitation of the study and of all case studies is their lack of generalizability. No real conclusions can be drawn from one group of seven students. This study, however, has established that there are valid reasons to see this group and their experience as representative of secondary ELL in the United States. Each year, mainstream teachers of secondary English have different groups of ELL sprinkled throughout their classes. The number and the combination of abilities vary from year to year and class to class. Therefore, the seven students in this study can

serve as a microcosm of ELL as they currently exist. First, the participants come from five different language traditions. Second, they have extreme variations in their educational experiences in their home countries. Third, they have varying degrees of comfort with both spoken English and written English. Therefore, their variability makes them analogous to other groups of ELL. Furthermore, because I can focus on these students and their responses in depth, their experiences can shed light on the effect of the instruction they receive. This allows the results to serve as a theoretical basis for practice and as a source for other teachers. The interventions then can also serve as a microcosm for instructional strategies that promote critical thinking in other contexts.

3.2.5. *Setting and Curriculum Context*

The course which served as the research site for this study is in an international American high school in Pretoria South Africa where I taught ninth grade students enrolled in a year long college preparatory class. All the courses were taught in English and met every day for one hour. The course emphasized academic writing and also supported students in the completion of reading and writing assignments in other academic courses. The course followed the national standards for English and Language Arts (ELA) instruction as published in *Standards for the English Language Arts* by the National Council of Teachers of English and the International Reading Association. These standards recognize the need for all students to have the “opportunities and resources to develop the language skills they need to pursue life's goals and to participate fully as informed, productive members of society” (*Standards* 2008: 8). The twelve standards⁵ present what “students should know and be able to do in the English Language Arts” (*Standards* 2008: 7). The national standards foster open inquiry and demand that students search for their own patterns, problems, and solutions. Students have to deal with complexity and construct their own knowledge. Because the standards are rigorous and demanding, they represent the basis for an enriched, integrated approach to ELA instruction.

3.2.6 *Ethical Concerns*

The research study is embedded in the mainstream ELA curriculum. The interventions are designed to supplement and support (not supplant) the learning objectives required by the *National ELA Standards*. This factor is key to ensuring the integrity and quality of the teaching interventions and in balancing the benefit to the academic achievement of the participants with

⁵ The most recent *Standards for the English Language Arts* are published on the NCTE website and are available for download at www.ncte.org/library/files/Store/Books/Sample/StandardsDoc.pdf.

the contribution the study makes in terms of the academic needs of ELL as a whole. The school that served as a context for the study was informed of the purpose and methods of the study, and the anonymity of the participants has been respected. The name of the school and the names of the students have not been used. A letter granting permission from the school for the use of the data collected is included in *Appendix J*. Furthermore, I have taken care not to exaggerate the data and have not avoided acknowledging limits to the reliability of the qualitative measures. Student writing and answers were transcribed word for word to ensure that responses were presented as honestly and objectively as possible.

3.2.7 Participants

In the US the population of ELL in secondary schools is “tremendously diverse, particularly with regard to their educational backgrounds. These students enter US schools with varying degrees of curricular preparation and a vast range of language proficiencies in English and their native language” (Kinsella et al 2007: *Differential Preparation*: par 1). In my own experience as an English teacher in a public high school in the southeast United States, my classrooms included students both literate and illiterate in their native language; students with both sustained schooling in their native country, and students with no schooling in their native country. Like many subject matter teachers, I struggled to meet their diverse instructional needs within the mainstream curriculum. Kinsella et al (2007) attribute this challenge to the “extreme variability” of these students (*Second Language Literacy Development*: par 1). The students in this study represent the kinds of ELL commonly found in secondary English classrooms across the United States. They also provide a unique opportunity for an in depth look at ELA instructional practices and their effect on ELL with diverse backgrounds. Seven ELL in the course participated in the study. Of the seven, two are boys and five are girls, and range in age from 14-16. The participants speak five different native languages and possess both varied backgrounds and varied degrees of prior education and English instruction. Six have had less than two years of instruction in English. The first language of two of the students is Swedish; one student is a native of Korea, while the rest of the students are Arabic speakers from Palestine, Egypt, and the Sudan. The two students whose first language is Swedish were tested last year on the *California Test of Basic Skills*, a norm referenced standardized test that assesses performance in reading, writing, mathematics, science, and social studies. Both scored above the 70th percentile in mathematics and science and scored well below standard on reading, writing, and social studies. On the ELA portion of the assessment, both showed mastery of a “basic

understanding” of text and nonmastery of their ability to “analyze text”, “evaluate and extend meaning”, and use and identify reading and writing strategies.⁶ For the rest of the students, however, no prior record of their schooling has been made available to the school. Therefore, interviews were conducted with the students and parents to find out information on their past schooling. Three of the students reported as much as a two year gap or interruption in their primary years, while the Swedish and Egyptian students reported that they have completed eight years of schooling in their native language and native country.

3.2.8 Assessment Procedures for Instructional Profiles

In order to determine what the students know and can do in English and to determine their knowledge base with the ELA curriculum, they were tested in a series of four assessments consisting of three alternative and one standardized measure. The alternative assessments included learner self-assessments and teacher-developed tests. The assessments were scored with recognized scoring rubrics from the national curriculum to improve their reliability. Student responses were compared to external criteria that measure the same standards. This was done to improve criterion validity. The assessments asked students to respond in writing to a series of questions about past instruction, complete a metaphorical thinking exercise, read a short narrative text to determine universal theme, and read and interpret a short poem taken from the 6th grade literature text. Finally, students were assessed with a standardized test released by the South Carolina State Department of Education. Entitled the *High School Assessment Program* (HSAP), the assessment is based on the national ELA standards and is given to all tenth graders in South Carolina. Students must pass the test in order to graduate from high school.

Because I wanted to use “these results to help improve, influence, refine, and shape students' attained writing ability,” more than one “evaluation procedure” was used to score the assessments (Perkins 1983: 651). In his study, Perkins determined that each scoring technique and evaluation had limitations. He states the following:

1) no test or scoring procedure is suitable for all purposes, and 2) even with guidelines and set criteria, the analytical and holistic scoring schemes can produce unreliable and invalid test information... In sum, no test or composition scoring procedure is perfect (1983: 651).

My aim was to get a more complete picture of student reading and writing ability for instructional purposes, especially in light of the fact that five students in the study have no prior

⁶ These descriptors are taken from the score report supplied by the parents of these two participants. Copies of those results have not been included at the students' request.

records of their schooling. Therefore, a combination of assessments allowed me to gather the necessary information for determining and documenting the instructional level of each student at the beginning of the course. The assessments included self-assessment, analytic and primary trait assessment, and holistic scoring. The results were used to create an instructional profile for each student. The students have been designated as *Student A – Student G* to protect their anonymity.

3.2.9 Assessment Instruments for Instructional Profiles

Though there is “skepticism about students' capacity to provide meaningful information about their ability to use the language”, Leblanc and Painchaud (1985) assert that “self-assessment must be considered a very valuable tool as a placement instrument” (674). They argue:

[T]he basic requirement for [self-assessment] is to give learners the opportunity to indicate what they think they can do with the language they are studying ... [Self-assessment also] involves students to a much higher degree than other placement instruments (Leblanc and Painchaud 1985: 683).

Furthermore, “the students have nothing to gain by being less than truthful” (1985: 686). The study uses two self-assessments (*Assessment 1 & 2*) in an attempt to gain input from the participants.

For *Assessment 1 (Appendix C)* I posed a series of questions to assess students' perceptions on the following topics: (1) their strengths as a thinker, a writer, and a reader, (2) their goals for improving their English, (3) challenges they perceive to their learning, and (4) how they feel about literature and the study of English language arts. Student responses were analyzed and students were interviewed to discuss and clarify their responses. *Assessment 2 (Appendix D)* asked students to think abstractly. Though the assessment was a relatively simple academic task, it required students to justify their responses and provided insight into how well the participants think below the surface and how well they can elaborate on their insights. The assessment also provided insight into the participants' confidence with using English to describe abstract concepts.

In addition to the self-assessments, I used analytic assessments in determining the instructional profiles. “Analytical scoring ... involves the separation of the various features of a composition into components for scoring purpose [and] consists of an attempt to separate the various features of a composition for scoring purposes” (Perkins 1983: 655). Because the scoring guide describes each feature of student writing in detail and establishes high, mid, and

low points the information from the assessment can be used to help focus instruction on the “particular learning necessary for movement to mastery” (Perkins 1983: 657). In other words, instructors have a view of the individual gaps each student has in his/her learning and can target instruction to the zone of proximal development. For *Assessment 3(Appendix E)*, students read a short poem taken from the 8th grade literature book. After a discussion of universal theme and literature, I asked students to answer a series of interpretive questions. Then, I assigned a holistic score to a particular feature or primary trait of writing exhibited in the students’ writing samples. Because of the participants’ varying degrees of academic English, the questions were designed to couch the assessment within their “range of knowledge” (Perkins 1983: 659). The goal of the assessment was to determine a precise, detailed description of a student's writing ability for a specific rhetorical task: namely literary interpretation. Because the assessment asked students to develop their **own** interpretation via a series of interpretive questions, it provided an exercise to generate writing that reflected each student’s ability to make inferences about literature. To increase the validity of the analytic measurements, the descriptors from the *National Standards for English Literature* for literary interpretation were adapted to the task and defined a range of scores from 1-4. **Figure 3.1** lists those descriptors.

Figure 3.1
Primary Traits for Literary Interpretation

Range 1

- Makes some general statements showing minimal knowledge of the poem.
- Uses only basic relevant comments theme.

Range 2

- Works through a straightforward understanding to address the question. Offers a summary which relates to the theme and indicates some engagement.
- Begins to use the text to develop ideas. Shows recognition of the way meaning is achieved and recognition of effect.
- Misreads text.

Range 3

- Uses specific details chosen appropriately to answer the questions directly. May offers examples indicating insight into theme, showing an appreciation of the poet’s craft. Sound knowledge of the poem. Shows some insight and uses personal opinion to engage the poem.
- Evidence of a textual overview (how things tie together). May offer explicit comments on how language conveys meaning – such as the deliberate use of rhyme, imagery, etc.
- Answers intelligently and coherently but not as fully or specifically as Range 4 response.
- May reduce or simplify meaning to a surface level.

Range 4

- A full understanding is evident. All of Range 3 plus a use of sophisticated exploration.
- Clear, confident, lucid interpretation. Consistently demonstrates a highly skilled, mature language analysis with clear judgment of the writer’s craft. Uses technical vocabulary with ease/familiarity and stays focused on the question.
- Personal and informed evaluation – use of social/cultural/historical perspective.
- Insightful reading (analytical/complex).

Finally, *Assessment 4 (Appendix F)* is a standardized assessment used to determine the instructional level of each participant. Results from studies of objective measures vary from researcher to researcher, and critics assert that standardized tests are not valid because they don't ask the students to do what they measure; namely, read and compose authentic texts. Despite that criticism, research has shown that "a short multiple choice examination ... provides a more accurate prediction of success in a basic English composition course emphasizing writing skills than does an essay examination requiring the actual demonstration of writing skills" (Perkins 1983: 663). Standardized measures also lend reliability to teacher evaluation. Therefore, I selected a released sample test ⁷ from *The High School Assessment Program* (HSAP) to provide a standardized measure of the level of English competency for the students participating in the study. The HSAP also measured students' academic achievement on selected national standards in English Language Arts. I assessed the students using released test items posted on the South Carolina State Department of Education's web site in 2007. The released items are intended for the use of classroom teachers to assess their students' readiness for the HSAP test given each spring. The participants responded to items from all three sections of the test. These sections include an extended response, a constructed response, and multiple choice questions that assess reading comprehension. Furthermore, I have been trained to administer the test by my former school district and have given the test on five occasions. Therefore, this increases the reliability of the assessment because the test was overseen in the way it was designed to be administered. The test blueprint⁸ published by the HSAP describes the national standards assessed by the released items and is listed in *Figure 3.2*.

Figure 3.2

**SC High School Assessment Program (HSAP)
Test Blueprint—English Language Arts**

Standard 1--The student will read and comprehend a variety of literary texts in print and nonprint formats.

19-23
points

In responding to test questions, the student may be asked to

- **analyze characteristics of fiction/nonfiction**
- **analyze elements of poetry**
- **compare and contrast information within and between texts**

⁷ The multiple choice section of the released sample is included in *Appendix F*.

⁸ The test blueprint is published by the examiners and reflects both the content and objectives of the exam.

- determine the main idea
- draw conclusions and make inferences
- determine impact of cause and effect relationships
- analyze relationships among plots, characters, settings, conflicts, and themes in literature
- analyze the impact of point of view
- evaluate author’s craft
 - ~ flashback ~imagery
 - ~ foreshadowing ~symbolism
 - ~ figurative language ~word choice
 - ~ personification ~tone
 - ~ hyperbole ~irony
 - ~ simile
 - ~ metaphor (including extended)

Standard 2—The student will read and comprehend a variety of informational texts in print and nonprint formats.

19-23 points

In responding to test questions, the student may be asked to

- compare and contrast information within and between texts
- determine impact of cause and effect relationships
- determine the central idea
- draw conclusions and make inferences
- analyze author’s use of bias and propaganda techniques
- determine undocumented statements/inadequate support in texts
- analyze information from text elements and graphic features

Standard 3—The student will use word analysis and vocabulary strategies to read fluently. In responding to test questions, the student may be asked to

8-12 points

- use knowledge of Greek and Latin roots and affixes to analyze the meaning of complex words
- use context analysis to determine the meanings of unfamiliar or multiple-meaning words
- analyze idioms, euphemisms, and words with precise connotations and denotations

Standard 4—The student will create written work that has a clear focus, sufficient detail, coherent organization, effective use of voice, and correct use of the conventions of written Standard American English.

8-13 points

In responding to test questions, the student may be asked to

- edit for language conventions
 - ~ capitalization ~ punctuation
 - ~ word usage ~ verb tense
 - ~ word choice ~ subject/verb agreement
 - ~ spelling

- **revise writing**
 - ~ clarity
 - ~ effective phrasing
 - ~ sentence structure
 - ~ parallel structure
- ~ precise vocabulary
- ~ sentence combining
- ~ sentence variety

30 points

Standard 5—The student will write for a variety of purposes and audiences.

In responding to a given prompt, the student will be asked to

- **develop an extended response around a central idea using relevant supporting details and a logical progression of ideas to explain, inform, describe, or persuade. (Response will be scored using a 15 point rubric focusing on the following domains: content/development, organization, voice, conventions.)**

Standard 6—The student will access and use information from a variety of sources.

10-15
points

In responding to test questions, the student may be asked to

- **use a dictionary and thesaurus**
- **ask questions to guide research inquiry**
- **clarify and refine a research topic**
- **evaluate credibility of sources, including consideration of accuracy and bias**
- **organize and classify information by categorizing and sequencing**
- **summarize, paraphrase, analyze and evaluate texts**

96 points -- total

The first task students are asked to complete on the HSAP released sample is to write a composition in response to a general prompt. The examiners label this exercise the “extended response” and allocate 30 minutes for students to complete their essays. The released item used in the study is presented in *Figure 3.3*.

Figure 3.3 Writing Prompt – Extended Response

If you could spend a day with a person you have read about or seen in a movie, who would that person be? How would you spend your day with that person?

Write an essay in which you explain how you would spend your day with this person and why it would be so special. Include detailed descriptions and explanations to support your ideas.

As you write, be sure to

- **consider the audience.**
- **develop your response around a clear central idea.**
- **use specific details and examples to support your central idea.**
- **organize your ideas into clear introduction, body, and conclusion.**
- **use smooth transitions so that there is a logical progression of ideas.**
- **use a variety of sentence structures.**
- **check for correct sentence structure.**
- **check for errors in capitalization, punctuation, spelling, and grammar.**

For the second task on the released sample, students were asked to read a two page expository passage. Then students answered ten multiple choice questions. The questions assessed reading comprehension, ability to determine main idea, and knowledge of context clues. Finally, students wrote a response to the passage based on the information included in the passage. The examiners label this section of the test the “constructed response.” The released passage the students in the study responded to described the hobby of Bonsai. For the constructed response students had to write a response the prompt listed in *Figure 3.4*.

Figure 3.4: Constructed Response Prompt

Decide whether you would enjoy the hobby of Bonsai. Using the information from the selection, explain why or why not. As you write, be sure to support your response with evidence from the selection.

The holistic scoring rubric provided by the examiners was used to score both the extended response and the constructed response. The Perkins (1983) study determined that of “all of the composition evaluation schemes available ... holistic scoring has the highest construct validity” (1983: 652). Holistic scoring allowed the researcher to evaluate the whole text produced by the students rather than simply parts of a text. Holistic scoring also provided a means to obtain a general impression of the composition skills of each student. The HSAP guidelines for holistic scoring are listed in *Figure 3.5*.

Figure 3.5 HSAP Holistic Scoring Guide for Extended and Constructed Responses

Score	Descriptor
3	The 3 response fully accomplishes the task requirements. It includes a complete interpretation that goes beyond the text, has clear logic or reasoning, provides specific, relevant support from the text.
2	The 2 response adequately accomplishes the task requirements. It includes an adequate interpretation, may have minor flaws in logic or reasoning, provides general but relevant support from the text.
1	The 1 response minimally accomplishes the task requirements. It includes a minimal interpretation, may have gaps in understanding or flaws in logic or reasoning, may provide sparse or irrelevant support from the text.
0	The 0 response does not accomplish the task requirements. It may provide no support from the text, may be limited to information copied directly from the text and presented as the student’s own may be incorrect or illogical.

Condition Codes:UR = unreadable or illegible B = blank

To increase the validity of the measurement, the extended response rubric published by the *High School Assessment Program (HSAP)*⁹ was also used in scoring student essays. That rubric is included in *Appendix G*. The HSAP rubric uses state and national criteria to establish a holistic scoring guide for evaluating both the extended response and the constructed response. The rubric focuses on the global features of the essays such as content/development, organization, and voice and evaluates the writer's ability to handle the conventions of grammar and punctuation. The rubric also provides an assessment with an external criterion believed to measure writing level. Again, this provides the study with external measure by which to evaluate the same ELA standards addressed by the interventions used in the study.

3.2.10 Initial Testing and Classification of Students

3.2.10.1 Instructional Profiles¹⁰

The assessments conducted prior to the study served to determine the following:

- What are the unique qualities that embody each student and their literacy level? What strengths does each student possess? What challenges does he/she face?
- Where does each student stand in terms of the standards of a content-rich English curriculum? What is his/her knowledge base?
- What is each student's level of metacognitive awareness?
- How does the information gleaned from the assessments determine how instruction can guide them to improve based on their personal development level?

Using the five assessments as well as interviews conducted with the parents to “elicit information in order to achieve understanding of the participants [background and] point of view”, student profiles were developed to serve as a starting point for instruction (de Vos et al 2005: 293). To standardize the profiles, descriptors defined by the *National Reporting System (NRS)*¹¹ for reporting the language proficiency and literacy of ESL students were used and were combined with a description of their performance on skills demonstrated on each assessment. Those skills

⁹ In South Carolina, each public school student must pass an exit examination (or HSAP) to receive a South Carolina high school diploma. The HSAP also measures students' academic achievement on high school and assesses selected national standards in English language arts. The HSAP also measures students' academic achievement on high school and assesses selected national standards in English language arts. Similar assessments are administered across the US.

¹⁰ The findings of the preassessments are included in this chapter because they establish the basis for the instructional interventions and a means of establishing the ZPD (Zone of Proximal Development).

¹¹ The *National Reporting Service* provides a national standard for describing the educational level of ELL. *The Functioning Level Table* is available at the NRS website at www.NRSweb.org/docs/EFL_Table.doc.

are described by the holistic and analytic rubrics provided. **Figure 3.6** summarizes the results of the standardized assessment. The student profiles are described in the next section.

Figure 3.6 Summary of Results on HSAP Release Items

Participant	Reading Comprehension	Constructed Response	Extended Response
Student A	10% correct	1	1
Student B	50% correct	No response	2
Student C	20% correct	1	2
Student D	30% correct	0	1
Student E	60% correct	No response	1
Student F	70% correct	2	2
Student G	90% correct	2	2

3.2.10.2 Advanced ESL¹²

The preassessments show that two of the students, **Student F** and **Student G**, share many common traits. Both of these students are native Swedish speakers and have been studying in English for two years. Both have also studied and continue to study the Swedish language in preparation for gymnasium upon their return to Sweden and are high achievers in their first language. They and their parents report that the literature and composition curriculum for Swedish learners seems to have much in common with the ELA curriculum. Both of these students are able to understand and identify abstract concepts and have competent reading and literacy skills. They fit the reading profile defined by the NRS as *Advanced ESL* which describes students who can make inferences and deal with moderately complex text (*Appendix H*). In addition, both of these students have begun to use the text to develop ideas. For example, on the alternative assessment which asks them interpretive questions about the poem “The Road Not Taken” by Robert Frost (*Appendix E: Assessment 3*), both students identify a theme that is an abstract concept, but offer only summary to support their reading. **Student F** states: “The subject of this poem is how it can be hard to decide on which way to go in life.”¹³ And **Student G** states, “I think this poem is about choices – in this case two choices that are totally different.”

¹² Advanced ESL refers to the educational and literacy level of ELL as defined by the *National Reporting Service Functioning Level Table* and included in *Appendix H*.

¹³ Student responses are transcribed word for word throughout this section. Any errors are the student’s own.

Student G even points to specific lines that support his reading. But he merely points to the lines and is unable to fulfill the requirement to “explain how the lines fit into the meaning”.

It is clear from the limitations of their responses that while both students show insight on this task, they struggle to express their insights and to engage the text on a personal level. When asked on the same assessment, for example, to make observations about the poet’s message, **Student F** responds, “I think the message is very good and interesting. I think he has a very good point. And I can really imagine a situation like that”. Though she doesn’t explicitly misread the text, she does reduce and simplify the meaning and does not demonstrate a personal engagement with the text beyond the literal or summative level. **Student G**’s response contains the same limitations. He states, “I have had many choices in my life but nothing specific right now.”

The surface response and literal explanation is also reflected in the writing samples gathered from the five assessments. Both of these students are able to present a central idea in response to the topic, yet they struggle to develop the central idea with specific detail. Furthermore, the progression of their ideas seems simplistic or repetitious, and there are gaps in their logic or reasoning. Though their phrasing may be vague or predictable, they do maintain an appropriate tone and are aware of most of the conventions of standard written English. In other words, the errors they do make do not interfere with the meaning.

Finally, both students express an awareness of this limitation in their reading and writing ability in English. **Student F**’s personal reflections in response to the first assessment (*Appendix C*), illustrate that she is both mature and thoughtful. She describes herself as “creative” and sees her hard work and perseverance as one of her main strengths. But she states that she is “not very good at explaining and expressing [her ideas] in writing.” One of her goals is “to be able to get the point across in [her] writings and express [herself] better.” She also describes her struggle with reading in English. She says, “It often holds me back because I read slowly and don’t always understand what I’m reading”. Her responses reflect the findings of the four other assessments she completed. She needs help in critical thinking and the higher order functions required by the secondary English curriculum and complex reading tasks. She has good ideas, but is frustrated by her inability to demonstrate her creative/critical thought with creative/critical expression. As she so aptly puts it, she is “held back” by her need to develop the

fluency with which she reads and communicates about authentic text. She is “held back” by her inability to communicate the complexity of her thought.

Though less mature and detailed in his responses to the self-assessment survey, **Student G**’s answers are also revealing. He states, “*I need to develop a better sense of structuring my sentences and organizing my thought process*”. He seems to intuit the gap between his thinking and reasoning ability and his writing ability in English. In class discussions he is fast in his responses, but also too succinct. Though he has the ability to grasp concepts and interpret meaning quickly and easily, he is unable to go beyond a quick pat response and elaborate on his reasoning. His responses demonstrated that limitation.

3.2.10.3 Low Intermediate ESL¹⁴

The assessments determined that four of the students, **Student B**, **Student C**, **Student D**, and **Student E**, demonstrate the traits of students who are described as functioning on the *Low Intermediate ESL* level by the NRS. Three of these students are native Arabic speakers who have been studying exclusively in English for less than two years. One student speaks Korean and has studied English as a foreign language in her home country for one year. Furthermore, these four students perceive great differences between the demands of the ELA curriculum and the EFL demands in their home countries where they see the focus as less on writing and critical thinking and more on communicating. All four students meet the following descriptors:

[They] can read text on familiar subjects that have a simple and clear underlying structure (e.g., clear main idea, chronological order); can use context to determine meaning; can interpret actions required in specific written directions; can write simple paragraphs with a main idea and supporting details on familiar topics (e.g., daily activities, personal issues) by recombining learned vocabulary and structures; and can self and peer edit for spelling and punctuation errors on essays read in class (*Educational Functioning Level Table 2006: 2*).

But their performances on the five assessments indicate that these students have great difficulty with cognitively demanding tasks. They respond more to explicit meanings and ideas, but must develop inference skills and the ability to see beyond the literal level. For example, on the alternative assessment which asks them interpretive questions (*Assessment 3: Appendix E*), these students merely retell what they think is the story of the poem. At times they also misread the poem, picking up and focusing their entire response on repeating words used in past class

¹⁴ Low Intermediate ESL refers to the educational and literacy level of ELL as defined by *The National Reporting Service Functional Level Table* included in *Appendix H*.

discussion. When asked to explain the poet's message and to express what the poet seems to be communicating, **Student D** writes:

The poem's subject is about the life that the poet didn't chooce. The poets attitude is quit fair. The reason I said that is because the poet chooce. The shorter way to life and better life, the reason he chooce one is because he can't chooce two different lives if he's only one person.... No, one can live two live, and always chooce the right one that will make your easyer and happyer.

The responses provide only minimal interpretations, have gaps in their understanding and flaws in their reasoning. **Student D**'s response illustrates the traits of students at this level. Namely, she focuses on explicit meaning and the topic of the poem. She and the other students battle to both understand and to communicate abstract concepts. This struggle is also reflected in the writing samples gathered from the five assessments. These students attempt to write an introduction, body, and conclusion; however, one or more of these components is ineffective. Therefore, their central idea is unclear, repetitious, or nonexistent. Though two of the four have developed an awareness of paragraphing and other structural features, the effect of their writing samples is that their ideas are somewhat random and simplistic. Furthermore, all four need to improve on a tendency to repeat rather than elaborate in their writing. They are sometimes overly brief. Their standard written English exhibits a pattern of errors in more than one category (e.g., capitalization, spelling, punctuation, sentence formation). As illustrated in **Student D**'s writing sample, these errors interfere somewhat with meaning.

Finally, like the *Intermediate* students, the *Low Intermediate* students express frustration with limitations in their reading and writing ability in English. They seem to equate their English ability with grammar and vocabulary. **Student C**'s personal reflections in response to the first assessment (*Appendix C*) illustrate this tendency. She writes:

I am a student who like to do all her work and need to Sucessed in all her works. My goals in this class are to improve my language. My grammer and will be able to write a lovely and interesting essay. I actually need help on My spelling.

By equating better grammar with more "interesting essay[s]" she illustrates the gap in this group's understanding of the demands of the secondary English curriculum. These four students seem to think that increasing their punctuation and spelling alone will improve their English. When **Student D** responds to the first assessment she states that she "should know more" and

that “[her] strength as a thinker is not very good”. Yet her solution for improving her language ability, like **Student C**, is to fix the “problem with [her] spelling.”

3.2.10.4 *Beginning ESL*¹⁵

On the five assessments, **Student A**, exhibits the characteristics of a *Beginning* ESL student. This semester is the third in which he is studying in English. Prior to coming to the school, **Student A**'s parents reported that he had been taught the alphabet and counting in English in the Sudan. He also deals with a severe and progressive visual handicap which makes it difficult for him to see or to read without a visual enhancement like enlarged type or magnification. He is a strong advocate for himself, however, and clearly communicates his needs in class. He can read familiar phrases and simple sentences but has a limited understanding of connected prose and may need frequent re-reading. Yet his responses to the preassessments indicate that **Student A** can use autobiographical details in his writing and does attempt to incorporate his point of view. He contributes frequently in class discussion and is developing the ability to respond personally to what we read and discuss. He shows an awareness of the key ideas and events in the literature and makes inferences, but he is unable to state them in writing. His level of comprehension seems low and he needs support with the text. Furthermore, he struggles with complex writing and his explanation is often basic. For example, on the alternative assessment which asks him interpretive questions, he is only able to make general statements or copy random statements directly from the text in response to the question.

Student A is able to write some simple sentences with limited vocabulary, but on all the assessments his meaning is unclear. He shows very little control of basic grammar, capitalization and punctuation and has many word level and sentence level errors. Though he can write some simple narrative descriptions and short paragraphs on familiar topics, his lack of control with basic grammar and writing conventions make it difficult for him to elaborate on his ideas. On both the constructed response and extended response, his answers demonstrate the ability to be able merely to relate events in order – sometimes in bullet format. There is no reflection or analysis in his writing. His responses are almost entirely tied to literal detail and summary. On the extended response, for example, he writes:

I would take Mr Bean to holwood, and spend our time in holwood and see his reactions and write about him and have photos with him. And have fun.

¹⁵ Beginning ESL refers to the educational and literacy level of ELL as defined *The National Reporting System Functional Level Table* in Appendix H.

Because Mr Bean I might not see him again. I would spend and do my best to enjoy the day, and I'll call some friends who I know who like Mr Bean and we can have fun.

Like the other students, **Student A** expresses an awareness of the limitations of his reading and writing ability. He states that he doesn't "read fast" and that he fails to "understand the articles very spesfically." He attributes this gap to the fact that he doesn't "know enough vocabulary." **Student A** is also very motivated and sees English as a key to his success.

3.2.11 Implications of Instructional Profiles on Study

Because the study group is so varied, it presents an opportunity for a case study. Such varied participants, provide the means to examine the efficacy of specific teaching strategies for improving the critical thinking of a representative group of ELL. First, each participant brings different strengths and weaknesses to the study. They have diverse levels of English as well as different levels of facility with a rigorous curriculum. Yet the ELA curriculum holds each participant to the same standard of achievement. In other words, they **all** must improve their thinking and reasoning ability to succeed in the secondary ELA classroom. Each must learn to express more complex thinking and improve their level of language proficiency, regardless of their current level.

Second, the ELA curriculum stresses critical thinking. Resnick (1987) describes the complex process of higher order thinking as a process which involves:

- The ability to offer "multiple solutions".
- The use of "nuanced judgment and interpretation".
- The ability to deal with "uncertainty" and the "application of multiple criteria".
- The ability to "impose meaning" or "find structure in apparent disorder" (Resnick 1987: 3).

In other words, higher order thinking is critical thinking that deals with information on an abstract level as opposed to a concrete level. Resnick (1987) asserts that higher order thinking requires analysis, critical thinking, and the ability to make inferences and reason. She also sees higher order thinking as the basis for interpretation and for creating meaning. The processes she describes also require metacognition or an awareness of one's own thinking. With the adoption of national standards across the curriculum, all secondary teachers of all disciplines should now recognize the central importance of critical thinking and reasoning. Academics and instructors in our postsecondary schools also clearly link critical thinking and reasoning to success in

American colleges and universities. Therefore, these skills must be honed – especially for English Language Learners – in order to ensure that students succeed. Yet research comparing ELL and native speakers of English shows that ELL produce texts that are simpler and less effective. Furthermore, “the needs, backgrounds, learning styles, and writing strategies of most ELL differ dramatically from those of native English speakers” (Matsuda 1999: 701). Because the standards of the ELA curriculum in particular demand that students “comprehend, interpret, and evaluate” as well as become “knowledgeable, reflective, creative, and critical”, the secondary English classroom represents the perfect platform to study the effect of instructional strategies to improve critical thinking on a diverse group of ELL.

The interventions included in each unit have been specifically designed to provide realistic scaffolds for instruction targeted for ELL. They were meant to help the participants deal with the content demands and achieve at an academic level commiserate with their native speaking peers. The interventions supported students as they try to comprehend, to make inferences, and to analyze connotation. By providing specific strategies designed to improve critical thinking, and by using content based instruction with authentic text, the lessons built both the skills and the necessary schema to enable struggling ELL to balance difficult academic content with the challenges posed by their language gaps. In addition, the choice of text and the assigned tasks were sequenced to build in complexity; that in itself acted as a form of scaffolding.

3.3 Intervention Procedures

The assessment of the participants’ level of achievement prior to the interventions identified gaps in the core concepts and the thinking and reasoning skills necessary for the students to produce high quality text and to read and interpret text at a complex level. The varied nature of the assessments also established a point from which to move forward with instruction and helped create as complete a picture as possible of the instructional level of each participant. From a research perspective subjective elements in the profile could be seen to create a problem of reliability. From a realistic perspective, however, the instructional profile allows the instruction to be meaningful. To combat the problem with reliability, I used external criteria to make the profile or starting point as specific as possible. The use of research based rubrics and student work samples support the analysis.

The interventions that follow focus on how pedagogy can enhance critical thinking and the skills of analysis, synthesis, and evaluation. I posted the following research questions to frame the analysis:

1. What happens when ELL are guided with pedagogical strategies designed to improve their thinking in ELA?
2. What aspects of learning have the most influence on improving critical thinking?
3. What are the implications for curriculum design in other contexts?

Using the literature required by the curriculum and included on most high school reading lists, I created units of instruction that addressed the skills and concepts of critical thinking. Built into each unit were interventions build critical thinking skills. The interventions traversed 18 weeks of instruction and each addressed specific critical thinking skills required for ELL to achieve in ELA. After each intervention, I analyze the text generated by students in response to the interventions. That analysis is framed by both the cognitive theory and the cognitive apprenticeship model. The data collected in the course of this study came from student responses to written assignments, student responses to interview questions as well as my own reflections and observations. Finally, I make recommendations on the efficacy of these interventions for teacher application in other contexts which can lead to assertions about curriculum development and the teaching of critical thinking to ELL.

3.3.1 Scaffolding the Literature

The three units of instruction use three genres: epic poetry (*The Odyssey*), drama (*Antigone*), and nonfiction prose (*Narrative of the Life of Frederick Douglass*). The decision to use those three texts was guided by several considerations. First, there are two influences on meaning making in reading comprehension: *the text* and how it is presented and *the reader* and his/her background knowledge. Peskin (1998) states that literature “communicates universal human truths. It is an instrument to make us see life and live it more intensely” (1998: 235). These three texts connect with students and their life experiences. They are universal and enable students to use their background knowledge in interpreting them.

Second, Peskin (1998) points out:

[T]wo mental models are constructed during comprehension of text: the model of the *textbase*, which is the mental representation of the propositional relations in that specific text, and the *situation model* which is the cognitive representation of that area of domain knowledge that is relevant for that particular text (235).

Her view highlights the importance of genre and discourse analysis in the development of high literacy skills. Kinsella (1997) also notes the central role of discourse analysis in developing the high literacy skills of ELL. She says that ELL need to understand the “discourse features and characteristics of different ... literature” (1997: 49). One of the basic assumptions of Lee’s (1995) study of disadvantaged students and literacy is that “literacy is not a single amorphous set of skills that are evenly applicable across any circumstances requiring reading or across any text” (1995: 292). The importance of analyzing text structures is also highlighted by Grabe (1996) in his work linking discourse analysis to improved reading comprehension. Grabe (1996) argues that reading comprehension improves when ELL are taught to “recognize the organizational features of texts” (intro. par 1). Grabe (1996) also notes that “systematic attention to clues that reveal how the authors attempt to relate ideas to one another or any ... attempt to impose structure upon a text ... facilitates comprehension” (intro. par 6). His findings imply that “direct instruction in text awareness” or into recognizing and analyzing how meaning and purpose are created in literature and in composition aides in the development of critical literacy skills (1996: instructional strategies, par 1). Because of the considerable evidence these studies provide in support of the use of discourse analysis in improving reading comprehension, the three pieces of literature used in this study come from three different genres addressed within the mainstream secondary ELA curriculum. Therefore, the interventions deal with the variability of text and difficulty within the academic content.

Third, Tang’s (1997) research shows that it is imperative that content not be watered down or simplified. She states ELL “need explicit teaching and practice to acquire the skills of understanding and expressing content knowledge in appropriate academic language” (Tang 1997: 75). Teemant et al (1997) further this argument with their finding that “helping second language students does not mean compromising content” (314). In fact, the adjustments to content that actually help ELL are “elaborations rather than simplifications” (Teemant et al 1997: 314). Teemant and her colleagues attribute this finding to the fact that “simplifying materials denies [ELL] access to the very language they need and limits their opportunities for learning” (1997: 314). That means that the texts selected for the instructional units need to be sequenced so that they build in complexity. Furthermore, “giving [ELL] more than one ... avenue for understanding a concept can be more useful than watering down the content” (Teemant 1997: 314). Research (Grabe 1996, Teemant 1997, Tang 1997, suggests that the literary texts in this study must remain unaltered from the text utilized in the mainstream

curriculum. In order to be useful the texts must be grade appropriate even though the participants' achievement is below grade level.

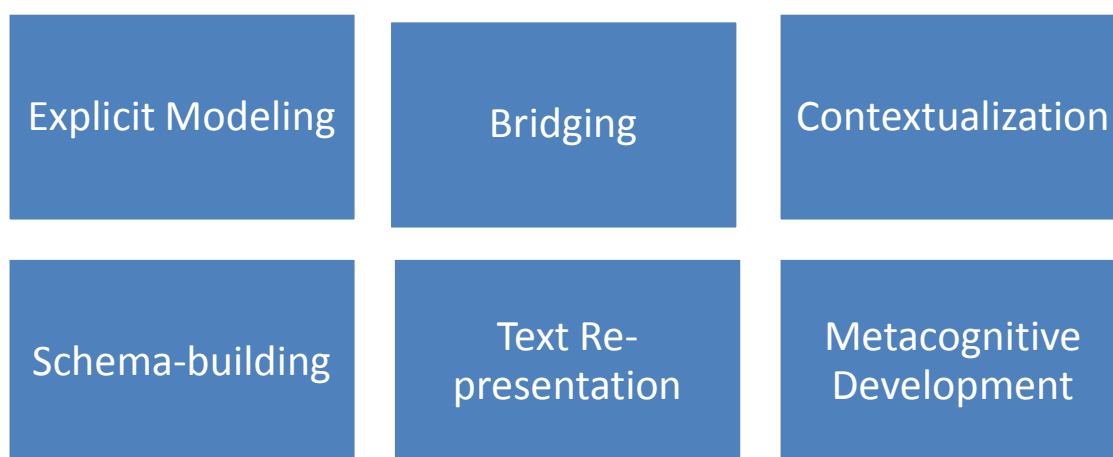
Finally, Holton's (1997) research contends that literature in itself can provide scaffolds for the cognitive and content demands of the curriculum. Literature can enable students to "connect with compelling events" as they work to understand complex concepts (Holton 1997: 384). Holton (1997) states that literature "provides an excellent crucible for language work" as well as for promoting critical thinking skills (384). By sequencing literature from simple to more complex, teachers can "support not only the development of concepts and academic skills, but also the oral and written discourse characteristics" of English literature and academic essays (Holton 1997: 51). She backs up her assertions by stating that ELL "who are not 'text wise' and 'text ready' ... labor ... over content area reading assignments with little payoff in terms of comprehension and retention of subject matter". In fact she found that many find it easier "to wait for the teacher to skillfully identify and explain the main points" (Holton 1997: 51). Therefore, instruction must meet students where they are and guide them to where they should be. Here Grabe's (1996) study is again influential. He posits that "older students already have well-developed implicit knowledge of narrative structures". He believes that narrative provides a basis for helping students learn "to recognize specific implicit ideas in the text – central and causal ideas – rather than [learning] to recogniz[e] generic narrative structure components (e.g. setting, character, episodes)" (Grabe 1996: intro. par 3). Franzosi (1998) concurs. He states: "Narrative is present in every age, in every place in every society; it begins with the very history of mankind and there nowhere is or has been a people without narrative" (1998: 517). Narrative follows a "natural, logical, or chronological order" and, therefore, serves as an excellent starting point for instruction because by allowing the instructor to build on what students already know – the "recapitulation of past experience" (1998: 519). The interventions then progress to the genres of drama and nonfiction prose and more complex concepts like characterization and rhetoric. In this way, the sequence of instruction scaffolds the literature that is used as the center point for the instructional interventions.

3.3.2 Scaffolding of Academic Tasks Required in the Interventions

In addition to the literature scaffolds, the academic tasks addressed by the interventions are also scaffolded. Galguerra's (2001) discussion of scaffolding academic content to ELL is based on the cognitive apprenticeship concept and was influential in the techniques selected for use in this study. The three units of instruction include instructional interventions that use the

scaffolding techniques from cognitive apprenticeship listed in **Figure 3.6**. Galguerra argues that in explicit modeling, “expert teachers invite guide, and support apprenticing students into academic discourse communities” (2001: par 7). Thus students learn the procedures and the language of the content area. Because they are then “familiar with a set of procedures or interaction routines, [ELL] are better able to devote attention to content” (2001: par 7). Galguerra (2001) continues that “bridging consists of helping students make personal connections between their individual experiences and ... content” (par 8). He argues that “such connections turn abstract and distant academic knowledge into concrete, personalized, and tangible understandings that are memorable to students” (par 9).

Figure 3.7 Scaffolding Techniques in the Cognitive Apprenticeship



The third type of scaffolding Galguerra recommends is contextualization in which the content specific terminology is used as the students engage in tasks. In ELA, for example, literary terms like *diction*, *imagery*, and *metaphor* have more meaning when they are taught with a concrete example from the text. Fourth, schema building is an important aspect of scaffolding. Galguerra (2001) posits that schema building “helps English learners organize knowledge into recognizable patterns (2001: par 14).” He recommends “explicitly organizing content knowledge into structures ... processes ... and rules ... [such as] graphic organizers” (2001: par 15). Finally, Galguerra’s discussion of “text re-presentation” resonates with the literacy goals this study addresses. He reminds content teachers that they must teach ELL to recognize and use the preferred “genres in [our] discipline” (2001: par 17). One way to scaffold this process is by asking students to re-present texts or change information from one set of conventions to another in their writing assignments. Finally, metacognition is primary in scaffolding. ELL must develop

the ability to assess their thinking skills “in order for them to take full advantage of their own abilities and knowledge” (2001: par 18).

3.4 Validation of Instruction

All student responses to the activities in the interventions are transcribed word for word. Grounded in research into best practices, the assignments are designed to promote growth in critical thinking for the students in the study. Student responses are assessed and evaluated according to the national ELA standards. In addition, at the end of each unit, students are interviewed to determine whether or not they were aware of growth in their thinking or if they see the inherent value of improved critical thinking. Each unit of instruction contains several instructional interventions which culminate in a longer writing assignment. This longer assignment requires students to apply the critical thinking skills emphasized in each unit. Each unit of instruction lasted from 3-5 weeks.

There are several limitations to this study. First, the setting is ideal. While representative of the diversity of ELL in ELA mainstream secondary classes, the amount of attention, feedback, individual help, and guidance the instructor can provide eight students is truly exceptional. For each lesson, the instructor could focus on the recursive nature of ELA and target instruction to build on individual strengths and support individual weaknesses. The small class size must contribute to the clear growth demonstrated by all the students. Second, all teaching situations are unique – each year brings a different set of backgrounds and a different skill set for a group of students. But the fact remains that the place they have to get to – the achievement level that each student must attain – never changes. The standards set the level. Therefore, the analysis in this study has implications for all ELA classrooms and all ELA lessons where teachers want to improve the critical thinking of the ELL they serve.

3.5 Overviews of Each Unit of Instruction

3.5.1 The Personal Odyssey Unit Overview¹⁶

Introduction

The purpose of this unit is to examine the ways in which life’s journey instills character and teaches lessons essential to survival and success. Inquiry into this matter will be guided by interpretation of universal theme, analysis of conflict, and the students’ personal connections to that theme.

¹⁶These three unit overviews use the format required by the NCTE ReadWriteThink web site that provides educators with high quality standards based language arts lesson plans. The web address is www.readwritethink.org.

Guiding Questions

- *What is universal theme and how is it revealed in the narrative of Odysseus' journey?*
- *What conflicts and struggles arise in the human condition?*
- *How do our personal knowledge, experiences and backgrounds affect our responses and interpretations of literature?*
- *What critical thinking skills enhance our literary understanding of events in a narrative?*

Objectives

- Students will examine a piece of literature and look for contemporary connections to its universal themes.
- Students will discuss the conflicts and tension that drive narrative.
- Students will consider the ways in which events in a work of literature can resonate in contemporary society.

Activities

1. Cornell Note taking: Intervention #1
2. Close Reading Exercise: Intervention #2
3. Thinking Metaphorically: Intervention #3

Assessments

Graphic Organizers

Final Project

Class Discussion

Standards

1. Students read a wide range of print and nonprint texts to build an understanding of texts, themselves, and of the cultures of the US and the world; among these texts are fiction, nonfiction, classic and contemporary works.
2. Students read a wide range of literature from many periods in many genres to build an understanding of the many dimensions (i.e. philosophical, ethical, and historical) of human experience.
3. Students participate as knowledgeable, reflective, creative, and critical members of a variety of literacy communities.
4. Students use spoken, written, and visual language to communicate effectively.
5. Students apply knowledge of language structure and figurative to create, critique, and discuss print and nonprint texts.
6. Students conduct research on issues and interests by generating ideas and questions, and by posing problems.

3.5.2 Antigone Unit Overview

Introduction

The purpose of this unit is to examine the ways in which a playwright dramatizes cultural and historical concerns. Inquiry into this matter will be guided by questions of psychology and morality. The unit builds on previous lessons by going beyond the interpretation of events to delve into causation and character motivation.

Guiding Questions

- *What psychological and philosophical connections can we make to the characters, and how is character revealed through actions and words?*
- *How can a work of literature mean different things for different generations of citizen readers?*
- *What critical thinking skills enhance our literary understanding characters in conflict?*

Objectives

- Students will examine the historical context of a piece of literature and look for contemporary connections.
- Students will discuss what makes characters so compelling and how dialogue reveals thoughts/feelings.
- Students will consider the ways in which a work of literature can mean different things for different generations and for different cultures.

Activities

1. Developing a Moral Point of View: Intervention #4
2. The Dialectic Notebook: Intervention #5
3. Thinking in Threes: Intervention # 6

Assessments

Graphic Organizers
Final Project
Class Discussion

Standards

1. Students read a wide range of print and nonprint texts to build an understanding of texts, themselves, and of the cultures of the US and the world; among these texts are fiction, nonfiction, classic and contemporary works.
2. Students read a wide range of literature from many periods in many genres to build an understanding of the many dimensions (i.e. philosophical, ethical, and historical) of human experience.
3. Students participate as knowledgeable, reflective, creative, and critical members of a variety of literacy communities.
4. Students use spoken, written, and visual language to communicate effectively.
5. Students apply knowledge of language structure and figurative to create, critique, and discuss print and nonprint texts.
6. Students conduct research on issues and interests by generating ideas and questions, and by posing problems.

3.5.3 Narrative of the Life of Frederick Douglass Unit Overview ¹⁷**Introduction**

¹⁷ This unit was adapted from the curriculum unit *From Courage to Freedom: Frederick Douglass's 1845 Autobiography*. This unit appears on the National Endowment for the Humanities Web Site EDSITEment. This lesson and others like it are available for download at http://edsitement.neh.gov/view_lesson_plan.asp?id=594.

In 1845 Frederick Douglass published his autobiography, *The Narrative of the Life of Frederick Douglass: An American Slave Written by Himself*. In addition to highlighting his extraordinary courage and intellect, the work is geared toward a specific audience for a specific purpose: namely to persuade whites of the inherent evil of slavery and slaveholders. In this unit students analyze passages from the work for Douglass' use of rhetorical appeals to communicate his message.

Guiding Questions

- How does the author use rhetoric to accomplish his purpose?
- What critical thinking skills enhance our literary understanding of rhetorical devices and how do they function to create meaning?

Objectives

- Students will analyze an author's use of rhetorical devices such as diction and imagery.
- Students will consider the interaction between author, audience, and rhetoric in the creation of meaning.

Activities

1. Purpose and Rhetoric: Intervention #7

Standards

1. Students read a wide range of print and nonprint texts to build an understanding of texts, themselves, and of the cultures of the US and the world; among these texts are fiction, nonfiction, classic and contemporary works.
2. Students read a wide range of literature from many periods in many genres to build an understanding of the many dimensions (i.e. philosophical, ethical, and historical) of human experience.
3. Students participate as knowledgeable, reflective, creative, and critical members of a variety of literacy communities.
4. Students use spoken, written, and visual language to communicate effectively.
5. Students apply knowledge of language structure and figurative to create, critique, and discuss print and nonprint texts.
6. Students conduct research on issues and interests by generating ideas and questions, and by posing problems

3.6 Summary and Conclusions

This chapter has established the rationale for the research methodology used in this study. It has also described the instructional profile of the participants in the study and presented the instructional framework for the interventions. Finally, overviews explain the guiding questions, objectives, activities, assessments, and standards of each unit of study. In the next chapter, the interventions and their results are presented along with interpretation of the data generated by the student writing samples.

Chapter 4 Teaching Interventions: Results and Analysis¹⁸

4.1 The Personal Odyssey Unit

4.1.1 Narrative as a Starting Point

The challenge of this first unit of instruction is to implement strategies that will build on the participants' strengths in the narrative mode and help them develop the higher-level thinking that will improve their achievement. The interventions in *The Personal Odyssey Unit* are bridging strategies which build reading comprehension skills and move students from knowledge to analysis and synthesis. These interventions also provide the modeling, rehearsal, and coaching necessary for ELL to develop the ability to think critically about what they read.

4.1.2 Intervention #1: The Cornell Note-taking Strategy.

The Cornell Note-taking Strategy provides ELL students with a “specific scaffolding strategy that [can] help them summarize, recall, and synthesize” what they read (Fagan 2003: 38). The idea for the strategy translates into the following procedure used for each section of text:

1. The students made a chart that divides the top portion of a sheet of notebook paper into two sections.
2. On the right hand side of the chart, the students recorded the main concepts and events of the narrative, including any details and explanations they felt were important to understanding the text.
3. On the left hand side, they wrote down the key words in the section along with any unfamiliar vocabulary.
4. The process was followed on the board by the instructor, using student input to create a model response and clarify and answer any questions.
5. Finally, after the discussion, students wrote their own summary for the section at the bottom of the page.

I modeled the process as the students provided input for each stage of the activity allowing the students to build a conceptual model of the entire process before using it individually. The system also allows students to keep track of main ideas and to note vocabulary words that are unfamiliar. *Figure 4.1* is a sample of the handout completed by students.

¹⁸ In this chapter, a discussion of the results and analysis immediately follows the description of each intervention in an effort to avoid unnecessary cross referencing and to highlight the rationale for the sequencing of the lessons.

Figure 4.1 Cornell Note-taking Strategy

Key Concepts & Vocabulary	Main events/Details/Explanations
Summary	

4.1.3 Intervention #1: Results and Analysis

Action Research into the reading process by teachers of ELL like Fagan (2003) reinforces the fact that “reading for comprehension is hard work. Students must understand that the words on the page should be thought about ... not just decoded ... in order to understand the text” (Fagan 2003: 38). Yet students in this study admit that they often read whole pages of text without really understanding what they have read. In an interview conducted prior to the intervention Student D notes, “I just keep going, knowing that I won’t remember it.” Because she merely calls words, she doesn’t really comprehend the concepts on the page. The goal of this intervention, therefore, was for these students to stop and think about what they read in order to comprehend it. The strategy provides a means for externalizing the thinking processes necessary for reading comprehension. For example, responses show the instructor whether or not students are choosing appropriate key words indicating who needs more support to

understand the text. The system also provides an opportunity to deepen and focus student thinking and make it more analytical by allowing the instructor to pose questions that require higher order thinking. Finally, the student's personal reflections on the process, a key component of the cognitive apprenticeship, indicate the value of the strategy. **Figure 4.2** documents those reflections.

Figure 4.2 Personal Reflections on Cornell Note-taking Strategy

- "This helped me improve on understanding pieces of text and their importance ... more deeply than before".
- "I learned to concentrate more about my reading ... and see the whole point".
- "I learned I shouldn't just copy [but] I need to write my own words from my thoughts".
- "I learned better construction among my thoughts".
- "The summary helps you understand the story better and gives you an idea why the author wrote the story or what he/she is trying to say to the reader".
- "The summary makes the main point shorter - so that I can understand it".
- "I sort of understood the story better by writing the summary. I thought it through when I prepared ... it helped me understand better".

These comments clearly show that the students realized that comprehending text is more than a decoding exercise; instead it requires active engagement. Because *The Cornell Strategy* breaks the process for comprehension into smaller steps, students could "attack one part of the process at a time" (Benson 1997: 127). The *Strategy* required students to pause and reflect as they made the information they read their own. In the process, participants also made the strategy as well as the thinking skill their own by employing the strategy to their history class, where the instructor agreed to use the technique. As they continued the process, they grew in their ability to understand academic content across the curriculum. Their improved reading comprehension set

the stage for the more substantive interpretation required in intervention#2. It also helped them understand and remember more of what they read because they were able to make connections and develop questions. The students focused on monitoring their reading and learning. In turn, I was able to fill in gaps in their understanding by analyzing their note-taking. In addition, the graphic organizer provided a road map for students to monitor their thinking by acting as a schema for organizing and evaluating the quality of their thinking.

4.1.4 Intervention #2: Close Reading Exercise

Analysis of the curriculum indicates that while comprehension is certainly necessary for succeeding in secondary English, it is not enough. Therefore the next intervention for the unit employed Paul and Elder's (2003) *art of close reading*. After teaching the students to write summaries using the *Cornell Note-taking Strategy*, I wanted to encourage students to think more deeply about what they read. *Close Reading Exercises* provided a means of moving the students beyond retelling and description to challenging and expanding on what is in the text. Students were provided with a copy of *Close Reading of Part I and Part II: Writing an Explication* shown in **Figure 4.3**. The exercise focused student attention on the figurative language of the passage dealing with Odysseus' encounter with the cyclops. Thus the instructional focus shifted from comprehension of the narrative to reflection on the significance of Odysseus' behavior and the events. The following procedure was followed for the second intervention.

- The class identified the salient similes, metaphors, symbols, and images associated with the characters in the excerpt.
- Then students worked together to categorize that figurative language and attribute quoted text to a character or characters in the episode.
- The instructor defined the word *tension* giving examples of tensions that arise between individuals and the oppositions that heighten the conflict.
- Then the instructor elicited responses to the question: "What oppositions/tensions do you see between the groups?" If students struggled to respond, the instructor provided an example. The rest of the responses were provided by the participants. Finally, students wrote a response to the question: "What insight does [Odysseus]'s struggle with the Cyclops reveal about his character?"

Figure 4.3

Close Reading of Part I and Part II – Writing an explication. 25 points
Remember our focus: How does his use of figurative language reveal theme?

Define tension:

List the similes, metaphors, symbols, and images associated with Odysseus.

List the similes, metaphors, symbols, and images associated with Odysseus' men.

List the similes, metaphors, symbols, and images associated with Polyphemus.

What oppositions/tensions do you see between and among the groups? Articulate them here.

BIG QUESTION: In a well-organized paragraph, respond to the following:
What insight does his struggle with the Cyclops reveal about his character? How does he develop?

After the intervention, I assessed student progress with a second close reading exercise included in *Figure 4.4*.

Figure 4.4**Close Reading of Part I and Part II – Writing an explication. 30 points****Remember our focus: How does his use of language reveal theme?**Read the passage from *the Odyssey*. Underline the images that stand out to you. Think about how Odysseus describe the Cyclopes? (2 points)

In the next land we found were Cyclopes,
 Giants, louts, without a law to bless them.
 In ignorance leaving the fruitage of the earth in mystery
 To the immortal gods, they neither plow
 Nor sow by hand, nor till the ground, though grain—
 Wild wheat and barley—grows untended, and
 Wine-grapes, in clusters, ripen in heaven's rain.
 Cyclopes have no muster and no meeting,
 No consultation or old tribal ways,
 But each one dwells in his own mountain cave
 Dealing out rough justice to wife and child,
 Indifferent to what the others do.

**USE A STRATEGY
WORDS TO KNOW****IMPORTANT WORDS****Summarize the plot situation for this passage. What is he talking about?**

What oppositions/tensions do you see between Odysseus' values and the values of the Cyclopes? Articulate them here. Explain the effect of the passage. What values or qualities is he contrasting? (5 points)

BIG QUESTION: In a well-organized paragraph, respond to the following: What insight does his view of the Cyclops (IN THIS PASSAGE) reveal about his character and about the character of people like the cyclops? What point is HOMER making with his images? **Do your best – this is a learning stretch. 20 points**

**4.1.5 Intervention #2: Results and Analysis**

The assessment shown in **Figure 4.4** reinforced the *Close Reading Strategy* by focusing on a shorter passage. Rather than gathering and arranging the images for students, I required students to identify *for themselves* the images that stand out. Paul and Elder (2003) assert that

students must establish the purpose of a text to understand it. Student responses to the exercise showed development in their critical thinking which can be attributed to several causes.

First, in our discussions of *The Odyssey*, I noted that the stories served a cultural purpose and transmitted the values of ancient Greece to subsequent generations. In order to understand those values, students first had to gain an understanding of the primary ideas and thoughts “key to understanding” a text. Such a stance then required the students to question, to interpret, and to make conclusions as they constructed meaning from the text. “A good reader actively seeks the author’s purpose in writing and looks for systems of meaning in the text. [This close reading is] the type of reading that leads to true ownership” of a text (Paul and Elder 2003: 39). Paul and Elder (2003) state that reading well is more than just understanding what is in the text: “To read well requires one to develop one’s thinking about reading and, as a result, to learn how to engage in the process of close reading” (36). In order for the students to “take ownership of the text’s important ideas,” they have to engage their “intellectual skills” (2003: 36). That means reading with the goal of truly understanding what the author is communicating. Like Horace Mann in 1838, these researchers found:

[Most students] do not understand the meanings of the words they read; [they do not understand] that the ideas and feelings intended by the author to be conveyed to and excited in the reader’s mind still rest in the author’s intention, never having yet reached the place of their destination (in Paul and Elder 2003: 36).

Second, Wolfe’s (1999) work establishes the importance of using metaphor to instruct ELL. She argues that because metaphor “allows people to map a more abstract domain onto a more concrete one, [it] gives them a way of conceptualizing the abstract domain in terms of something that has already been named” (255-6). Odysseus’ personal struggles served as an exemplar for students in discerning the reasoning behind moral choices. His perceptions, his sensitivities, his moral code have universal appeal and can improve students own reasoning by guiding them to critical understanding of the values – both explicit and implicit – in Odysseus’ choices. *The Odyssey* showed them that seemingly simple situations require complex problem-solving skills and provide a context for showing the students problems in their entirety. The cognitive apprenticeship model highlights the importance of students seeing a whole process, while class discussion provided an active learning approach for students to rehearse ideas verbally before writing.

As the classicist Reinhold (1989) points out, students “tend to admire Odysseus” (242). Yet he is, like all humans, quite flawed. Reinhold observes that Odysseus, while heroic, is also lecherous with a “penchant for lying, brutality ... and killing” (1989: 242). Odysseus’ journey is not simply a case of the good guy beating the bad guy [register deliberate]. Instead, his journey and the way he is presented give students an opportunity to delve into the implications of the character’s moral choices. In addition, they can discern the relevance of his decisions to their own decision making processes.

Student F analyzes Homer’s passage by stating:

Odysseus is saying that these weird creatures live in a total different way. They look and behave differently. And because they are totally isolated they are dumb and have no sense of organization. Odysseus thinks that everyone should have some sort of organization. He thinks that it is unnormal to live isolated and believes that people should care about one another in some way. Homer says “Cyclops have no muster and no meeting. No consolation or old tribal ways.” This shows the Cyclops don’t come together or work in anyways with others, they don’t ask anyone for help ever and they live all by themselves. When Homer says “but each one dwells in his own mountain cave, Dealing out rough justice to wife and child” He means the cyclopes are uncivilized and don’t care about anything. I agree with Odysseus that the cyclopes have a weird way of living. Because just as Odysseus I have grown up in a civilized city and anything that is very different from what we are used to is considered pretty weird. But I disagree with the way he thinks that they should not live like that at all. And that it’s totally wrong how they are. I would think it could be fine to live like that if they want to, as long as they don’t harm anyone else who doesn’t agree with them.

This student’s response takes into account figurative language and considers its purpose. Though she shows gaps in her analysis, she is able to identify the words that lead to her conclusions. This shows an increased awareness of the effect of figurative language and how it functions to create meaning. Because the exercise scaffolds the literacy skills required for analysis by making those skills explicit, she is able to express more than a rudimentary understanding of Odysseus’ character and even begins to engage the text on her own terms.

4.1.6 Intervention #3: Thinking Metaphorically

The culminating assignment to the unit was the composition of a *Personal Odyssey*. To begin, students completed a brainstorming activity (**Figure 4.5**)¹⁹ that encouraged them to draw analogies between Odysseus’ journey and their own lives. After making a graphic representation

¹⁹ **Figure 4.5** is included on pages 116-117 because of its length.

of his journey listing the obstacles, temptations, dangers, and dilemmas he faced along the way, they mapped their own life experiences and created a visual of their personal odyssey. In addition to the model supplied by Odysseus' narrative, I completed the brainstorming activity fleshing out and discussing my own experiences to model the thinking required to respond adequately. This supported students as they attempted to complete a complex cognitive task and reminded them of literary connections as they moved step by step through the assignment.

4.1.7 Intervention #3: Results and Analysis

By engaging in deep modeling during the brainstorming activity, I provided the participants with the language they needed to discuss issues raised by the text and by the assignment. The students had a reference point to use in structuring their thinking. For example, the intervention drew a parallel to the close reading activities completed earlier in the unit by asking students to think about “concept words” for describing their experiences. In this way the participants identified the “universal themes” of their personal narrative in the same way they identified the universal nature of Odysseus' narrative. They were thus able to extend those themes to other contexts and metaphorical, abstract thinking was accomplished in a systematic and incremental way. To illustrate, the exercise first asked students **to list** analogous experiences, then asked them **to explain** one of those experiences before asking students to tie that experience to a **concept** and **to evaluate** its value. Though the tasks were increasingly abstract, they were grounded in students' own experiences. Thus, the intervention accomplished the goal of the heuristic strategies recommended by proponents of the cognitive apprenticeship. I did not **provide** answers but **modelled** appropriate responses. Furthermore, the cognitive demands of the intervention were sequenced to be attainable.

A contrast between a sample essay written by Beginning ELL **Student A** prior to the intervention (*Figure 4.6*) with his essay written in response to Intervention #3 (*Figure 4.7*) serves to illustrate the results of the three interventions. Beyond the length, **Student A**'s personal odyssey entitled “Confidence” provides both a profound artifact of his interactions and understanding of the themes of *The Odyssey*, as well as a stark contrast to “The Worst Accident”, which serves as an exemplar of his writing prior to the first instructional intervention. According to the HSAP extended response rubric (*Appendix G*) for narrative, “The Worst Accident” exhibits the following characteristics of a 1 or failing essay:

- There is no clear central idea.
- Details are absent or confusing.

- There is no sense of focus.
- There is little awareness of audience and task.

In fact, the essay is merely a list of events that occurred on the same day. “Confidence”, however, shows great improvement. The essay exhibits the characteristics of a 3 or passing essay and shows developing competence in the following areas:

- The essay presents and develops a central idea.
- He attempts an introduction, body, and conclusion.
- He provides a logical progression of ideas.

Though his phrasing may not be effective and he makes severe grammatical and spelling errors in standard written English, **Student A** demonstrates an awareness of purpose and audience. Furthermore, he shows insight and evidence of higher level critical thinking as he reflects on the significance of overcoming an obstacle on his character and future. In fact, his voice emerges strongly. He also demonstrates what Marzano (2001) labels *Level 3 Analysis* as he integrates thematic concepts gleaned from the text into his own schema.

Figure 4.5 Intervention #3 Brainstorming Activity

Introduction

You have been studying excerpts from Homer's *Odyssey*. This epic poem tells of Odysseus's adventures as he traveled back to Ithaca on his return from Troy. Odysseus sailed from Troy with a fleet of twelve ships. He encountered monsters and enchanting women who tried to prevent his return. The wanderings of Odysseus and his men led them through many unfamiliar and dangerous encounters. Now it is time for you to take an extensive imaginary voyage of your own. This will be your personal Odyssey.

You will be writing a journal that details your own fictional odyssey. You will also create a map of your journey.

Step 1. "What doesn't kill you makes you stronger."

Think of all the emotional, intellectual, and physical obstacles you have faced in your life – negative forces you've had to defeat, temptations you've had to reject, personal failings you've had to overcome, fears you've had to face. Try to think maturely and reflectively – don't list the things you always list – think about what has shaped you. How have you become the person you are. Use the graphic representation of Odysseus journey as a model.

Odysseus before the journey

Odysseus after the journey

You before

You after

Step 2. Choose the two most influential "battles". Free write on both explaining how that event shaped you and changed who you are.\

Figure 4.5 Continued

Step 3. Think about concept words for the lessons you learned. Did you learn – as Odysseus did – of leadership, truth, perseverance, family ties, companionship, loyalty, strength, and true valor, or have your lessons been about other things? Why has that made you a better person? How has it made you better person? [Remember, not merely that it has made you a better more mature person.]

Step 4. Then explain how that concept is important for all of us – why it's important in life and in order to be successful. Areas you anticipate still needing to work on and how you might be able to build on these lessons.

Figure 4.6

Write about a significant event that taught you a lifelong lesson.

The Worst Accident

When I was eight, I went to visit my cousin who lived next to me. So. When I was crossing the Road, a bicycle hit me. And I went between the wheels. That hareble. I went to the doctor and I stayed at for five days without going anywhere.

Figure 4.7

Write about a significant event that taught you a lifelong lesson.

Confidence

In my first days in SA, I didn't speak any English. So I had to learn English. So I had to learn English to go school and talk and play with my friends too. I went to a school called Easy English where I learned my English. A few of my class mates laughed at me when I spoke English because I made funny mistakes, that annoyed me, I stopped talking to them and playing with them. I spent most of my free times alone, and I usually had my lunch alone, However, two great people Mr. Wilkin and a friend of mine called Abdul didn't let me to stay alone and have my lunch alone.

My homeroom teacher asked me, "Why do you spend most of your free times alone?" I told him because of my English is not good enough. I told my mom about that case, she said to me, "You should learn from your mistakes and try to talk to your English language teacher, and when you make mistake then she'll correct you. And that's a good way to improve your English language.

I learned to be confident by facing problems and facing obstacles that we might face in the future, We learned from my mistakes in the past. Three months later my grammar and my sentence structure was improved, then my classmates stopped laughing at me. Being confident is a reason of being a successful person. And if you are not self confident then you'll have a weak personality, and people won't really think you are a great person. You'll never be a good leader and you also cannot depend on your self and you'll definitely ask people for help always. And you'll fail and you'll also struggle really hard. Being confident is needed for everybody. If you are self confident then people will absolutely respect you.

An excerpt from an essay by an Intermediate ELL, **Student D**, in response to Intervention #3 provides another powerful example of improved critical thinking. She states:

Avoiding peer pressure helped me gain confidence. Before I lived my life always trying to please others and make them happy. Having to please my parents and what ever they wanted me to do. I got to a stage where I didn't exactly know who I was. The way I gained self-confidence is I didn't please others anymore. I went on my own, did what I thought was right and became what I wanted to be. I realized that if I started believing more in myself I would know more about life. The things I face now, I will also face one day when I grow up. It is important that I learn to make my own decisions.

The improvement demonstrated by the participants rests in the strategy of using the text to provide a conceptual whole for analyzing and writing about the lessons of their own lives. The text served as a scaffold that allowed students to think and write about events with more complexity and promotes cognitive growth. Lee (1995) attributes the success of the strategy of connecting text interpretation to writing tasks to the fact that

...[T]his connection ... provide[s] them with two critical lessons: (a) it gives them a way of pulling together a mental representation of [a] complex cognitive task, and (b) it invokes a set of attitudes toward language and sensibilities to ambiguity that are required to participate in [interpretation] (620).

The improvement also rests in the power of Homer's story. Glasser (1994) states:

Metaphorically human life is an odyssey, a series of wanderings ... The trials, obstacles, temptations, and dilemmas [Odysseus] faces provide a concrete representation of similar dilemmas these students confront in their own lives. His journey is, in fact, an excellent paradigm for exploring and experiencing the meaning of their own lives (66).

Finally, in research into foreign language acquisition DeGuerrero and Villamil (2000) observed that "responsive instruction in the ZPD. . . encourages skill-using before skill-getting (in other words performance should precede competence)" (54). In other words, the success of the strategy rests partially in the fact that it represents a *scaffolded learning stretch*. Because of the recursive nature of the English Standards, I designed the next unit to help participants stretch even further toward a more complex goal and with more complex tasks.

4.2 Interventions 4-6: The Personal Essay Unit

4.2.1 Dramatizing Character Conflict

The *Personal Essay Unit* built on the progress made in the first unit with the close reading and writing assignments. Instruction focused on how to explicate text and form a

substantive response and moved students beyond summary and personal response to tackle interpretation and analysis. The unit was centered on the play *Antigone* as well as other authors influenced by Sophocles and his ideas on civil disobedience. In the final assessment students argued the merits of civil disobedience using both outside sources and personal observation as the basis for their opinion. By inserting themselves into the conflict between Creon (an agent of authority) and Antigone (an agent of rebellion) students had to get outside of their own frame of reference and think from the perspective of the characters. The students could then understand more clearly how the tensions between the two characters drive the plot. Though the action in this drama can seem subdued to many contemporary teenagers, the participants recognize and understand rebellion against authority. *Intervention #4, Developing a Moral Point of View*, asked students to consider the morality of the characters' words and actions, while *Intervention #5, The Dialectic Notebook*, provided a means for students to begin to evaluate those stances as they formulated their own opinion. Finally, *Intervention #6 Thinking in Threes* helped students build on their interaction and deal with nuance and complexity rather than limiting their responses to either/or thinking.

4.2.2 *Intervention #4: Developing a Moral Point of View*

In this intervention I defined Lawrence Kohlberg's well known theory of moral reasoning and development. According to Kohlberg, moral thought develops in six stages progressing from morality based on outside authorities to morality based on principles of justice. Researchers (Doris 1978) have noted that Kohlberg's "stages as a whole represent a movement from an egocentric to an *other-considering* notion of the individual and society" (34). Thus in this intervention I used various situations and scenarios from the students' own lives to help participants build an understanding of the stages. Then I asked them to connect this theory to the characters and events in *Antigone*. In the exercise, students worked with a partner to:

1. define the moral stage in their own words,
2. assign one character from the play to each of Kohlberg's stages, and
3. find one quote from the play that proves their choice is correct.

Figure 4.8, and **Figure 4.9** show students' handwritten responses to this exercise. Note that different colored sticky notes visually separated the three steps in the assignment.

4.2.3 *Intervention #4: Results and Analysis*

The intervention gave participants a template for shading in aspects of the character and gave participants a vocabulary that deepened the level at which they were able to discuss the

characters. In the subsequent class discussion students justified each decision going beyond saying “*Antigone is right*,” to reasoning on **why** she is right and whether or not they agree with her. As a result they were able to identify themes in the play and engage in more intelligent discussions of the ideas the characters embody. Furthermore, the sticky notes are not permanent. Students could move them around as the teacher recognized gaps in their thinking and asked probing questions that made them consider their choices carefully.

The success of this exercise rested in my decision to incorporate a specific philosophic paradigm as a conceptual heuristic for the ideas in the text. First, students identified the moral dilemmas facing the characters in the play. Then Kohlberg’s model forced them to identify the issues of “personal conscience, authority, and truth” essential to the characters’ moral choices and assume the characters’ “moral point of view” (Doris 1978: 37). In this way the model served as an explicit means for interpreting motivation and rationale and showed that there are various right positions for each character – not one. Combining the model with their knowledge of the characters and the text, added a layer of interaction to their interpretations. The exercise captured the complex nature of moral dilemma and served as a visual reminder of that complexity. In later interventions, students could then internalize the paradigm and use it as a source in their interactions with the events in the play.

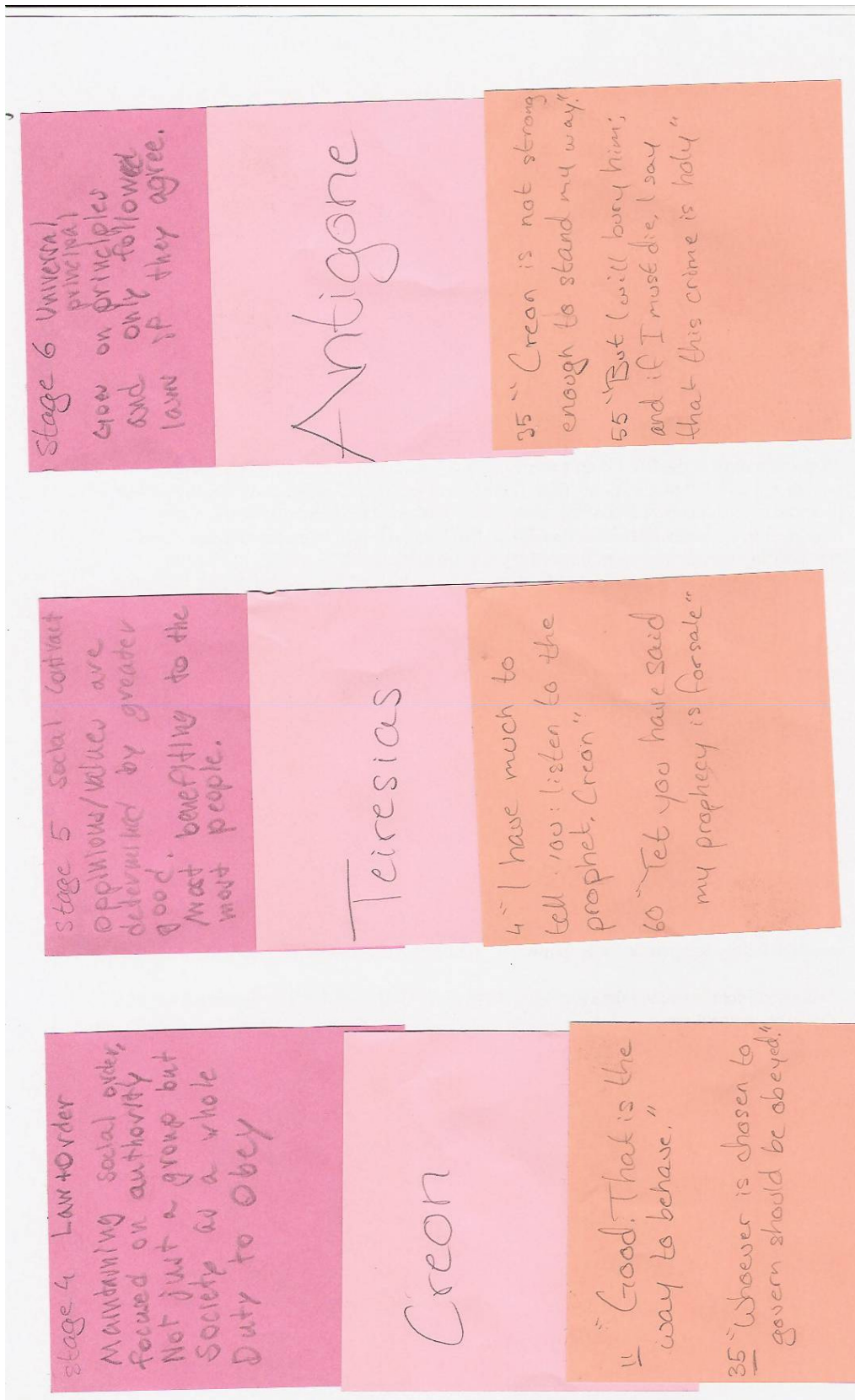


Figure 4.9 Student D: Antigone and Kohlberg's Theory

The image shows a collection of handwritten notes on sticky papers, organized into three columns. The notes discuss the character of Ismene, Creon, and Antigone, and relate them to Kohlberg's Theory of Moral Development. The notes are written in various colors: pink, yellow, and green.

Column 1 (Left):

- Top (Pink):** It is about how a law was created for so long and that no one else can remove or change it. It is also a law that was made without other people's opinions about it.
- Middle (Yellow):** Ismene is the character that describes stage four.
- Bottom (Green):** We are only women; we cannot fight with men, Antigone! The law is strong, we must give in to the law to forgive me, but I am helpless; I must yield to those in authority.

Column 2 (Middle):

- Top (Pink):** It's about the consensus that from different decisions of people and make a final decision which is benefit for them.
- Middle (Yellow):** Creon is the character that describes stage five.

Column 3 (Right):

- Top (Pink):** It is about when someone makes a decision based on what he thinks and what the people around him think. It is a universal principal.
- Middle (Yellow):** Antigone is the character that describes stage six.
- Bottom (Green):** A mother bird came back to a stripped nest, heard her crying bitterly a broken note of two for the young ones stolen. Just so when this girl found the bare of corpse, and all her love's work wasted. She swept and cries on heaven to damn the hands that

4.2.4 Intervention #5: The Dialectic Notebook

The dialectic notebook, recommended and explained by the teachers and developers of the AP curriculum, is another close reading strategy. These notebooks are based on the Greek word *dilektos* meaning “conversation, discussion” in search of truth. In completing a dialectic notebook, students participate in conversation with the author to engage the content more closely. “It is this engagement that creates meaning” (Pre-AP 2005: 3). The process builds on the *Cornell Note-taking Strategy* used in *Intervention #1*, with one main difference: instead of merely recording and summarizing the main ideas, students must respond to the ideas. For *Intervention #5*, I gave students the following instructions:

- Divide the page into two columns. One labeled *It Says* and one labeled *I Say*.
- Under *It Says*, record the most important points in the text.
- Under *I Say*, record personal reactions as you read the text. It is literally what you say about the text.

Though simple to implement, the researchers caution that students “need a lot of practice before they can use this technique independently. [Therefore], the best way for teachers to introduce the dialectical notebook is to model its use in the classroom” (Pre-AP 2005: 3). In this intervention, I modelled the technique with a passage from the play to reinforce and scaffold the reading comprehension for struggling students. At the same time, I posed interpretive questions to guide them in completing the *I Say* column. I continued this approach, modeling and interspersing questions generated by the students’ responses – individually and in groups.

4.2.5 Intervention #5: Results and Analysis

The Dialectic Notebook helps students when they encounter new text. They diagram the difference between telling the events in the play and interpreting the events. By modeling the activity first, I presented the exercise in its conceptual whole before asking students to complete it and highlights for students the conceptual difference between retelling and interpreting. **Figure 4.10** shows two such interactions taken from Student A’s *Dialectic Notebook* (a Beginning ELL) and from Student F’s *Dialectic Notebook* (an Intermediate ELL).²⁰

²⁰All student responses are transcribed word for word and any errors are the student’s own.

Figure 4.10 – Example Responses From Dialectic Notebooks

<p>Student F It Says.... Creon says that Eteocles should have a military burion [burial]. Because he died fighting for his country and belives Polnises died as a treater [traitor]. And this why he was not beried and left to be eaten by animals.</p> <p>Student A It Says, Creon viewed Polyneices as a traitor who had waged war against his own people. He says Polyneices did something very bad and broke the law and does not deserve burial.</p>	<p>Student F I say... In these lines Creon wants people to see Eteocles to be a leader and encrouge them to do the same thing he did and discourage them to not do what polnises did. And show them what will happen to them if they did the same. He is warning them.</p> <p>Student A I say Creon doesn't understand Polyneices point of view and his reasons. What Polyneices did didn't agree with the law nor his principles.</p>
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In their responses, both students are able to differentiate between what Lavelle (2007) calls “knowledge telling” (**IT SAYS**) and “knowledge transforming” (**I SAY**) (221). The difference is made explicit and concrete by their separation on the graphic organizer. In a study focusing on the development of critical thinking in developing readers, Paziotopoulos and Kroll (2004) hypothesized that a “graphic organizer helps students become cognizant of their thinking and provides them with a strategy for generating and answering higher level questions” (672). Because the graphic organizer in this intervention anchored the academic task in a visual manner, the exercise served as an effective instructional tool to scaffold responses from summary to the “production of [a] personal and creative perspective” (Lavelle 2007: 232). Student A, for example, notes how the text reveals Creon’s leadership qualities, while Student F points to his failure to understand another perspective. Their comments suggest that they have progressed beyond surface learning and literal understanding to a more conceptual understanding of the text. The strategy helped them integrate what they know about character and human nature with the words on the page.

Dialectic notebooks give students a way to really take ownership of the text. Each student must give his/her side of the story – an individual view of the main points. This approach is

reminiscent of Paulo Friere's seminal text, *Pedagogy of the Oppressed* (1979), required reading in most US university education departments. Though Friere's theory is essentially political, the argument mirrors the educational foundations of the dialectic notebooks and provides a rationale for their success. Glass (2001) outlines Friere's thesis.

For Friere, the essentially defining ontological feature of being human is that people produce history and culture, even as history and culture produce them, and thus both the theory and application of education as a practice of freedom 'take people's historicity' as their starting point' (17).

Glass (2001) calls this process "a dialectical interplay between existence and context" (17). This argument about the interaction between people and contexts can be translated to the interaction between students and texts. Freire's central metaphor is dialogue – a dialogue in which the oppressed "struggle to transform reality" – not just take it in (Glass 2001: 18). In the same way, dialectic notebooks require the students to "transform" text, make it their own, and redefine themselves as interpreters of text. The same sort of interplay occurs with the use of dialectic notebooks – the text produces a response in the reader which in turn produces meaning in the text. Participation in a dialectic between text and reader, challenges the students to see beyond "individual experiences" to universal "connections" and universal structures (Glass 2001: 18). The Pre-AP curriculum developers also note:

[Dialectic notebooks] are the perfect tools for individualized instruction. The quality and depth of response will vary greatly, but every student will be able to access every text in some way. This builds confidence for insecure readers and takes good readers to new levels of interpretation....Because [students] ask questions, make comments, and record ideas next to that part of the text that [they consider important], the [I say] column represents an intellectual history of their reading experience (Pre-AP 2005: 3).

Responses become a *jumping off point* for discussion and for instruction and help guide students to the beginnings of interpretation. Literary interpretation requires that readers insert their ideas into the text – they must respond. In order to form an interpretation, they must interact with the text. This technique makes the internal process of interpretation external.

Lunsford (1979), however, posits that the basic writer in her introductory college English classes who is unable to demonstrate critical thinking lacks cognitive development. She characterizes the thinking and writing of her basic students as lacking in inference, analysis, or synthesis. She states that these students are unable to "form abstractions or conceptions" and therefore ill-prepared for "college tasks" (Lunsford 1979: 38). Though the assumptions she

makes about her students in description of their abilities – or lack of abilities – seem archaic in her vehemence that the problem rests within the minds of the students, Lunsford’s (1979) analysis of why there is a disconnection between higher level academic tasks requiring analysis and synthesis and the more concrete thinking she attributes to basic writers is applicable to this study. She references Vygotsky who identifies three stages of thought that culminate in “thinking in complexes”. In prior stages, Vygotsky theorizes that children can not abstract from or define concepts. While they may be able to use abstract thought, “they are not aware of the processes they are using. Thus they often lack the ability to infer principles from their own experience” (Lunsford 1979: 39). Furthermore, she uses the theories of Piaget to shore up her argument. Piaget categorizes mental development into four stages, the last of which, formal operations stage, is “characterized by the ability to abstract, synthesize, and form logical relationships” (Lunsford 1979: 39). To achieve this stage, Piaget argues that a child must go through a process called “decentering” – where he or she must learn to “[get] outside one’s own frame of reference and [understand]the thoughts, values , feelings of another person” (Lunsford 1979: 39). The dialectic notebook provides a way to move students to conceptualization and analytic and synthetic modes of thought ... because it gives them practice in “decentering and performing tasks which require analysis and synthesis.” (Lunsford 1979: 39). DeGuerrero and Villamil (2000) support the importance of such scaffolding in complex language tasks. With this in mind, I asked the participants to move beyond impressionistic writing found in many ELL classes to the substantive academic writing of the secondary English curriculum.

4.2.6 Intervention #6 Thinking in Threes

This next intervention used another strategy that researchers argue can help students explore the text from multiple perspectives. Burke’s (2002) heuristic, *Thinking in Threes*, provided a framework for examining the theme of civil disobedience in *Antigone* and in other texts. The theme civil disobedience cuts across time and culture to appear in essays from Thoreau to Gandhi, from Martin Luther King, Jr. to Ken Saro-Wiwa. By interpreting and engaging these texts, students were exposed to divergent views of one theme. The intervention coupled the text with a graphic organizer (*Figure 4.11* and *Figure 4.12*) developed by Burke (2002). The impetus for using this tool was that the students needed to “transcend either/or thinking (yes/no, right/wrong, good/bad) and consider a subject from one more side. It challenges students to think beyond the obvious, to generate additional possibilities” (Burke 2002: 102). In this way, Burke (2002) contends, student thinking becomes more complex as they

create new knowledge and gain new insight that avoids “reductionist thinking” about the text they read (102).

To complete this intervention, I gave the following instructions:

- Write the theme in the center of the big triangle. (**Figure 4.11**)
- In each of the three top sections, examine the theme from the perspective of two different authors and from your own observations and experience. Quote from the text and add your response to the authors’ words. If you run out of space, attach sticky notes to the section. Remember to interpret and respond to the words. Do not just retell the author’s opinion (TIP: *IT SAYS/I SAY*).
- In the space below the triangle, write a paragraph that synthesizes your perspective with the three different perspectives you included.

Students then completed an outline (**Figure 4.12**) that helped them arrange their thinking section by section to create a five paragraph, thesis-driven, academic essay. **Figure 4.11**, **Figure 4.12**, and **Figure 4.13** chronicle the responses of Student D to this assignment through each stage.

4.2.7 Intervention #6: Results and Analysis

The cognitive demands of *Thinking in Threes* were greater than the cognitive demands of the prior interventions. Students engaged in what Marzano (2001) describes as “knowledge utilization” because their view of the theme was enhanced by their knowledge of the views represented in the excerpted text. The intervention also scaffolded the culminating assessment for this unit described in **Figure 4.14**. The assessment was an essay based on the essay format required by the SAT: *Test of Critical Thinking and Reasoning*. The rubric for the essay is included in **Appendix B**.

Figure 4.12 Thinking in Threes Outline

QUESTION: Is it ever right to disobey the law when one's conscience dictates him/her to do so? Use personal examples, examples from your reading, observations, or your knowledge of history literature or science.

1. Using the third area of your brainstorming, formulate your thesis. If necessary use the question to help you word it. Be sure to STATE, ELABORATE, EXPLAIN, ILLUSTRATE, PROBLEM, RESPONSE. Your thesis paragraph should be substantive (i.e. 5-10 sentences). SAY WHAT YOU THINK OF THE QUESTION AND EXPLAIN WHY YOU ARE RIGHT!!

I believe that It is right to break the law if ^{the law} is against your culture, or beliefs. I think people can't break the law, if the law is wrong, or goes against their religion, or if they don't have freedom or not been treat it equally.
If the law didn't give me, all the rights I deserve, or goes against my beliefs, I would do anything to protect my culture and beliefs, no matter what the consequences are going to be. If people disagree with my personal opinion.
I would ask them what ^{what} would they do if they were in Antigone's place. What would you do, if someone you love is hurt, if I was in Antigone's place, I would stand up for my culture and beliefs.

2. Using the Antigone area of your brainstorming, support your thesis. (TOUCH THE GREEN). Explain how what you learned from Antigone about the question, either adds to or takes away from your argument. Relate the ideas of Sophocles to your ideas. Be sure to STATE WHAT SOPHOCLES SAYS ABOUT THE ISSUE AND HOW IT RELATES TO YOUR THESIS, ELABORATE, EXPLAIN ILLUSTRATE (with an explained quote), and if appropriate, YOUR PROBLEM AND RESPONSE OR RELEVANCE.

In the play Antigone, Sophocles presents his ideas on civil disobedience. He shows us... Antigone says, "I am not afraid the danger, if it means death, will not be the worst of death - death without honor." Antigone has so much respect for her culture and her beliefs came before anything. She believes if a person wants to die, him/her should die with honor. People who always stand up for their culture and beliefs, and care about people who are close to them, those are the people you can respect, and considered as heroes.

RESPECT (How does that relate to belief/cul)

11/12/14
10/12/14

Figure 4.12 Part II

3. Using the other area of your brainstorming, support your thesis. (TOUCH THE GREEN). Explain how what you learned from the text you chose about the question, either adds to or takes away from your argument. Relate the ideas of Sophocles to your ideas. Be sure to STATE WHAT THE AUTHOR SAYS ABOUT THE ISSUE AND HOW IT RELATES TO YOUR THESIS, ELABORATE, EXPLAIN ILLUSTRATE, (with an explained quote) and if appropriate, YOUR PROBLEM AND RESPONSE OR RELEVANCE.
- In long walk to freedom also argues for the rights and believes He shows us.... That people have the right for freedom. He says "when an arm and a chest are full side by side, the one does not remain inert to make for others but both obey their own laws" etc. Mandela fought for his people's rights before his own rights. He's trying to tell us if people don't live with freedom they want to survive. So for 17 years his own life of wasted his life just to help the other people. Mandela is a Decent man, he wanted 27 years of his life in prison to help others. That's what Mandela and Antigone have in common they Decent people and have respect for their culture and belief, and asked their love just to help others.
4. Without repeating other parts of your essay, conclude. Bring the three areas of your argument – YOU+ ANTIGONE+ the other text -- together. What does all this equal? What are the common denominators and why are they significant? What can you say about the world view you have chosen and how it relates to the others and what it says about our society. Put your ideas in the context of our current society and our future. Again. STATE, ELABORATE, EXPLAIN, ILLUSTRATE.

Decency

From the time of Sophocles to our current society, the concept of civil disobedience..... Society isn't different or hasn't changed much, you do find people who still fight for their cultures and beliefs. Antigone's world view is similar to Mandela's world view. The both fought their own rights and beliefs. This is true because there's war and everyone tries to fight for their own rights and beliefs. Their beliefs. I think you do get people who are like Antigone and Mandela who fight for their freedom and others. Everyone wants to live a free life. I want to be proud of their culture, want to be helped when ever they need it or help others when ever others need it. But something always comes in the way.

Figure 4.13 Student D's Final Draft of Personal Essay

I believe that it is right, to break a law if the law is against your culture or beliefs. I think that people can only break the law, if the law is wrong or against religion, or if they don't have freedom or not being treated equally. If the law, didn't give me all the rights I deserve, or goes against my beliefs. I would do anything to protect my culture and belief, no matter what the consequences are going to be. If people disagree with my personal opinions. I would ask them, what they would do if they were in Antigones place. What would you do, if someone you love is hurt, if I were in Antigones place I would stand up for my culture and beliefs?

Antigone says, "I am not afraid of the danger, if it means death, will not be the worst of the death – death without honor." Antigone has so much respect for her culture and her beliefs come before everything. She believes if a person wants to die him/her should die with honor. People who always stand up for their culture and beliefs, and care about people who are close to them, those are the people who you can respect, and considered as heroes.

In long walk to freedom also argues for the rights to belief he shows us that people have the right to freedom. He says "when an acorn and a chest nut fall side by side, the acorn does not remain inert to make for others but both obey their laws, etc. Mandela fought, for his peoples right. He's trying to tell us if people don't live with freedom they won't be able to survive. So he used his own life or wasted his own life just to help the ones he loves. Mandela is a decent man; he wasted 27 years of his life in prison to help others. That's what Mandela and Antigone have in common, they are decent people and have respect for their culture and belief, and risked their lives to help others.

Society isn't different or hasn't changed that much, do you find people who still fight for their cultures and beliefs. Antigones world view is similar to Mandela's world view. They both fought their own rights and believes this is common, because there's war, and everyone tries to fight for their own rights and protects their selves. I think you do get people who are like Antigone and Mandela, who fight for their freedom and others. Every one wants to live a free life, wants to be proud of their culture, and wants to be helped whenever they need it or help others whenever others need it. But something always comes in the way.

Figure 4.14

Consider the worldview in these lines from *Antigone*.

Creon: “Whoever is chosen to govern should be obeyed – Must be obeyed in all things, great and small, just and unjust.” (Scene 1 lines 35-8).

Is it ever right to disobey the law when one’s conscience dictates him/her to do so? Use personal examples, examples from your reading, observations, or your knowledge of history, literature or science. You must use both *Antigone* and one other relevant text from our study in your discussion to prove your thesis. Relevant texts: Thoreau’s *Civil Disobedience*, Mandela’s *Long Walk to Freedom*, Gandhi’s writings on justice, the quote by Ken Saro-Wiwa, and MLK’s *Letter from a Birmingham Jail*.

The intervention provided a model for students to use in order to structure the knowledge they were learning, thus freeing them up to engage in analysis. *Thinking in Threes* also encouraged synthesis and allowed students to integrate their background knowledge with knowledge gained from the text in a structured, systematic way. The approach is in line with schema theory which holds that real comprehension “requires the ability to relate textual material to one’s own knowledge” (Vermillion 1997:28). The *Thinking in Threes* graphic organizer was also a visual model of how differing views on the same topic fit together. The results of this intervention as reflected in student responses show that the quality of participant thinking improved.

Student D, for example, has begun to conceptualize the assignment differently and reflects on her growing ability when interviewed after the intervention. She stated: “I am able to make more sense in writing an essay. I would like to improve in writing an essay”. This view is a contrast to the view she held prior to instruction where she equated better spelling with better writing. Her comments illustrate that she has developed the capability of reflecting on her writing to some extent. In an interview **Student D** also notes that the “civil disobedience thing” (referring to the *Thinking in Threes Activity*) allowed her to have “better construction among other of my thoughts”. She is building on the progress made with the close reading skills in the prior interventions. Her metacognitive awareness is reinforced as she is able to see improvement. Though there are still some attributes of her responses that reflect a more simplistic approach to interpretation and analysis, she goes beyond summary and employs more critical thinking skills. In **Figure 4.13**, she asserts that if she “were in *Antigone*’s place [she] would stand up for [her] culture and beliefs” illustrating an ability to go beyond merely stating

the obvious in order to begin to reflect on the significance of her thesis and consequences of the ideas in the text in her own life. The efferent stance Rosenblatt (2005) calls for engages her in a reflective process and interaction with the text. Because she integrates what she has read into her own knowledge base, clear progress is made by this student resulting in *Level 3 Analysis* according to *Marzano's Cognitive Processes (Figure 2.5)*. Though full understanding is not evident, growth is. In prior writing samples **Student D**'s interaction with the text was closely tied to surface detail and summary with basic comments on theme. Now, however, she offers examples and personal opinion that show some insight, a response that falls in the **Range 2** category on the rubric used to measure interpretation of literature (*Figure 3.1*). **Range 2** is described as a response that “works through a straightforward understanding to address the question” but “begins to use the text to develop ideas” and “shows recognition of the way meaning is achieved”. Furthermore, **Student D** presents a cogent point with more relevant details and more specificity resulting in an essay that is strong and also a marked contrast to her earlier effort prior to instruction. *Figure 4.15* shows the first paragraph of both essays.

Figure 4.15

PRE ASSESSMENT EXCERPT	POST INTERVENTION EXCERPT
<p>The poem's subject is about the life that the poet didn't chooce. The poets attitude is quit fair. The reason I said that is because the poet chooce. The shorter way to life and better life, the reason he chooce one is because he can't chooce two different lives if he's only one person.... No, one can live two live, and always chooce the right one that will make your easyer and happyer.</p>	<p>Antigone says "I am not afraid of danger if it means death, will not be the worst of the death— death without honor." Antigone has so much respect for her culture and her beliefs come before everything.... People who always stand up for their culture and beliefs and care about people who are close to them, those are the people you can respect and considered to be heroes.</p>

4.3 The Effect of Rhetoric Unit

4.3.1 Teaching Rhetoric

Graves (1999) asserts the importance of *teaching for understanding*. He argues that *teaching for understanding* “enables [students] to ‘explain, muster evidence, find examples, generalize, apply concepts, analogize, [and] represent in a new way’” (2). It also requires active use of knowledge – it is not passive. To support such active learning, teachers must stay focused on what Graves calls *generative topics* central to the discipline and central to interdisciplinary study. The study of rhetoric is one such *generative topic* in the study of literature. The

understanding of an author's rhetorical choices is primary to higher literacy and comprehension of complex text, as ELL need to respond appropriately to authentic texts in every discipline. Yet the interpretation of rhetorical devices is challenging for ELL. Literary analysis is very abstract; therefore learning to interpret requires a level of abstraction difficult to bridge for ELL. This final intervention presented a means for "explicit instruction" in interpreting the "functions, features, and forms" of rhetoric (Purcell-Gates et al 2007: 12).

The direct instruction made strategies for interpreting understandable, so students could begin to engage an author's ideas on more than one level and to grasp the nuance and subtlety of an author's rhetorical choices. *Intervention #7: Purpose and Rhetoric* focused on rhetoric and built in complexity from prior interventions. While the previous units recognized that literary study provides a central point for discussion about values, emotions, and character and a way for students to develop knowledge about the world of ideas, this unit provided a way for students to develop knowledge about the rules of discourse. By shifting the focus away from the examination of events and actions to a closer examination of the effect of language, students could learn to detect theme from the "principles that influence text structure, imagery, [and] rhetoric" (Lee 1995: 613). The intervention used *A Narrative of the Life of Frederick Douglass* as its central text and introduced students to the importance of diction and repetition in establishing theme.

4.3.2 Engaging in a Dialogue with the Author

A Narrative of the Life of Frederick Douglass is an excellent text for use in a unit focused on rhetoric. Aristotle's well known rhetorical triangle contends that in any rhetorical task, there is an interactive relationship between author, subject, and audience. Rhetorical choices are driven by the purpose of the text and by the author's intended effect on the audience. Douglass' purpose, subject, and audience are clear. In pre Civil War America, he wrote to persuade white citizens of the injustice of a system they either actively or tacitly supported and that purpose drove all of his rhetorical decisions. Douglass' experience as both victim of and witness to slavery's atrocities give his account moral weight, while his eloquence gives it intellectual weight. Therefore, his clear intent and the clear injustice of his subject clarify his rhetorical choices and push the student to engage the author and respond to his ideas.

4.3.3 Intervention #7: Purpose and Rhetoric

In lesson plans for Douglass' autobiography published by the *National Endowment for the Humanities*, the curriculum developers include an introductory lesson meant to encourage

students to “recognize and explain the use and effectiveness of precise word choice, imagery, ... and rhetorical appeals” in the text (*From Courage to Freedom* 2004: 1). I began the lesson by defining and giving examples of Aristotle’s persuasive appeals: logos, pathos, and ethos. In addition, I explained literary terms such as repetition, imagery, connotation, and denotation. After this discussion, I provided a handout entitled *Reading Douglass’ Rhetoric*. The handout included an excerpt from Chapter Two of Douglass’ autobiography which describes the beating of Douglass’ aunt. I asked students to underline what they consider to be strong and important phrases and images. I discussed the phrases students selected, teasing out the reason behind the students’ choices, while continuously pointing them back to Douglass’ purpose. For example, several students noted that the word *bloody* is repeated six or more times in the passage. Because it is repeated, the students felt the word was important. I asked the student to think about the effect of repetition and why Douglass might have wanted to repeat that *particular* word/image. In other words, how did his repetition reinforce his purpose? After this discussion and with teacher support, the students answered the following questions from the handout:

- Which words or phrases serve as strong images?
- Which verbs seem particularly strong? What effect do they have on the reader?
- What effect does the repetition of certain words have on the reader?
- What rhetorical appeals – logos, ethos, pathos – is Douglass using? Is he effective? Why?

I then gave a second excerpt and students followed the same procedure independently. As with *The Close Reading Strategy* from **Intervention #2**, I required the students to note and focus on the language features that stand out for them as individuals. In this way, the first passage and the class discussion served as a procedural model for interpreting the second passage and writing original responses.

4.3.4 Intervention #: Results and Analysis

Figure 4.16 on the following page shows excerpts from student responses to the second extract.

Figure 4.16 Student Responses**Student G**

Mrs. Auld is first described in the story as "a woman of the kindest heart and finest feelings." But she changed. "That cheerful eye under the influence of slavery soon became red with rage; that voice made all of sweet accord, changed to one of harsh and horrid discord; and that angelic face gave place to that of a demon." She became the total opposite of what she was. This is an example of juxtaposition where she goes from a "woman of kindness to "a demon". Also she was used to be "dependent upon her own industry" and now she depends on someone else and becomes power hungry and evil. With this Frederick Douglass wants to show that slavery corrupts all people as it destroys kindness and compassion into hate and disgust. Frederick Douglass wants to show that slavery corrupts all people no matter if you were an angel before it destroys kindness and compassion and turns it into hate and disgust. Douglass wants to tell everyone in the process of slavery that they are being corrupted and dehumanized and with this he wants the end of slavery. He shows us that if you continuously treat people bad you become bad even if you think you are good.

Student A

He wants us to understand that learning the ABC was forbidden or so rare for slaves. He is saying that learning the ABC might change his life completely or very huge jump. It will let him understand what they slaveholders mean deeperly. It would help in making an organization that will make him free. The white masters are afraid of letting the slaves learn to read and write because there is a gap between the master and the slaves. If they both know how to read and write then slaves would be equal to them. They are also afraid of slaves learned how to read and write they won't be slaves. They would think of they they're developing enough and think of their freedom. But the situation is the same it would just continue as the same. Douglass uses irony when he describes the master saying, "if you give an inch, he will take an ell...he should know nothing just to obey his master." When Mr. Auld tells his wife that she must not teach a slave how to read and write because he will use it to get freedom, Frederick decided to learn. He thought that Mr. Auld doesn't want him to learn how to read and he decided to learn how to read. If a slave knows how to read he will be looking for his freedom. If I was a slave I think Frederick Douglass would be a great leader to the slaves to get their freedom. He seems very smart. He knows how to deal and I believe he is wise. He tried to learn how to read.

*Figure 4.16 Continued***Student D**

The passage is about how he's been taught how to read and write. He's exploring how important education is. Because the only way he can express yourself is being able to learn how to read and write. Also to prove to his enemys that it doesn't matter what colour you are you can be smart. That everyone has the right for education and without education you wna't be able to make a future for yourself. In the passage he tells us how his master, doesn't want to lurn to be able to read and write. Because the master thinks that is a slave is able to read and write he's going to think that he is better than his master. So the master thinks that a slave should always stay one The phrases "that is was unlawful as well as unsafe to teach a slave to read "it's irony. It's very scary for the wite if slaves are able to read because if the slaves are able to read and write they might be able to take over or fight for their own rights. But the slaves are normal, but for Douglass. He wants to be able to read and write. Because when he heard his master argue he then new the only way he could be free, and other slaves. Is being able to rread and write . So he can prove that, slaves have the right for education and also freedom. Slaves should also live like any white person living. In my opinion! think education is very important with out education we wont really make it very far in the future If we don't have educated people in the world, povert well increase. We should take to mind, If we don't give every one the right to education, we would not have what we have today. Like the have education I think of othe people deserve that to.

Student F

This passage is really about how Mrs. Auld is someone else, deep inside, from what she appears to be and what she has to be. He is saying that Mrs. Auld appears to be a really loving person who has feelings for others, but that even though this might not be completely wrong, the situation she is in controls who she is. I feel that there is something wrong with the way a person is, is determined by other things such as race and status. Mr.s Auld is forced by slavery to act in the ugly way she does. Frederick Douglass explains how Mrs. Auld at first seems to be a wonderful person with a warm heart. But later acts like any other slaveholder and does not at all act like a nice person anymore. He uses imagery when he says "That cheerful eye under the influence of slavery soon became red with rage." It shows that she is under some control that forces and controls who she is and what she does to others. Mr.s Auld is a nice person who does care, but she is in such a situation that she cannot decide on her own who she wants to be. There is something else behind the way she acts, something very wrong that gets Mrs. Auld to hide her real feelings and be someone else. We are all who we are because of how we have been raised and under what conditions we have grown up. Some people are born in such a position which they cannot get out of. And even today some people just get no chance to live a different life from what their families and previous generations have lived. Prejudice and what is expected from us determines how we live. And puts limits for us. If everyone got an equal chance to be themselves people would not do things they don't believe are right even though they are expected to. In this case., many slaveholders would not have treated their slaves the way they did if there was not a fixed image of how people should treat slaves.

Note how both **Student G** and **Student A**, for example, grapple with the *concepts* Douglass explores. **Student G** grasps the dehumanizing effects of slavery on the slaveholders, while **Student A** recognizes the power of education. Without knowledge of the structures, forms, and patterns Douglass employs, the level of student interaction would be more limited and surface, but both students are able to point to how Douglass creates his meaning, and they do so specifically. This demonstrates that they have transferred the process of analysis to new text. By adding their independent reflections and personal engagement, the students also exhibit Marzano's *Level 3 Analysis* by "generating new conclusions" (Marzano 2001: 71) **Student F**, for example, reflects on the limiting effect of racism on the racist. She also notes the effect of history and family on the individual reflecting an ability to come to her own conclusions about Douglass' message. Furthermore, the instructional intervention has enabled these students to understand the text with insight and depth. Instead of merely "decoding" the text, they now recognize the text structures and patterns Douglass uses as well as the effect of those choices, demonstrating deeper rather than surface understanding.

I attribute the students' growth directly to the interactive process and support of the instructional intervention. I asked students about what they perceive in the text and how they feel about those perceptions. The questions on the handout guided their thinking and pushed them to identify their perceptions and explain the associations, thoughts, and feelings that help form those perceptions. Scardamalia and Paris (1985) attribute growth in the critical thinking directly to the "instruction [students] receive in analyzing the structural function of text" (1985:1). These researchers note that "structure knowledge yields more mature performance" (1985:1). The results of this intervention reinforce that conclusion. In the past instruction in structure and form (rhetoric) has been criticized as yielding student writing that is formulaic; these student responses show that providing models of structure and then scaffolding the use of structure allows students to internalize structure. The absence of direct instruction in structure and form limits the learning process. By making the forms of discourse explicit, this intervention also makes them more concrete and attainable for the participants.

In the next section, I report the results of the summative assessment given at the end of the 18 week instruction cycle and summarize and make assertions about all seven teaching interventions.

4.4 Conclusions and Recommendations

4.4.1 Summary of Research Study

4.4.1.1 Description of the Study

Lauer (2005) notes that the instruction ELL receive in mainstream secondary English in the United States can be reductive, with the focus on the surface meanings of text ELL read and the surface errors of text they generate. In this study I set out to change that focus for seven ELL using teaching interventions designed to improve their critical thinking and critical literacy skills. I conducted pre-assessments and researched the most current pedagogies for critical thinking and the teaching of ELL. As a result of that research, I selected the cognitive apprenticeship paradigm to serve as the pedagogical framework for the instructional interventions. My findings from the pre-assessments indicated that prior to the teaching interventions all the participants in this study, who range from Beginning to Advanced ELL, exhibited difficulty in critically understanding and analyzing literature text. The pre-assessments established the zone of proximal development for each participant, as well as a point from which to move forward with instruction.

4.4.1.2 The Literature and Universal Theme

The first unit of instruction was built around Homer's *Odyssey*, while the second unit of instruction was built around Sophocles' *Antigone*. While it may seem odd to begin with a text from an ancient civilization and try to connect it to students in the 21st century, the classical literature is highly accessible to all levels. The third text selected as the basis for instruction was *A Narrative of the Life of Frederick Douglass*; all three texts are part of most ninth grade literature courses across the United States and represent the different genres used in literature instruction. But beyond that expedient fact, the texts address universal themes concerning fidelity, betrayal, loss, freedom, rebellion, and leadership. By focusing on universal theme, the instructional interventions in this study gave these diverse students from Asia, Europe, the Middle East, and Africa a common ground.

Fine (1997) comments on the value of using universal theme in her discussion of teaching *The Odyssey*:

Those students who [are] more socially minded question Odysseus' fidelity during his time with Calypso and Circe. Many students identify with Telemachus' sense of loss at having grown up without a father and his burning desire to find Odysseus. The story offers something for everyone (Fine 1997: 65).

In fact, one classicist argues that the literature provides “a repository of complex, pluralistic reflections on the human condition” that allows [students] to “enlarge their understanding of themselves and of others” (Reinhold 1989: 241).

4.1.1.3 The Aesthetic Stance and Critical Thinking

Furthermore, the teaching interventions adopted what Rosenblatt (2005) calls an aesthetic stance to instruction that emphasizes personal response and personal perspective in response to literature. Rosenblatt (2005) argues against “efferent teaching” in literature classrooms. She describes efferent teaching as the process by which teachers focus students attention on facts that will be tested later. She argues that the efferent stance “nullifies” or “subverts” students’ aesthetic appreciation of literature – I would also contend that it does so at great cost by simplifying the study of literature into something that requires only the identification of facts (Rosenblatt 2005: 43). Instead of efferent teaching, Rosenblatt (2005) recommends that teachers encourage students to “find meaning [on] the printed page” (44). She also posits that this aesthetic stance encourages the natural cognitive development of adolescents. Furthermore, she states that by focusing on the meaning of the text, students will also focus on what was “seen, heard, felt, or thought” during the reading of a text which will lead to the judgments and interpretations which are the building blocks of analysis. Finally, her article also reminds teachers that “literature deals with all that is basic in human life, from the most humble to the most ideal” (Rosenblatt 2005: 6). Lauer (2005), however, notes many classrooms are “woefully stuck in a focus on lower order cognitive skills” (34). Because the instruction also divorces content from “higher-order cognitive skills”, he feels that “learning suffers.” He cautions teachers to “use critical thinking pedagogy to teach content as well as critical thinking skills” (34). This study represented my steps to help a group of ELL move beyond description and retelling to interpretation and analysis. I intended for each intervention to challenge the participants to read differently and more deeply. To accomplish that goal, attention to discourse patterns – to the way meaning is created in literature – was crucial.

4.4.1.4 The Cognition Hypothesis and Critical Thinking

The Cognition Hypothesis provides a means for making pedagogic decisions for ELL as they try to acquire English proficiency and achieve in an academic setting. Grounded in linguistic theory, the Cognition Hypothesis emphasizes that “increasing the cognitive demands of tasks ... will push learners to greater ... complexity” (Robinson and Gilabert 2007: 162). To use the terminology of these researchers, more complex “pedagogic tasks” lead to more complex

“targets.” These researchers argue that “expending the mental effort needed to meet [increasingly] demanding cognitive/conceptual” tasks leads to “analysis” (2007: 165-6). Logically, this means that “structural complexity tends to accompany functional complexity in discourse” (2007: 166). In short, the Cognition Hypothesis predicts “that more interactive complex tasks will result in greater amounts of interaction, and negotiation for meaning” (2007: 167). It only makes sense that if teachers want students to comprehend and produce substantive text, instruction should be designed to demand increasing levels of cognitive complexity.

Schultz’s (1991) analysis of mapping and cognitive development provides a rationale for selecting text like *The Odyssey*, *Antigone*, and *Frederick Douglass*. First, Schultz’s work addresses a pedagogical situation analogous to the situation this study addresses; primarily, the question of how to analyze and then address the “apparent difficulties students experience in moving from intermediate to advanced courses” (1991: 978). Schultz argues that because the “lower-division” programs tend to concern themselves with “the acquisition of the basics of language: students work on grammar ... By contrast students in “upper-division” programs are frequently expected to analyze authentic ... texts [and] to discuss them critically” (Schultz 1991: 978). Research into the development of critical thinking in ELL substantiates this argument. *The National High School Center* in the United States reports that most high schools “track English Language Learners into remedial literacy and ... lower level core academic courses” (Koelsch 2006: 1). Like the courses in the Schultz study, these lower level secondary courses tend to follow a skills based curriculum; and like the students in the Schultz study, ELL in lower level secondary courses don’t get the “high quality instruction that develops advanced literacy skills” (Koelsch 2006: 3). Therefore, many ELL leave school woefully underprepared for complex literacy challenges. Second, Schulz’s (1991) argument is based on the premise that:

the language base necessary for the expression of analytical thought (particularly as manifested through writing) is different from the one needed to produce experiential or quotidian forms of practical expression ... The language that analytical thinking requires involves ... organizational and logical thinking skills” (979).

This study makes the same assumption. Students must receive specific and explicit instruction in analytical thought in order to foster the development of their higher-level thinking. More challenging input from the instruction results in higher quality output. But an even more compelling rationale Schultz’s study provides is that it also “draws heavily on ... research on the writing process and on discourse theory ... [to] foster the development of higher-order cognitive

skills” (1991: 980). Her work categorizes different writing and reading tasks into the descriptive, the narrative, the expository, and the argumentative. She states that “researchers into discourse theory now know ... that different writing tasks require very different types of cognitive strategies” (1991: 980). Schultz’s (1991) study provides one theory that explains the difficulty the ELL in this study have in moving from the knowledge telling strategies of description and narrative to the knowledge transforming strategies of analysis. Argument requires a greater “level of abstraction” than the linear thinking required by the other three modes (Schultz 1991: 981).

The purpose of the interventions was to implement instructional strategies that will build on their strengths in the descriptive, narrative, and expository mode and help them develop the higher-level thinking that improve their achievement. By using the cognitive apprenticeship teaching paradigm, I provided the modeling, rehearsal, and coaching necessary for the participants to develop the ability to think critically. Each of the interventions was targeted on strategies that addressed the following aspects of learning:

1. Moving students beyond reading for what happens to reading to understand the concepts embedded in the text.
2. Providing students with graphic organizers that anchor and develop the skills necessary for close text analysis and interpretation.
3. Supporting student thinking with the use of thinking paradigms and metaphors that recognize the interactive processes of critical thinking.

4.4.2 Summary of Findings

4.4.2.1 Overview of Intervention Results

The students’ performances demonstrated not only improvement in content knowledge, but also tangible improvement in their ability to deal with text and to apply the critical thinking and writing skills covered by the instructional interventions. Therefore, the results indicate that ELL can be guided and their thinking deepened and focused with direct instruction in critical thinking skills. The results also suggest the importance of schema building and scaffolds that support ELL as they engage in substantive reading and writing tasks. To substantiate the results indicated by the student responses to the assignments used in the teaching interventions, I gave a summative assessment; a summary of those results is discussed in the next section.

4.4.2.2 Summative Assessment

At the end of the seven teaching interventions, I assessed students for growth in their ability to deal with the grade level content of the secondary English classroom. A portion of a standardized test was used to improve the validity of the measure. That assessment, a past *IGCSE Exam for English Language and Literature* published by the *Cambridge Board of Examiners*, was selected because it includes unseen prose text and mark schemes written by outside examiners. The released exam assesses the same literary objectives assessed in the pre-assessments. In addition, the summative assessment consisted of teacher constructed items that assessed student ability to deal with and write original interpretations. Of the seven students who began the study, four remained for the summative assessment, with three withdrawing to return to their home countries. Therefore, the results of the summative assessment reflect the progress of **Student A**, **Student D**, **Student F**, and **Student G**, who range from beginning ESL to advanced ESL.

Figure 4.17 summarizes the results for the *IGCSE* Assessment. Each question is transcribed and the number of correct student responses is recorded. In addition, the critical literacy skill assessed by the question is noted.

*Figure 4.17 Results of the Summative Assessment*²¹

Exam Question	Correct Responses	Literacy Skill
Which word in the first sentence of the passage shows that the narrator did not want to be heard?	4	Comprehension
By referring to what the narrator says in paragraph 1 explain what might be found surprising about his state of mind.	4	Comprehension
Give two words from the second paragraph which suggest that the window was difficult to open.	4	Interpretation
Where was the cash box hidden, and how did the writer find it?	3	Comprehension
Explain, using your own words, the change which the writer felt had come over the room and how this affected his state of mind in paragraph 4.	3	Interpretation
Why do you think the writer	4	Interpretation/Analysis

²¹ Excerpts of student responses and texts included in the summative assessment appear in *Appendix I*.

uses the word “stretchings” (line 13) to describe the spiders’ webs?		
Re-read lines 9-25. Choose three details which the writer uses to suggest a sense of uneasiness and fear. Explain how each of these details suggests this sense.	4	Interpretation/Analysis/Evaluation
Explain using your own words, what the writer means by “my senses were already disarranged” (line 36).	4	Interpretation
Explain using your own words what the writer means by “with a mild but unwavering interest” (line 43).	4	Interpretation
Re-read lines 1-19 and then write a summary of what you have learnt about the appearance of both the outside and the inside of the house.	3	Interpretation/Analysis/Evaluation

If the results are compared to the participants’ performance on the pre-assessment, the efficacy of this approach and these interventions for teacher applications in the teaching of critical thinking to ELL within the mainstream secondary English classroom is clear. Though the number of students taking the summative assessment is less than the number that began the study, the range of abilities and levels within the group remained unchanged. On the exam, each student was able to meet literary objectives that require interpretation, analysis, and evaluation. In the pre assessment, for example, **Student D** and **Student A** focused on the surface meaning of the literature samples and struggled even to identify abstract concepts embedded in the texts. On the summative assessment, however, both students were able to deal with questions dealing with connotation and the effect of rhetorical choices. These results also provide evidence of growth in their ability to offer insight into theme and explain a personal and informed evaluation; skills key to developing critical literacy. Finally, Student A even crosses out a part of his answer, marks it “*Summary*” and begins again; illustrating his awareness of the difference between summary and interpretation and his ability to monitor his own thought processes in dealing with literature.

4.4.3 Conclusions

I set out to explore how the cognitive apprenticeship model and theories of cognition can be used to meet the instructional needs of ELL as they grapple with grade level content that demands critical thinking. The results lead to several conclusions. The first conclusion deals with teaching practice. By adopting the cognitive apprenticeship paradigm for the teaching of

secondary literature to ELL, I implemented more thoughtful and measured teaching methods. The cognitive apprenticeship is closely tied to theories of cognition and melds that theory with practice. This resulted in a qualitative shift in my teaching; a shift toward teaching focused on students' metacognition and their awareness of the purpose of the writing and reading tasks.

Other practical conclusions are also apparent. The results of this study indicate that literature can be used to promote ELL academic literacy and critical thinking skills. Critical thinking skills develop through a complex process, and the participants in the study improved their ability to analyze arguments, make and judge observations, reason, and evaluate. They did so through the use of instruction that recognizes the thinking skills necessary for students to engage in substantive reading and writing. The instruction also incorporates teaching strategies that recognize that those skills can be taught through deep modelling and scaffolding that meets students in their ZPD. Therefore, the cognitive apprenticeship provides a realistic framework for addressing the literacy skills of ELL within the mainstream classroom.

4.4.4 Summary of Contributions

All researchers recognize the need to develop the language and literacy skills of ELL in content instruction such as secondary English. But mainstream teachers often lack the knowledge necessary to help ELL develop those skills. A simplistic approach permeates the practice of instruction to lower level classes where most ELL students languish. This study suggests one concrete means for mainstream content teachers to conceptualize a means of helping ELL in a real context. The study integrates what the research says about literacy development with what the research says about effective pedagogy for ELL. Despite the importance of teaching critical thinking and reasoning to ELL, research on teaching interventions utilizing specific strategies has been scarce and sometimes fails to consider the larger context in which mainstream teachers operate. That context can present difficulties and place tremendous demands on mainstream teachers' time and resources. ELL are just one group of students among many who have special needs, and public schools cannot often afford special resources or different resources for all of those students. Therefore, the practical approach this study takes using literature available in most secondary textbooks is necessary.

In fact, one of the most important aspects of this model has to do with its practical applications. The number of students legally allowed in each section of secondary English in the United States has grown in recent years. At present, secondary English classes are capped at 35 students. That number means that teachers often must make the choice to meet the needs of most

students at the expense of the needs of a few. Realistically, a method that integrates what is being taught already to the other students in the room is necessary. This study provides one avenue in establishing an equitable learning opportunity for those students whose needs might otherwise be ignored. The cognitive apprenticeship does not require different teaching. It requires scaffolded teaching to meet students where they are and help them achieve.

The investigation also sheds light on the importance of critical thinking instruction for ELL. Though many teachers believe that ELL are not ready for complex writing and critical thinking, the fact remains that they need it.

Teemant et al (1997) state:

[S]tudents cannot wait until they speak English fluently to be deemed “ready” for content instruction. There tends to be a wide gap between what ESL students can understand, write, and conceptualize in English and what they can say, write, and conceptualize in their native languages... . [W]aiting for content can mean academic disaster for ESL students who many never catch up to their peers” (312).

These researchers recognize that our focus should be on finding the supports that can help these students. This study shows that one potential support is the implementation of the cognitive apprenticeship paradigm.

Finally, the results contribute to the discussion of how to combat the Matthew Effect. This study has cited the research that establishes the ongoing and growing achievement gap in literacy between ELL and their native speaking peers. In education, there has been a persistent call for research that delves into “strategy that effectively addresses lingering practice problems” (Dirkx 2006: 274). Teaching critical thinking skills to ELL is one of those lingering practice problems, and the cognitive apprenticeship is one “rigorous, systematic, and objective method” to solve it (Redfield 2004: 24).

4.4.5 Suggestions for Further Research

The study suggests several important implications for future research. This is a limited study. Though the group was diverse in terms of skills and cultures, it was also quite small. Therefore, the level of teacher/student interaction was intense, focused, and highly individualized. Future studies should focus on the effectiveness of the teaching paradigm with larger student samples to substantiate its conclusions. Furthermore, this study has established the complexity of critical thinking and critical literacy. The skills addressed in the teaching interventions in this study are not the only skills required by the secondary English curriculum.

Reading and writing skills vary among individuals and among classes. Future studies should focus on the effectiveness of other writing strategies for ELL in the mainstream classroom to account for the possible variation in skills and in cultures with the participants in this study.

4.4.6 Discussion of Problems

A problem with this study is the fact that not all of the participants completed the summative assessment. Three students returned to their home countries before the end of the school year. Again, this fact does not negate the results of this study, as those students who did complete the assessment were representative of the three instructional groups (Beginning, Low Intermediate, and Advanced ELL) established by the preassessments. In addition, to increase the trustworthiness of my interpretations and my assertions about the quality of the student responses, I utilized accepted grading rubrics so my evaluation of student responses was more systematic while still being responsive to student needs. Therefore, the interventions, the responses, and my evaluation of those responses accurately reflect the recursive nature of genuine teaching. I have also provided samples of the original work in the students' own handwriting.

4.4.7 Implications of Teaching Interventions Used in this Study

The implications of this study for educators are clear. We must move the instruction of ELL from “remediation to academic acceleration and enrichment” (Koelsch 2006). The results of the writing assignments produced by the students in this study support the idea of cognitive apprenticeship. The interventions addressed the critical literacy and thinking skills necessary for success in the demanding secondary ELA curriculum. Those skills include the ability to interpret, analyze, and evaluate authentic texts. The interventions utilized the key tenets of the cognitive apprenticeship teaching paradigm including modeling and scaffolding. The students, regardless of level, show clear growth in their critical thinking skills and ability to deal with abstract concepts. Therefore, this study substantiates the importance and usefulness of the cognitive apprenticeship in helping ELL improve their critical thinking skills. By providing ELL with strategies “for attacking problems, analyzing texts, and constructing arguments ... normally hidden mental activities” are made clear in the teaching interventions. The results of the teaching interventions show that direct instruction provides ELL with an enriched environment that supports students as they move from literal understanding of text to higher levels of abstraction required by interpretation and analysis. Thus, this process combats the Matthew Effect that widens the gap between ELL and their native speaking peers. The Cognitive

Apprenticeship Paradigm recognizes the fact that conceptually simplified instruction will lead to conceptually simplified writing. This study contends that critical thinking can be improved with the use of heuristics and paradigms in conjunction with challenging literature. The research draws on schema theory with the emphasis on explicit teaching (modeling), guided practice (scaffolding), and literacy strategies (heuristics) that allow students to internalize new information and perform critical thinking tasks. As a result, the interventions evoked more nuanced responses from the participants that dealt with more than one perspective. The seven instructional interventions follow a teaching model that allows for a high degree of individuation and a means for filling in gaps in student knowledge. The model is based on credible learning theory and the link between language and cognition.

This study contributes to the discussion of how to improve the critical thinking skills of ELL within the mainstream curriculum in three main ways. First, the interventions provide a conceptual map or anchor for the students abstract thought and thus facilitate learning. Second, the interventions articulate scaffolds that frame the knowledge for the students and act as guides for expert thinking. Third, the interventions in this study recognize the complexity of the secondary ELA curriculum. Critical thinking threads throughout the ELA curriculum with the emphasis being placed on the higher order thinking skills of analysis, synthesis, and evaluation. The Cognitive Apprenticeship Paradigm recognizes the teacher's role in helping ELL make these seemingly unmanageable thinking skills manageable. Finally, the interventions in this study are replicatable with other literature and with other classroom contexts. The importance of this study is not in the individual lessons but in the fact that it provides a way of articulating an approach that addresses the abstract nature of the discipline while being mindful of the fact that any approach must be practical and applicable within the context of real US classrooms.

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Appendix A: State and National Standards for English 1²²

In English 1, students continue to develop skills through structured study and independent reading of literary and informational **texts**. A variety of informational **texts** as well as four major types of literary **texts**—**fiction**, literary **nonfiction**, poetry, and **drama**—are read and viewed both inside and outside of class. Through literary **texts**, students study the **author’s craft** by making **inferences**, determining **point of view**, and analyzing **theme** and **figurative language**. By reading a variety of informational **texts**, students analyze an author’s development and support of a **thesis**, create a variety of responses to **texts**, and examine the ways that **bias** is revealed in **texts**. In addition, students continue to develop and use in reading, writing, and oral communication, a knowledge of vocabulary that includes **roots**, **affixes**, **euphemisms**, and **idioms**.

High school students are a great deal more sophisticated in their use of language than they were in the lower grades. They now produce coherent and well-organized writing that includes a **thesis** and supporting evidence. In implementing the writing process, students compose various types of **texts** including informational (**expository**/persuasive/argumentative) pieces and narratives. They proofread and **edit** for the correct use of the conventions of written **Standard American English**, and they improve the content and development, the organization, and the quality of **voice** in their writing through the use of revision strategies. The ability to develop an idea thoughtfully is a skill that students will use in college and in the workplace.

In carrying out the research process, students in English 1 identify a topic, collect information from primary and **secondary sources**, and present their findings and conclusions in oral, written, and visual formats. In today’s technological world, with the amount of information expanding at an unparalleled rate, students must be adept at accessing information in order to become critical, independent learners, thinkers, and writers. They must be able to determine what particular type of information they need for a specific topic, and they must know how to locate that information efficiently. Students must also be able to evaluate the validity of their sources. In addition, after incorporating their own ideas with the information they have chosen from those sources, they must be able to clearly distinguish that information from their own ideas by providing accurate and complete documentation of the sources they have used.

²² The standards listed in *Appendix A* are for English I or 9th grade English. The National and State Standards for K-12 can be viewed in their entirety at the South Carolina Department of Education website located at <http://ed.sc.gov/agency/Standards-and-Learning/AcademicStandards/old/cso/standards/ela>.

English 1**READING****Understanding and Using Literary Texts**

Standard E1-1 The student will read and comprehend a variety of literary **texts** in print and nonprint formats.

Students in English 1 read four major types of literary **texts**: **fiction**, **literary nonfiction**, **poetry**, and **drama**. In the category of **fiction**, they read the following specific types of **texts**: chapter books, adventure stories, historical fiction, contemporary realistic fiction, young adult novels, science fiction, **folktales**, **myths**, satires, parodies, allegories, and **monologues**. In the category of **literary nonfiction**, they read classical essays, memoirs, autobiographical and biographical sketches, and speeches. In the category of **poetry**, they read narrative poems, lyrical poems, humorous poems, free verse, odes, songs/ballads, and epics.

The teacher should continue to address earlier indicators as they apply to more difficult **texts**.

Indicators

- E1-1.1 Compare/contrast ideas within and across literary **texts** to make **inferences**.
- E1-1.2 Analyze the impact of **point of view** on literary **texts**.
- E1-1.3 Interpret devices of **figurative language** (including **extended metaphor**, **oxymoron**, pun, and **paradox**).
- E1-1.4 Analyze the relationship among **character**, plot, **conflict**, and **theme** in a given literary **text**.
- E1-1.5 Analyze the effect of the **author's craft** (including **tone** and the use of **imagery**, **flashback**, **foreshadowing**, **symbolism**, **irony**, and **allusion**) on the meaning of literary **texts**.
- E1-1.6 Create responses to literary **texts** through a variety of methods (for example, written works, oral and auditory presentations, discussions, media productions, and the visual and performing arts).
- E1-1.7 Compare/contrast literary **texts** from various genres (for example, poetry, **drama**, novels, and short stories).
- E1-1.8 Read independently for extended periods of time for pleasure.

English 1**READING****Understanding and Using Informational Texts**

Standard E1-2 The student will read and comprehend a variety of informational **texts** in print and nonprint formats.

Students in English 1 read **informational (expository/persuasive/argumentative) texts** of the following types: historical documents, research reports, essays (for example, social, political, scientific, historical, natural history), position papers (for example, persuasive brochures, campaign literature), editorials, letters to the editor, informational trade books, textbooks, news and feature articles, magazine articles, advertisements, journals, speeches, reviews (for example, book, movie, product), contracts, government documents, business forms, instruction manuals, product-support materials, and application forms. They also read directions, schedules, and recipes embedded in informational **texts**. In addition, they examine commercials, documentaries, and other forms of **nonprint informational texts**.

The teacher should continue to address earlier indicators as they apply to more difficult **texts**.

Indicators

- E1-2.1 Compare/contrast theses within and across informational **texts**.
- E1-2.2 Compare/contrast information within and across **texts** to draw conclusions and make **inferences**.
- E1-2.3 Analyze informational **texts** for author **bias** (including **word choice**, the exclusion and inclusion of particular information, and unsupported opinions).
- E1-2.4 Create responses to informational **texts** through a variety of methods (for example, drawings, written works, oral and auditory presentations, discussions, and media productions).
- E1-2.5 Analyze the impact that **text elements** have on the meaning of a given informational **text**.
- E1-2.6 Analyze information from **graphic features** (for example, charts and graphs) in informational **texts**.
- E1-2.7 Analyze **propaganda techniques** in informational **texts**.
- E1-2.8 Read independently for extended periods of time to gain information.

English 1

READING

Building Vocabulary

Standard E1-3 The student will use word analysis and vocabulary strategies to read fluently.

The teacher should continue to address earlier indicators as they apply to more difficult **texts**.

Instructional appendixes are provided as the baseline expectations for instruction and are not intended to be all-inclusive documents.

Indicators

- E1-3.1 Use **context clues** to determine the meaning of technical terms and other unfamiliar words.
- E1-3.2 Analyze the meaning of words by using Greek and Latin roots and **affixes**. (See *Instructional Appendix: Greek and Latin Roots and Affixes*.)
- E1-3.3 Interpret **euphemisms** and **connotations** of words to understand the meaning of a given **text**.
- E1-3.4 Spell new words using Greek and Latin roots and **affixes**. (See *Instructional Appendix: Greek and Latin Roots and Affixes*.)

English 1

WRITING

Developing Written Communications

Standard E1-4 The student will create written work that has a clear focus, sufficient detail, coherent organization, effective use of **voice**, and correct use of the conventions of written **Standard American English**.

The teacher should continue to address earlier indicators as they apply to more difficult **texts**.

Instructional appendixes are provided as the baseline expectations for instruction and are not intended to be all-inclusive documents.

By the beginning of high school, students should have mastered the concepts listed below. Review and/or reteaching may be necessary.

Conventions of Grammar	Mechanics of Editing
<p><u>Parts of Speech</u></p> <p>nouns (common and proper nouns, singular and plural nouns, collective nouns, agreement of nouns and their modifiers)</p> <p>pronouns (personal pronouns, nominative and objective-case pronouns, pronoun-antecedent agreement, indefinite pronouns, pronoun case)</p> <p>verbs (past, present, and future verb tenses; past participles of commonly misused verbs; subject-verb agreement; consistent verb tenses; verb formation)</p> <p>adverbs (adverbs of time, place, manner, and degree; irregular adverbs; formation of comparative and superlative adverbs)</p> <p>adjectives (comparative and superlative adjectives, proper adjectives, irregular comparative and superlative adjectives, formation of comparative and superlative adjectives)</p> <p>conjunctions (<i>and, but, or, because, since, yet, until, although, while, neither, nor</i>)</p>	<p><u>Capitalization</u></p> <p>first word of a sentence; the names of people; the pronoun <i>I</i>; proper nouns; the initials of a person’s name; courtesy titles (for example, Mr. and Ms.); days of the week; months of the year; titles of books, poems, and songs; geographic names; holidays; historical and special events; titles of works of art; titles of publications; brand names; proper adjectives; names of organizations; names of ethnic and national groups; names of established religions and languages</p> <p><u>Punctuation</u></p> <p>end punctuation (periods, exclamation points, question marks)</p> <p>commas (to enclose appositives; to separate items in a series; in dates, addresses, and greetings and closings in letters; in compound sentences; between main clauses; to separate introductory clauses and long introductory phrases from the main body of sentences)</p> <p>periods in abbreviations</p>

<p><i>prepositions and prepositional phrases</i></p> <p><i>interjections</i></p> <p><u>Usage</u></p> <ul style="list-style-type: none"> • subject-verb agreement • subject-verb and pronoun-antecedent agreement with collective nouns • main and subordinate clauses • idiomatic usage • placement of modifiers • shifts in construction 	<p><i>apostrophes</i> (contractions, possessive nouns)</p> <p><i>quotation marks</i> (to show dialogue, in direct quotations, to indicate titles of short pieces within longer pieces, underlining or italics of titles of separately published works)</p> <p><i>colons</i></p> <p><i>hyphens</i></p> <p><i>semicolons</i></p> <p><i>ellipses</i></p> <p><i>parentheses</i></p> <p><u>Spelling</u> (high-frequency words; three- and four-letter short-vowel words; words that do not fit regular spelling patterns; basic short-vowel, long-vowel, <i>r</i>- controlled, and consonant-blend patterns; misused homonyms; commonly confused words; words that have blends; contractions; compound words; words with orthographic patterns; words with suffixes and prefixes; multisyllabic words; commonly confused words; double consonant patterns; irregular vowel patterns in multisyllabic words; and words with Greek and Latin roots and affixes)</p>
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Indicators

- E1-4.1 Organize written works using prewriting techniques, discussions, **graphic organizers**, models, and outlines.
- E1-4.2 Use complete sentences in a variety of types (including simple, compound, complex, and compound-complex).
- E1-4.3 Create multiple-paragraph compositions that have an introduction and a conclusion, include a coherent **thesis**, and use support (for example, definitions and descriptions).
- E1-4.4 Use grammatical conventions of written **Standard American English**, including
- subject-verb agreement,
 - pronoun-antecedent agreement,
 - agreement of nouns and their modifiers,
 - verb formation,
 - pronoun case,
 - formation of comparative and superlative adjectives and adverbs, and
 - idiomatic usage.
- (See *Instructional Appendix: Composite Writing Matrix*.)
- E1-4.5 **Revise** writing to improve clarity, **tone**, voice, content, and the development of ideas. (See *Instructional Appendix: Composite Writing Matrix*.)
- E1-4.6 **Edit** written pieces for correct use of **Standard American English**, including the reinforcement of the mechanics previously taught. (See *Instructional Appendix: Composite Writing Matrix*.)

English 1

WRITING

Producing Written Communications in a Variety of Forms

Standard E1-5 The student will write for a variety of purposes and **audiences**.

The teacher should continue to address earlier indicators as they apply to more difficult **texts**.

Indicators

- E1-5.1 Create informational pieces (for example, letters of request, inquiry, or complaint) that use language appropriate for the specific **audience**.
- E1-5.2 Create narratives (for example, personal essays, memoirs, or narrative poems) that use descriptive language to create **tone** and mood.
- E1-5.3 Create descriptions for use in other modes of written works (for example, narrative, **expository**, and persuasive).
- E1-5.4 Create persuasive pieces (for example, editorials, essays, speeches, or reports) that develop a clearly stated **thesis** and use support (for example, facts, statistics, and firsthand accounts).
- E1-5.5 Create technical pieces (for example, proposals, instructions, and process documentation) that use clear and precise language appropriate for the purpose and **audience**.

English 1

RESEARCHING

Applying the Skills of Inquiry and Oral Communication

Standard E1-6 The student will access and use information from a variety of sources.

The teacher should continue to address earlier indicators as they apply to more difficult **texts**.

Indicators

- E1-6.1 Clarify and refine a research topic.
- E1-6.2 Use direct quotations, paraphrasing, or summaries to incorporate into written, oral, auditory, or visual works the information gathered from a variety of research sources.
- E1-6.3 Use a standardized system of documentation (including a list of sources with full publication information and the use of in-text citations) to properly credit the work of others.
- E1-6.4 Use vocabulary (including **Standard American English**) that is appropriate for the particular **audience** or purpose.
- E1-6.5 Create written works, oral and auditory presentations, and visual presentations that are designed for a specific **audience** and purpose.
- E1-6.6 Select appropriate graphics, in print or electronic form, to support written works, oral presentations, and visual presentations.
- E1-6.7 Use a variety of print and electronic reference materials.
- E1-6.8 Design and carry out research projects by selecting a topic, constructing inquiry questions, accessing resources, evaluating credibility, and organizing information.

Appendix B: SAT Rubric

SCORE OF 6

An essay in this category demonstrates **clear and consistent mastery**, although it may have a few minor errors. A typical essay

- effectively and insightfully develops a point of view on the issue and demonstrates outstanding critical thinking, using clearly appropriate examples, reasons, and other evidence to support its position
- is well organized and clearly focused, demonstrating clear coherence and smooth progression of ideas
- exhibits skillful use of language, using a varied, accurate, and apt vocabulary
- demonstrates meaningful variety in sentence structure
- is free of most errors in grammar, usage, and mechanics

SCORE OF 5

An essay in this category demonstrates **reasonably consistent mastery**, although it will have occasional errors or lapses in quality. A typical essay

- effectively develops a point of view on the issue and demonstrates strong critical thinking, generally using appropriate examples, reasons, and other evidence to support its position
- is well organized and focused, demonstrating coherence and progression of ideas
- exhibits facility in the use of language, using appropriate vocabulary
- demonstrates variety in sentence structure
- is generally free of most errors in grammar, usage, and mechanics

SCORE OF 4

An essay in this category demonstrates **adequate mastery**, although it will have lapses in quality. A typical essay

- develops a point of view on the issue and demonstrates competent critical thinking, using adequate examples, reasons, and other evidence to support its position
- is generally organized and focused, demonstrating some coherence and progression of ideas
- exhibits adequate but inconsistent facility in the use of language, using generally appropriate vocabulary
- demonstrates some variety in sentence structure
- has some errors in grammar, usage, and mechanics

SCORE OF 3

An essay in this category demonstrates **developing mastery**, and is marked by ONE OR MORE of the following weaknesses:

- develops a point of view on the issue, demonstrating some critical thinking, but may do so inconsistently or use inadequate examples, reasons, or other evidence to support its position
- is limited in its organization or focus, or may demonstrate some lapses in coherence or progression of ideas
- displays developing facility in the use of language, but sometimes uses weak vocabulary or inappropriate word choice
- lacks variety or demonstrates problems in sentence structure
- contains an accumulation of errors in grammar, usage, and mechanics

SCORE OF 2

An essay in this category demonstrates **little mastery**, and is flawed by ONE OR MORE of the following weaknesses:

- develops a point of view on the issue that is vague or seriously limited, and demonstrates weak critical thinking, providing inappropriate or insufficient examples, reasons, or other evidence to support its position
- is poorly organized and/or focused, or demonstrates serious problems with coherence or progression of ideas
- displays very little facility in the use of language, using very limited vocabulary or incorrect word choice
- demonstrates frequent problems in sentence structure
- contains errors in grammar, usage, and mechanics so serious that meaning is somewhat obscured

SCORE OF 1

An essay in this category demonstrates **very little** or **no mastery**, and is severely flawed by ONE OR MORE of the following weaknesses:

- develops no viable point of view on the issue, or provides little or no evidence to support its position
- is disorganized or unfocused, resulting in a disjointed or incoherent essay
- displays fundamental errors in vocabulary
- demonstrates severe flaws in sentence structure
- contains pervasive errors in grammar, usage, or mechanics that persistently interfere with meaning

Essays not written on the essay assignment will receive a score of zero.

Appendix C: Assessment #1

8/14

Write a letter to Mrs. Westbrook addressing the following topics. Be honest and thoughtful in your responses. Use your best writing and paragraph format.

1. What are your strengths as a thinker, a writer, and a reader? What kind of student are you?
2. What are your goals for this class? What do you need help on in English? Be as specific as possible.
3. What have been some challenges in past classes? What has hindered your learning?
4. What is the best experience you have had with literature or with learning? Describe that experience and explain why it was beneficial.

Appendix D: Assessment 2

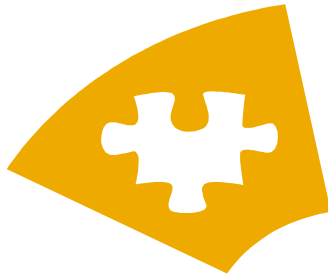
Process:
Concrete Details (Salient Features)

Metaphorical Thinking
Concrete:

Abstract:

Similarities to other situations:

Metaphor Defined:



Assertions and Extensions:

Objects that could be metaphors for you:

List one or two ideas – bring in the object and/or photo of the object. Write at least a one paragraph explanation of why that object illustrates you.

Appendix E: Assessment 3

Read the poem “The Road Not Taken” by Robert Frost. Complete the following questions in as much detail as possible.

1. What is this poem’s subject? What is the poet’s attitude toward the subject? Why do you say that?
2. What does this poet seem to be communicating to you?
3. What lines stand out to you and how do they fit into meaning?
4. What do you think of the poet’s message? What observations can you make? Can you make a personal connection to this poem?

Appendix F: Assessment #4 HSAP Release Items

SESSION 2

Read the selection below and answer questions 15-24. Then answer Constructed Response #1.

Art Imitating Life

Bonsai is the ancient art of growing and cultivating miniature trees. Although the art of Bonsai originated in China around 225 B.C.E., it is quite popular today in other countries of the Far East and Western nations. The word "Bonsai" translates as "tree planted in a small dish" and is used to describe a miniaturized version of a natural tree. As an art form, Bonsai is unique because it involves a living tree and, thus, can never be a finished work. Caring for such a miniature tree involves close observation of its progress. In doing so, a person may find a level of peace, as well as a connection with nature and the environment. Taking good care of the Bonsai tree is critical if it is to remain healthy. More than anything, the care of the Bonsai should be consistent.

Since there are many different kinds of Bonsai, including Juniper, elm, rosemary, Japanese maple, beecher, and gardenia, each tree needs to be considered individually. After having chosen the type of tree, one must think about where it will grow best. Some Bonsai trees thrive indoors near a sunny window, while others do well outside in a shaded area. Typically, Bonsai trees do better when exposed to adequate natural light, but artificial lighting can also be used in darker conditions.

Certain kinds of Bonsai, particularly those of coniferous and deciduous varieties, will need a dormant period during the winter; in fact, many Bonsai trees will not survive the winter unless it is fairly cold. These types of Bonsai do better in a cool room, basement, or even a garage, provided some light is available. As one might expect, a Bonsai tree will die if left in complete darkness for a long period of time.

In addition to exposing Bonsai to sufficient light, the tree will also need ample water. Since each tree is different, some need watering daily, while others have to be watered only every two or three days. A Bonsai is watered by submerging it for ten minutes in a sink with the water about a half an inch over the rim of the pot. The Bonsai

- 23 - Go on

SESSION 2

should not be allowed to become too dry. When the weather becomes very hot, the Bonsai tree needs enough water to keep both the soil and moss damp. Spritzing or spraying the leaves periodically with a light mist of water is helpful for maintaining a healthy tree full of green leaves or needles.

Shaping and trimming the Bonsai is also a very important part of care and maintenance. One must trim the Bonsai twice a year (at least once before spring). The Bonsai can be nipped and pinched at any time to maintain its form. When purchased, some Bonsai trees are wound in wire, which helps foster the tree's unique and striking shape. This wire should be removed after one year so that the tree can continue to grow properly.

Bonsai trees should be repotted into larger pots every three to five years, but are usually kept at a height between six and twenty inches. Visually, they should resemble their larger counterparts thriving in nature.

One additional consideration when buying the first Bonsai is where to purchase it. A reputable dealer is a much better choice than a store that doesn't specialize in Bonsai. If one chooses wisely, the dealer will be able to assist with the care of the tree and answer any questions that may arise.

- 24 - Go on

SESSION 2

15. Which statement best expresses the author's main point?

A. Bonsai originated in China.
B. There are many different kinds of Bonsai.
C. Caring for a Bonsai requires thought and effort.
D. Bonsai are miniaturized versions of natural trees.

C

16. What feature of the selection best illustrates that it is informational?

A. It explains how to grow a Bonsai tree.
B. It calls Bonsai an ancient art form.
C. It persuades people to grow Bonsai trees.
D. It is written by a Bonsai dealer.

A

- 25 - Go on

1/3

SESSION 2

Constructed Response #1

Write your response in your test booklet. Be sure to use only the lines provided below. Do not write beyond the lines or in the margins.

Decide whether you would enjoy the hobby of Bonsai. Using information from the selection, explain why or why not.

As you write, be sure to support your response with evidence from the selection.

KCH00000

I would not enjoy the hobby of Bonsai because I am not interested in trees or in art, actually I am not interested in how many different kind of Bonsai are there, but they look well enough or be interested why the called it Bonsai why it is not another name.

- 29 - Go on

Rachin

SESSION 2

Constructed Response #1

Write your response in your test booklet. Be sure to use only the lines provided below. Do not write beyond the lines or in the margins.

Decide whether you would enjoy the hobby of Bonsai. Using information from the selection, explain why or why not.

As you write, be sure to support your response with evidence from the selection.

I don't think I would enjoy it because it is not interesting to me. I just go and see the ones and maybe buy photos that I will not really be interested in. I have seen in TV or search for it in the internet, but spend money for buying plants.

I would like to go and see them. I've read about it, and it seems like very nice to see specially for farmers and it has many kinds of bonsai. Like cherry, maple, juniper, Japanese maple and others. If I could do make grow in my country, that'll be wonderful, and take photos and see that'll be cool too, and people will be interested to visit China and see it.

Myu

- 29 - Go on

SESSION 2

Constructed Response #1

Write your response in your test booklet. Be sure to use only the lines provided below. Do not write beyond the lines or in the margins.

Decide whether you would enjoy the hobby of Bonsai. Using information from the selection, explain why or why not.

As you write, be sure to support your response with evidence from the selection.

I wouldn't like it because it is simply too much work and thought into it, like you have to keep the plant saturated and I would forget that and change pots I wouldn't notice it needs to be change until the tree has gotten so big that it cracks the pot from the inside. So my answer would simply be no.

- 29 - Go on

Appendix G: HSAP RUBRIC

SCORE	CONTENT/DEVELOPMENT	ORGANIZATION	VOICE	CONVENTIONS
4	<ul style="list-style-type: none"> • Presents a clear central idea about the topic • Fully develops the central idea with specific, relevant details • Sustains focus on central idea throughout the writing 	<ul style="list-style-type: none"> • Has a clear introduction, body, and conclusion. • Provides a smooth progression of ideas throughout the writing. 		<ul style="list-style-type: none"> • Minor errors in standard written English may be present.
3	<ul style="list-style-type: none"> • Presents a central idea about the topic • Develops the central idea but details are general, or the elaboration may be uneven • Focus may shift slightly, but is generally sustained 	<ul style="list-style-type: none"> • Has an introduction, body, and conclusion. • Provides a logical progression of ideas throughout the writing. 	<ul style="list-style-type: none"> • Uses precise and/or vivid vocabulary appropriate for the topic • Phrasing is effective, not predictable or obvious • Varies sentence structure to promote rhythmic reading • Strongly aware of audience and task; tone is consistent and appropriate 	<ul style="list-style-type: none"> • Errors in standard written English may be present; however, these errors do not interfere with the writer’s meaning.
2	<ul style="list-style-type: none"> • Central idea may be unclear • Details may be sparse; more information is needed to clarify the central idea • Focus may shift or be lost causing confusion for the reader 	<ul style="list-style-type: none"> • Attempts an introduction, body, and conclusion; however, one or more of these components could be weak or ineffective. • Provides a simplistic, repetitious, or somewhat random progression of ideas throughout the writing. 	<ul style="list-style-type: none"> • Uses both general and precise vocabulary • Phrasing may not be effective, and may be predictable or obvious • Some sentence variety results in reading that is somewhat rhythmic; may be mechanical • Aware of audience and task; tone is appropriate 	<ul style="list-style-type: none"> • A pattern of errors in more than one category (e.g., capitalization, spelling, punctuation, sentence formation) of standard written English is present; these errors interfere somewhat with the writer’s meaning.
1	<ul style="list-style-type: none"> • There is no clear central idea • Details are absent or confusing • There is no sense of focus 	<ul style="list-style-type: none"> • Attempts an introduction, body, and conclusion; however, one or more of these components could be absent or confusing. • Presents information in a random or illogical order throughout the writing. 	<ul style="list-style-type: none"> • Uses simple vocabulary • Phrasing repetitive or confusing • There is little sentence variety; reading is monotonous • There is little awareness of audience and task; tone may be inappropriate 	<ul style="list-style-type: none"> • Frequent and serious errors in more than one category (e.g., capitalization, spelling, punctuation, sentence formation) of standard written English are present; these errors severely interfere with the writer’s meaning.
B	Blank			
OT	Off Topic			
IS	Insufficient amount of original writing to evaluate			
UR	Unreadable or illegible			

Appendix H National Reporting Service ELL Functioning Level Table²³

Beginning ELL

Speaking and Listening: Individual can understand common words, simple phrases, and sentences containing familiar vocabulary, spoken slowly with some repetition. Individual can respond to simple questions about personal everyday activities, and can express immediate needs, using simple learned phrases or short sentences. Shows limited control of grammar.

Reading and Writing: Individual can write some simple sentences with limited vocabulary.

Meaning may be unclear. Writing shows very little control of basic grammar, capitalization and punctuation and has many spelling errors

Low Intermediate ELL

Speaking and Listening: Individual can understand simple learned phrases and limited new phrases containing familiar vocabulary spoken slowly with frequent repetition; can ask and respond to questions using such phrases; can express basic survival needs and participate in some routine social conversations, although with some difficulty; and has some control of basic grammar

Reading and Writing: Individual can read simple material on familiar subjects and comprehend simple and compound sentences in single or linked paragraphs containing a familiar vocabulary; can write simple notes and messages on familiar situations but lacks clarity and focus. Sentence structure lacks variety but shows some control of basic grammar (e.g., present and past tense) and consistent use of punctuation (e.g., periods, capitalization).

Advanced ELL

Speaking and Listening: Individual can understand and communicate in a variety of contexts related to daily life and work. Can understand and participate in conversation on a variety of everyday subjects, including some unfamiliar vocabulary, but may need repetition or rewording. Can clarify own or others' meaning by rewording. Can understand the main points of simple discussions and informational communication in familiar contexts. Shows some ability to go beyond learned patterns and construct new sentences. Shows control of basic grammar but has difficulty using more complex structures. Has some basic fluency of speech.

Reading and Writing: Individual can read moderately complex text related to life roles and descriptions and narratives from authentic materials on familiar subjects. Uses context and word analysis skills to understand vocabulary, and uses multiple strategies to understand unfamiliar texts. Can make inferences, predictions, and compare and contrast information in familiar texts. Individual can write multi-paragraph text (e.g., organizes and develops ideas with clear introduction, body, and conclusion), using some complex grammar and a variety of sentence structures, but may make some grammar and spelling errors. Individual uses a range of vocabulary.

²³ The National Reports System for Adult Education is administered by the Division of Adult Education and the US Department of Education. They publish the ESL Functioning Level Table meant to provide benchmarks for the educational level of ELL. Those benchmarks are published in full at the organization's web site at www.nrsweb.org.

Appendix I: Student Samples of Summative Assessment

Part I Unseen Prose 30 points

Read the following passage carefully, and then answer all the questions.

In this passage the narrator returns to an old house in which he hid something several years before. He thinks that the house is empty and deserted.

THE HIDDEN BOX

I opened the iron gate and walked as softly as I could up the weed-tufted gravel drive. My mind was strangely empty. I felt no glow of pleasure and was unexcited at the prospect of becoming rich. I was occupied only with the mechanical task of finding a black box.

The front door was closed and set far back in a very deep porch. The wind and rain had whipped a coating of gritty dust against the panels and deep into the crack where the door opened, showing that it had been shut for years. Standing on a derelict flower-bed, I tried to push open the first window on the left. It yielded to my strength, raspingly and stubbornly. I clambered through the opening and found myself, not at once in a room, but crawling along the deepest window-ledge I had ever seen. After I had jumped noisily down upon the floor, I looked up and the open window seemed very far away and much too small to have admitted me.

The room where I found myself was thick with dust, musty and empty of all furniture. Spiders had erected great stretchings of their webs about the fireplace. I made my way quickly to the hall, threw open the door of the room where the box was and paused on the threshold. It was a dark morning and the weather had stained the windows with blears of grey wash which kept the brightest part of the weak light from coming in. In the far corner of the room was a blur of shadow. I had a sudden urge to have done with my task and be out of this house forever. I walked across the bare boards, knelt down in the corner and passed my hands about the floor in search of the loose board. To my surprise I found it easily. It was about two feet in length and rooked hollowly under my hand. I lifted it up, laid it aside and struck a match. I saw a black metal cash-box nesting dimly in the hole. I put my hand down and crooked a finger into the loose reclining handle, but the match suddenly flickered and went out and the handle of the box, which I had lifted up about an inch, slid heavily off my finger. Without stopping to light another match, I thrust my hand into the opening and, just when it should be closing about the box, something happened.

I cannot hope to describe what it was but it had frightened me very much. It was some change which came upon me or upon the room, indescribably subtle, yet momentous. It was as if the daylight had changed with unnatural suddenness, as if the temperature had altered greatly in an instant or as if the air had become twice as rare or twice as dense as it had been in the twinkling of an eye. Perhaps all of these, or other things, happened together, for all my senses were bewildered all at once and could give me no explanation. The fingers of my right hand, thrust in the opening in the floor, had closed mechanically, found nothing at all, and came up again empty. The box had gone!

I heard a cough behind me, soft and natural, yet more disturbing than any sound that could ever come upon the human ear. That I did not die of fright was due, I think, to two things: the fact that my senses were already disarranged and able to interpret to me only gradually what they had perceived, and also the fact that the utterance of the cough seemed to bring with it some more awful alteration in everything. It was as if the universe stood still for an

1. Which word in the first sentence of the passage shows that the narrator did not want to be heard? **softly** from "and walked as softly as I could".

2. By referring to what the narrator says in paragraph 1, explain what might be found surprising about his state of mind. **He felt no glow of pleasure and was unexcited at the prospect of becoming rich, he was just going to find it.**

3. Give two words from the second paragraph which suggest that the window was difficult to open. **raspingly** and **stubbornly**.

4. Where was the cash box hidden, and how did the writer find it? **It was hidden under a loose board and was found by crawling along the window ledge.**

5. Explain, using your own words, the change which the writer felt had come over the room and how this affected his state of mind in paragraph 4. **He felt a sudden urge to have done with his task and be out of the house forever.**

6. Why do you think the writer uses the word "stretchings" (line 13) to describe the spiders' webs? **Because they were very thin and stretched over the room.**

7. Re-read lines 9-25 (from "After I had jumped noisily down..." to "...something happened"). Choose three details which the writer uses to suggest a sense of uneasiness and fear. Explain how each of these details suggests this sense. **1. "The room where I found myself was thick with dust, musty and empty of all furniture." 2. "Spiders had erected great stretchings of their webs about the fireplace." 3. "I had a sudden urge to have done with my task and be out of this house forever."**

8. Explain, using your own words, what the writer means by "my senses were already disarranged" (line 36). **He had already got a right ceiling and was not looking at things as they really were.**

9. Explain, using your own words, what the writer means by "with a mild but unwavering interest" (line 43). **He is a little interested in the matter.**

10. Re-read lines 1-10, and then write a summary of what you have learnt about the appearance of both the outside and inside of the house. **The house had an iron gate into the road...**

(Total for Question 1: 30 marks)

g. "I laid up at the window... He sees things differently like the rise and distance of mountains, etc. of being nervous. This also means he is nervous?"

h. "I had my way entirely to the hall" - He is in a hurry to have done with my task and be out of this house. He wants to finish and leave fast, scared?

i. The house had an iron gate into the road...

The SEVEN AGES OF MAN

JACQUES:
All the world's a stage,
And all the men and women merely players;
They have their exits and their entrances;
And one man in his time plays many parts,
His acts being seven ages. At first the infant,
Mewling and puking in the nurse's arms.

2. And then the whining school-boy, with his satchel,
And shining morning face, creeping like snail
Unwillingly to school; And then the lover,
Sighing like furnace, with a woeful ballad
Made to his mistress' eyebrow; Then a soldier,
Full of strange oaths, and bearded like the pard,
Jealous in honour, sudden and quick in quarrel,
Seeking the bubble reputation
Even in the cannon's mouth; And then the justice,
In fair round belly with good capon lin'd,
With eyes severe, and beard of formal cut,
Full of wise saws and modern instances;
And so he plays his part; The sixth age shifts
Into the lean and slipper'd pantaloon,
With spectacles on nose and pouch on side,
His youthful hose well sav'd, a world too wide
For his shrunken shank; and his big manly voice,
Turning again toward childish treble, pipes
And whistles in his sound. Last scene of all,
That ends this strange eventful history,
Is second childishness and mere oblivion,
Sans teeth, sans eyes, sans taste, sans everything.

6 mewling; whining.

10 woeful ballad (ballad): sad, sentimental song.

12 pard: leopard.

16 with... lin'd: full of chicken.

18 saws... instances: old proverbs and examples that illustrate how they still apply.

20 pantaloon (pantaloons): foolish old man (from the name of a stock character in Italian comedies).

24 treble (treble): a high-pitched voice.

27 oblivion (oblivion): complete forgetfulness.

1. The poem is called a **dramatic monologue** which is a form of poetry in which a speaker is a character in a play addressing another character. How would you describe the speaker of this poem? Give at least two reasons for your response. **Very analytical, trying to catalogue a life in this poem. He writes about as he sees the stages of life and then describes them. He writes like a character in a play.**

2. What is the tone of this poem? Give at least two reasons for your response. **I think the tone of the poem is the politeness of it all. He says all these things but doesn't say them in a polite way. It's all about the old man in the end, in the hands of knowledge. It's not formal, it's all forgotten and it's form. (3 points)**

3. Identify the rhythm and meter of the following line, and explain why Shakespeare used that all other form. (3 points)
"Mewling and puking in the nurse's arms" (That is a very unpolished phrase)
It is easier to remember (memorise) (wouldn't he be though)

4. The speaker introduces the controlling metaphors in lines 1 & 2 - what are they? (2 points)
"They have their exits and their entrances" - everything that started and the world in some way (however small)

5. List the "seven ages of man" the speaker describes. (Quote the lines directly. (7 points))
**1. "At first the infant"
2. "And then the whining school-boy"
3. "And then the lover"
4. "Then a soldier"
5. "And then the justice"
6. "The sixth age shifts into the lean and slipper'd pantaloon"
7. "Last scene of all" (death)**

6. In your own words explain the meaning of the final line. Then explain why Shakespeare chooses to end the poem in this way. (Hint - think of the structure - where he began - and why it is ironic to end here with these words) (5 points) **I think he ends with the start as that was very out in reverse, first we start with the world and then we come anywhere. We slowly go backwards with looking mostly, feet, eye sight and then we go away entirely. It adds to the journey to everything that...**

Part IV. Independent Reading - 9 points for Content x 2 = 18 points. 7 points for Structure - 25 total

Read the attached passage from the final section of your novel. Then, in a well-written and intelligent paragraph of at least 10 lines, explore the language and rhetoric of the passage and explain how the author reveals his tone toward the characters. You should cover the following:

- the situation and explain what is happening in the scene. (Here you should demonstrate your knowledge of the novel as a whole and how this scene fits into the plot) (3 points)
- the tone of the characters included in the passage. (Here you should demonstrate your interpretation of the characters based on how they are presented in the passage and the book as whole) (3 points)
- And identify/explain two places where that tone is revealed in the language. (HOW? HOW? HOW?) (Here you should demonstrate your ability to interpret language as it is related to purpose in the passage) (3 points)

George In this passage the speaker is us. The moment when George and Lennie is ~~the~~ ^{the} ~~was~~ ^{was} over, George is a small guy, quite brave, has a good brain, well grown brain, but Lennie has Big Body is slow, children brain, he has not well grown mind. Lennie and George worked in a place with their boss, the son of the boss called Curly Carlson he hired Slim Swallower ~~them~~ ^{and} George ~~worker~~ and Lennie worked in there. They wanted have a farm.

Here's a summary:

PART III. Terms - 20 points

1. The following passage uses several rhetorical devices, including imagery and repetition. Underline the words that you think illustrate imagery. Then circle the words you think illustrate the use of repetition. Then explain the effect of those two devices on the meaning of this passage. (4 points)

I have often been awakened at the dawn of day by the most heart-rending shrieks of an old aunt of mine, whom he used to tie up to a post, and whip upon her naked back till she was literally covered with blood. No words, no tears, no prayers, from his gory victim, seemed to move his iron heart from its bloody purpose. The louder she screamed, the harder he whipped; and where the blood ran fastest, there he whipped the longest. He would whip her to make her scream, and whip her to make her hush; and not until overcome by fatigue, would he cease to swing the blood-blotted cowskin.

The effect of repeating the word "whipped" and "blood" gives us a clearer image of what it was like if you had been there and you could see it. The imagery also emphasizes the pain and the suffering of the victim.

- Label the figure to illustrate Aristotle's Rhetorical Triangle. Then explain why this idea is so key to your understanding of literary texts. (4 points)

Speaker: Curly Carlson
Audience: Lennie and George
Message: They should work hard and have a farm.

- Explain the difference between the denotation and the connotation of a word. (2 points)

Denotation is the definition you find in a dictionary. Connotation is the associations you have with a word.

- Why is it important to be comfortable with ambiguity when reading literature? (3 points)

Because a good piece of writing is often layered and 3/3 important to be able to interpret and add your own ideas. Something can be unclear and that is why you have to understand it in your own way.

- Often ask you to explain the structure of the text. What is structure in literary terms and why is it central to your understanding of what you read? (3 points)

The structure is the way in which the author organizes the text. It is important to understand it in order to figure out what the author means and why. If you understand the structure you understand the text and you will be able to understand the author's ideas.

- Identify at least four characteristics of the Shakespearean Sonnet. (4 points)

 - It has fourteen lines (14 = 10 + 4)
 - It is set up in iambic pentameter (natural speech)
 - It has three quatrains (a quatrain is a group of four lines and ideas)
 - Last two lines is a rhyming couplet and is a volta (a turn of ideas)

P1/20

4/4

- (a) Which word in the first sentence of the passage shows that the narrator did not want to be heard? (1) 1/1
- (b) By referring to what the narrator says in paragraph 1, explain what might be found surprising about his state of mind. (3) 3/3
- (c) Give two words from the second paragraph which suggest that the window was difficult to open. (2) 2/2
- (d) Where was the cash box hidden, and how did the writer find it? (2) 2/2
- (e) Explain, using your own words, the change which the writer felt had come over the room and how this affected his state of mind in paragraph 4. (3) 3/3
- (f) Why do you think the writer uses the word 'stretchings' (line 13) to describe the spiders' webs? (2) 2/2
- (g) Re-read lines 9-25 (from 'After I had jumped noisily down...' to '...something happened'). Choose three details which the writer uses to suggest a sense of uneasiness and fear. Explain how each of these details suggests this sense. (6) 6/6
- (h) Explain, using your own words, what the writer means by 'my senses were already disarranged' (line 36). (2) 2/2
- (i) Explain, using your own words, what the writer means by 'with a mild but unwavering interest' (line 43). (2) 2/2
- (j) Re-read lines 1-19, and then write a summary of what you have learnt about the appearance of both the outside and inside of the house. (7) 7/7

(Total for Question 1: 30 marks)

a) The word "softly" shows that the narrator did not want to be heard.

b) He felt no pleasure or excitement but he knows he can become rich by doing this. (3/3)

c) The words "stubbornly" and "clambered" suggest that the window is difficult to open.

d) The box was hidden in a hole in the corner and the writer finds it by stretching his hands out and lighting a match.

e) The room had become cold and dark, and there was no more any comfort found there as it had become hard to be and breath in the room. The writer freezes and does not know what to do or that he is to frighten to do anything.

f) It implies that there are a lot of spider webs and that the house has been left for a long time since the webs are very long. Also, it emphasizes the fear when there are big things to hinder you from something.

g) He describes the room as "dark without light", "empty and empty"; it shows how it isn't a normal room where someone lives and gives a feeling of loneliness and uneasiness. He describes the windows as stained with "bleach of grey wash" and it emphasizes how it's not a nice looking place and feels scary.

Appendix J Permission for Study

FROM: **Ken Baucom** <kenbaucom@nais.org.za> [View details](#) 11/17/08 [Reply](#)
REPLY-TO: Ken Baucom <kenbaucom@nais.org.za>
TO: Craig and Nana Westbrook <craigandnana@gmail.com>
DATE: Mon, Nov 17, 2008 at 1:42 PM
SUBJECT: Re: Westbrook article

Hi Nana,

Sorry to be slow in responding. Last week was report card week, with rain every day, and a constant stream of kids into my office for discipline -- but you know about rainy days.

It certainly sounds as if things are going well in Germany. I hope the girls are having opportunity to expand their German. Good luck with the ski club. That's one of the great advantages of Europe. When I was in Switzerland many years ago, cross country ski trips with Swiss friends was one of the best things I did.

The combination of IGCSE and pre/IB sounds interesting.

Of course you can use the name of NAIS in your article. I would love to see a copy when you get it done. There is certainly a broad need for in-service materials of the type you are planning. So let me know about those when you get them ready.

All is going well here. I think everyone is enjoying the new school premises -- especially middle school with large sunny classrooms. We lost a few students at the beginning of the year, but that has now been made up. There are 21 new kids registered for January. Pre-K, 1 and 1st grade are the largest numbers for them ever; and I think middle school is the largest ever -- or will be in January. With a total of 50 rooms (plus 33 bathrooms) altogether in the school, we have room to expand, although we might move some walls out to join some of the smaller rooms.

Give my regards to the family.