Monitoring The Writing Progress Of English Learners In The Secondary Setting

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MONITORING THE WRITING PROGRESS OF ENGLISH LEARNERS IN THE SECONDARY SETTING

A LITERATURE REVIEW

By

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

Hamline University

St. Paul, Minnesota

May 2015

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To my husband Mike and our children Luke, Claire, and Sam
Thank you for your love and encouragement as I worked to achieve this goal.
Epigraph

Indeed, young people who do not have the ability to transform thoughts, experiences, and ideas into written words are in danger of losing touch with the joy of inquiry, the sense of intellectual curiosity, and the inestimable satisfaction of acquiring wisdom that are the touchstones of humanity.

Vartan Gregorian
ACKNOWLEDGEMENTS

To Sandra, Amy, and Jenny

Thank you for your guidance throughout this journey.
# TABLE OF CONTENTS

Chapter One: Introduction ...........................................................................1
  Overview .................................................................................................4
  Role of the Researcher ...........................................................................5
  Background of the Researcher ...............................................................6
  Bias of the Researcher ...........................................................................8
  Guiding Questions ................................................................................8
  Summary ................................................................................................8
  Chapter Overviews ..............................................................................9

Chapter Two: Literature Review ..................................................................10
  Uniqueness of EL Writers ......................................................................11
  A Growing Population ..........................................................................15
  Language Proficiency ..........................................................................16
  Annual Assessments ...........................................................................18
  Frequent Progress Monitoring ............................................................24
  Summary ...............................................................................................27

Chapter Three: Methodology .................................................................28
  Systematic Review ..............................................................................28
  This Systematic Literature Review ......................................................31
LIST OF TABLES

Table 1 .......................................................... 22
Table 2 .......................................................... 80
Table 3 .......................................................... 84
CHAPTER ONE: INTRODUCTION

It seems like anytime I observe young teens in social situations, many of them have cell phones in their hands, and their thumbs (maybe a finger or two as well) are rapidly skipping across the device as they send messages to their friends. Most often they perform these maneuvers without glancing at the screen. Sending, receiving, reading, and responding to text messages have become part of their culture. Because there appear to be infrequent hesitations between these communication events, I assume both parties involved comprehend each other’s messages.

The teens are participating in writing tasks that meet their immediate needs; abbreviations, punctuation, symbols, whole words, and occasionally complete sentences are sent across the airwaves to communicate a message. At one time the costs associated with cell phones and texting plans meant that they were owned by a small population of affluent young teens. However, with the current availability of texting plans with a variety of prices and payment options, these tools used for written communication are widely used by young teens across socioeconomic groups. In recent years more of the English learners (hereafter, ELs) in my classroom own a cell phone with a texting plan. They have commented to me that at first they struggled with texting, but it did not take them very long to learn how to text with efficiency, and they send hundreds of texts a week. When I asked them how they got to be so good at texting, they responded with
explanations that involved phrases such as *a lot of practice, asking for pointers from friends, making changes as suggested, and sending texts that are like ones they receive.* Other comments included the excitement of sending a message and the anticipation of the response.

These same students, however, struggle with writing for academic purposes in school. They complain that they do not have any ideas to write about, that they work hard for no purpose other than a grade, and that the grade received at the end of the unit only gives them a general idea whether or not they are improving as academic writers. They do not know what aspect of their writing has improved, nor do they have any idea about what they need to work on in order to make their writing better.

As a middle school English language (hereafter, EL) teacher, I know the importance of effective written communication by students. While the motivation of the students for texting is on the surface different from the motivation for writing for a school assignment, they both have a common theme of getting a written message to a receiver who understands it and accepts it. From the comments my students made regarding how they improve their texting, it is apparent that they apply some degree of progress monitoring in this mode of communication. This brings me to wonder how educators can apply progress monitoring to the academic writing of ELs in secondary schools. (Grade configurations associated with educational levels are in flux across the country. For the purpose of this discussion, when I refer to secondary schools or secondary education, I mean grades 6-12, as is the case in the district where I teach.)
The K-12 educational system in the United States has expectations that all students progress in their basic skills throughout their school years. The tests that measure learning are considered as summative because they identify students’ level of proficiency on established state standards. Because the data is only provided once a year, it can aid in evaluating curricula but is inadequate for measuring ongoing student learning or making appropriate decisions regarding daily instruction (Stiggins and DuFour, 2009).

In Minnesota all students have to prove their proficiency in reading and math in order to receive a high school diploma. Previously, there was also a writing assessment required for graduation. The Minnesota Department of Education has withdrawn it although it is expected that it will be reinstituted in the near future. For students who do not show proficiency on the Minnesota Comprehension Assessments (MCAs), tests administered yearly starting in third grade, tools are available to monitor student progress in reading and math throughout the school year. Those who come from homes where a language other than English is spoken and whose assessments indicate that they do not have academic English proficiency have even more required of them. According to the Minnesota Department of Education website, ELs are not required to pass an EL assessment in order to graduate; however, these students are required to take yearly assessments in the four domains of language: reading, writing, listening, and speaking until they reach proficiency as determined by the Minnesota Department of Education.

Due to the limited usefulness of summative assessments, as highlighted above, educators administer well-designed formative assessments to obtain data that can be used immediately to refine their instruction. As the base of the term implies, such assessments
form, or shape, instruction. They shed light on what individual students know, what interventions are needed, and what new skill or concept they are ready for (Stiggins and DuFour, 2009). In recent years progress-monitoring tools, one type of formative assessment, have been developed to assist teachers in measuring student growth in specific areas. Often referred to as curriculum-based measures (CBM or CBMs), these instruments allow teachers to measure student growth throughout the school year and are frequently used to predict achievement levels on state standardized tests. These quick assessments refer to an explicit sequence of activities designed to be reliable and valid (Deno, 2003, Diercks-Gransee et al., 2009, Espin et al., 2008, McMaster and Espin, 2007).

Overview

In the forward to Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High Schools (Graham and Perin, 2007), Vartan Gregorian, President of the Carnegie Corporation of New York, reminds us that the need for humans to show with symbols (and later words) what they feel, think, and undergo dates back to paintings on cave walls that are estimated to be over 25,000 years old. Most students have a practical goal at this point in their lives, passing an assessment in order to be exited from a program, or, ultimately, graduating from high school, for example. Gregorian poetically describes a broader goal for learning to write well.

Indeed, young people who do not have the ability to transform thoughts, experiences, and ideas into written words are in danger of losing touch with the joy of inquiry, the sense of intellectual curiosity, and the inestimable satisfaction
of acquiring wisdom that are the touchstones of humanity. What this means for all of us is that the essential educative transmissions that have been passed along century after century, generation after generation, are in danger of fading away, or even falling silent (p.1).

As an educator of ELs, this is a reminder of the burden as well as the honor of playing a role in furthering our society. Research regarding how to teach writing to ELs is available and continues to expand. As teachers teach writing, they need to know what progress (if any) the scribes in their classroom are making and what kind of feedback students need in order to improve. DelliCarpini (2012) advocates for a “less is more” philosophy. She feels that a few structured positive comments and constructive criticisms help ELs sharpen their focus for subsequent writing assignments. Despite the abundance of research studies and literature on teaching writing, one has to look with more tenacity to find relevant resources for monitoring writing growth; this is particularly true for the EL population in secondary school.

Role of the Researcher

ELs at the mid-size rural middle school where I teach receive EL support in either a team-taught English class or in an EL class, receiving approximately 115 minutes of EL support per week. In both settings, writing is integrated into the curriculum. As school-wide schedule and curriculum adjustments arise, it is likely that changes in the structure of the EL schedule will be made. As I investigated what research had been conducted regarding progress monitoring in writing, I did so with these factors in mind.
Background of the Researcher

One of my fondest classroom memories of middle school is eighth-grade English. I remember feeling frightened of the blank page in front of me and being insecure regarding the quality of my ideas. I knew I was not particularly a good writer, and I did not necessarily like writing as some of my classmates clearly did. Nonetheless, I came to realize in this class that writing was an important skill and one that I would likely use throughout my life. It was not my favorite class, and I do not remember the teacher being stellar in any way. Looking back on it, this aha moment probably resulted from growing maturity and the teacher’s warm and supportive demeanor. I only vaguely remember grammar worksheets and diagramming sentences under the guidance of Mrs. Milroy (pseudonym); however, I clearly remember the satisfaction of completing lengthy writing assignments in her class. We were required to save all of our compositions, and periodically she directed us to pull them out, look at the remarks she had made in the margins, and “keep them in mind” when writing future essays. I recall feeling overwhelmed and wondering what aspect, if any, of my writing had gotten better through the year or if I was still making the same errors. Since no structure was provided for our independent evaluations, I did what all of my classmates did; I scanned the comments, returned the papers to my folder, and got busy with the new assignment. Writing experiences for the rest of my middle and high school years were similar. My experience does not support the philosophy that a few positive comments and constructive criticisms help a writer sharpen his or her focus on future writing assignments (DelliCarpini, 2012). This view is directed toward the EL writer which I am not. However, because I did not
get a sense of what to do differently from assignment to assignment after reading the comments the teacher had made on my papers, I wonder how an EL student would be able to improve his or her writing from the feedback as I have described.

For the past nine years, I have taught EL in small to mid-sized school districts in southern Minnesota. With the exception of one year, I have worked as the only EL teacher in my building, teaching all grades and all proficiency levels. Every year I struggle with how to provide a structured approach to evaluating student writing assignments that is meaningful and helpful to the students. While writing rubrics certainly assist me in making judgments regarding individual assignments, I have yet to arrive at a means to show growth over time for specific elements of students’ writing. Additionally, the results of the rubrics do not help me make decisions regarding the effectiveness of my instruction or plan for future lessons.

At the beginning of every school year, I evaluate the recent standardized EL test scores (formally the TEAE\(^1\), presently the ACCESS for ELLs\(^2\)) for growth from year to year as well as current proficiency level. Historically, the writing scores of students in the secondary school grades in my district are lower than their reading scores. In general, it is the low writing scores that prevent ELs from being exited from EL services. When planning writing units, I always have in the back of my mind that the students will have a variety of writing tasks that will be evaluated according to the WIDA\(^3\) writing rubric.

\(^1\) Test of Emerging Academic English; state of Minnesota required assessment administered to ELs from 2001 to 2011.
\(^2\) Assessing Comprehension and Communication in English State-to-State; state of Minnesota required assessment administered to ELs from 2012-present.
\(^3\) World-Class Instructional Design and Assessment; developer of ACCESS for ELLs
Because of its depth of technical language and its difficult format, this rubric is too cumbersome and has limited use for evaluating daily writing assignments or demonstrating progress throughout the school year.

Bias of the Researcher

I admit to having an inherit bias towards sharing progress data with students. I require my students to maintain a graphic record of things such as the number of minutes read outside of class in a week or quiz scores for a quarter. It appears that they tend to take more responsibility for their learning in these areas with these activities because they can see their growth, or lack of it, with the rise and fall of the points on the graph. I presume that when students are informed of their writing progress on specific skill development in a similar way, they will be more likely to take an increased responsibility for their acquisition of writing proficiency.

Guiding Questions

Because of my desire to discover how my students and I can better assess their writing growth, I have focused on the following questions: What are researchers saying about using progress monitoring in writing, particularly that of secondary school ELs? What monitoring tools are available for measuring the writing progress of these students?

Summary

This research project is a review of the literature available on the topic of progress monitoring of secondary school EL writers. I have examined and commented on what other researchers have discovered about this topic in order to discover answers to the guiding questions stated above. The process used for this literature review is loosely
based on the format of a systematic review. A systematic review, according to Petticrew & Roberts (2006), “… strives to comprehensively identify, appraise, and synthesize all relevant studies on a given topic” (p. 19).

Chapter Overviews

In Chapter One, I identified the purpose and importance of my research study. The framework of the study was briefly discussed as well as the role, postulations, biases and background of the researcher. In Chapter Two, I supply a general review of the literature relevant to progress monitoring in writing for secondary school students. Chapter Three details the research design and methodology that provides direction for this study. In Chapter Four, I describe the results of this study. Chapter Five is a reflection on the data collected. This chapter also contains comments on the restrictions of the study as well as suggestions for further research.
The purpose of this paper is to investigate ways of monitoring the writing progress of secondary school ELs. Writing in a manner that is clear and interesting is a difficult skill for most people whether they are writing in their first language or in a language in which they are working towards proficiency. Language learners who are able to write effectively for academic purposes are more successful in school and are able to be exited from EL services when writing proficiency accompanies proficiencies in speaking, listening, and reading. Because of my desire to discover how my students and I can better assess their writing growth throughout the year, I have focused on the following questions: What are researchers saying about using progress monitoring in writing, particularly that of secondary school ELs? What monitoring tools are available for measuring the writing progress of these students?

The literature review that follows will highlight how EL writers differ from native-speaking writers, provide background information regarding language proficiency, describe annual language proficiency monitoring through summative assessments, and discuss the need for formative assessments and frequent progress monitoring. A discussion regarding the role of student involvement in self-assessments and rubric construction is also included. This review of literature leads to a synthesis of the
research on the topic of monitoring the writing progress of secondary school ELs in
Chapter Four.

Uniqueness of EL Writers

EL writers bring a different set of language skills and life experience to the task of
writing. There is agreement among researchers in this area of written language
production. For example, recently I gave a writing assignment to the ELs in my class.
The students had to reflect on a personal experience in which they had to be resourceful
or brave. The majority of the middle school students in the class were Mexican and had
lived most of their lives in the Untied States. The topics for their stories included figuring
out the best route to walk to school to avoid unsafe areas of town, helping a parent
understand the English spoken by their landlord, and dealing with the stress associated
with a parent’s deportation. One student, who had come to the United States from
Thailand three years previously, wrote a story about a class field trip to the forest when
living in Thailand. Each of the students struggled with translating what they knew in their
first language and figuring out the words they needed to express their thoughts in
English. The latter student wrestled with figuring out the English words *herd* and
*stamped* when describing what a group of wild elephants were doing in the region where
the students were touring. The life experiences and language skills of these students is
unlike that of their classmates who do not have to spend time and energy wrestling with
translations, finding just the right word to express their thoughts (not settling for “close”
or “good enough”), or struggling with a lack of basic skills such as word order of
sentences.
Researchers in second language acquisition do not agree about how ELs handle their uniqueness as writers during the writing process of prewriting, drafting, revising, editing, and publishing. Peregoy and Boyle (2005) claim that the undertaking of the writing process is the same for all writers (p. 208). However, Ortmeier-Hooper (2013) describes ELs as treating each step of the writing process in isolation, resulting in writing that is disjointed. O’Malley and Pierce (1996) argue that EL writers approach some aspects of the writing process differently, but they do not explain what these differences are. Hedgecock (2005) emphasizes the importance of teachers providing clear, explicit instruction and modeling each writing process step.

Silva (1993) examined over 70 empirical studies which are verified by data. Native English (L1) and non-native English (L2) writing was compared in each of the studies. He identified three major aspects of the writing process that were unique to EL writers from high school age to the post-graduate level: planning (pre-writing and drafting), transcribing (generating written text), and reviewing (revising and editing). Although this literature review is intended to focus on secondary school EL writers, the following comments are appropriate because the writing process is an approach to writing that is accessible to both secondary students and to the older students who were the subjects of the studies in Silva’s (1993) report.

Silva (1993) reports that planning, or prewriting and drafting, is a struggle for ELs. When compared to the L1 subjects, the EL participants spent less time with global and local planning as well as goal setting. In these phases of the writing process, global planning involves strategies such as organization using a graphic organizer or developing
an outline, developing ideas, and adding details and descriptions (Ortmeier-Hooper, 2013). Consequently, EL writers generated fewer ideas that were ultimately included in the final product. Related to this, Silva (1993) found that the ELs set fewer writing goals for themselves and struggled with generating sentences with minimal errors.

Transcribing, that is generating written text, is a second process that Silva (1993) reported to be unique for ELs. According to the studies he reviewed, this population of writers takes more time and writes fewer words when compared to their L1 peers. During their writing sessions, some of the behaviors observed were more frequent checking of a dictionary, their outline, or the writing prompt.

In his report of findings, Silva (1993) discusses rereading, reflecting, and revision under the category of reviewing. According to his findings, there is evidence that there is consensus that ELs spend less time reflecting, that is thinking about what they have written, compared to their L1 peers. However, there is no consensus when comparing the amount of time native English students and ELs spend rereading and revising their written work. Silva (1993) found that several researchers reported that ELs concentrated on grammar revisions.

In the same study, Silva (1993) summarizes the findings of several researchers in regards to features of written text, addressing fluency, accuracy, quality, and structure. His report indicates that text length has a strong tendency to be shorter among ELs. Research shows that the number of errors made by EL writers is much greater than that of their peers. Types of errors included misusing morpheme rules in attempting to write grammatically correct sentences and lexico-semantic errors that deal with word meanings
and word relations. Other kinds of errors identified in EL writing more than in the writing of their peers occurred in the use of nouns, verbs, articles, and prepositions. Further, results of studies in this report demonstrate that this population of students needs extended time for revising and editing in order to write to the level of their peers.

Publishing by EL writers, or sharing the final product with others, does not appear to be a concern of the researchers Silva (1993) reported on. This seems reasonable in that this phase of the writing process does not involve actual writing. In the academic setting, this final phase of writing might offer choices for presentation format such as a hand-written or computer-generated essay or final drafts displayed on a bulletin board or bound (stapled) in a booklet.

In light of Silva’s (1993) report and from the reflections of nearly 100 participants of the workshops and classes she has led, DelliCarpini (2012), offers suggestions for addressing the challenges EL writers face. Direct instruction in the elements of the various genres needs to include opportunities for the students to analyze, discuss, and compare and contrast these genres. This will enhance their understanding of the purpose and form of the variety of writing tasks asked of ELs. Responding to their need for more time to work through the writing process, EL teachers and classroom English Language Arts (ELA) teachers can plan together so that the students have structured writing time and support across both classrooms. DelliCarpini (2012) promotes sustained silent reading (SSR) as one strategy to increase vocabulary knowledge of ELs, resulting in enhanced writing fluency. As noted previously, it is expected that EL writing will contain many errors. If the teacher marked each one, the student would likely feel deflated and
require a great amount of encouragement to continue to write. It is suggested that teachers give clear and specific feedback related to three or four aspects of the writing that are good as well as showing students what is not acceptable along with concise explanations (DelliCarpini, 2012).

As writers improve their skills, they move through a number of stages. O’Malley and Pierce (1996) discuss the appropriateness of adapting a rubric developed for native English speakers and writers to a checklist that describes seven stages of EL writing development. Because the development of their writing in English is dependent on several factors (including the level of their writing in another language and the age at which they begin learning English) age ranges for each stage should not be included on the checklist. They also emphasize the importance of describing each stage as the presence (emphasis added) of characteristics rather than their absence.

A Growing Population

The diversity of language use other than English continues to increase in the United States. According to 1980 census data, 11% of the people in the U.S. ages five years and older spoke a language other than English at home. In 2010, this figure had nearly doubled for the same demographic group, rising to 20.6%. Interestingly, the percentage of people in this same demographic group who spoke English at home represented 89% of the population in 1980 and only 79.4% in 2010 (Ryan, 2013).

A 2010-2020 projection indicates that the number of speakers of a language other than English will continue to increase (Shin and Ortman, 2011). While none of this data indicates percentages of school age children represented in each decade year, it stands to
reason that as the percentage of non-English speakers increases, there will be increases in the school-age population. For educators in this country, this means that there will continue to be an increasing number of students who will need English language support in order to reach proficiency in areas of listening, speaking, reading, and writing at school.

Language Proficiency

Defining language proficiency is critical to understanding the instructional needs of ELs. In a literate society, such as the United States, it is generally agreed that language proficiency means being able to “use language effectively and appropriately throughout the range of social, personal, school, and work situations required for daily living in a given society” (Peregoy and Boyle, 2005, p. 34). Some researchers turn to the federal government’s view of ELs. Cook, Boals, and Lundberg, (2011, p. 67) quote the No Child Left Behind (NCLB) Act, which defines an EL in part as a student:

whose difficulties in speaking, reading, writing, or understanding English may be sufficient to deny the individual (i) the ability to meet the states’ proficient level of achievement on state assessments . . .; (ii) the ability to successfully achieve in classrooms where the language of instruction is English; or (iii) the opportunity to participate fully in society.

As indicated by the definition of an EL, in order to succeed, students need to be proficient in social as well as academic English. The next two sections describe these two proficiencies.
Social Proficiency

As stated previously, language proficiency generally means the ability to successfully comprehend language that is heard and read, as well as the ability to speak and write in such a way that others understand the message expressed. Cummins (1980) is credited for what is commonly referred to as the iceberg theory of language acquisition. The observable tip of the iceberg represents social language or Basic Interpersonal Communication Skills (BICS). This is the language that is usually acquired first, allowing the individual to socialize with English speakers and negotiate basic needs. When learning a language, speakers of all ages tend to use just the most important words needed to get their message across. This is referred to as telegraphic speech (Freeman & Freeman, 2004, p. 6). For example, in school, ELs just starting to learn English demonstrate their BICs when they ask a classmate if they can borrow a pencil using only one or two words, with or without the accompanying rise in voice that is expected when asking a question in English. “Pencil?” or “Pencil, please?” Similarly, BICS is employed when a student understands and responds correctly when the teacher asks the students to perform a task such as opening their textbook to a specific page or writing their name on their paper. Studies indicate that it can take as little as six months to acquire this level of proficiency.

Academic Proficiency

Below the surface of the water where the iceberg sits is the larger, hidden area of the iceberg. Here are the language skills of reading, writing, listening, and speaking that are needed for academic purposes, referred to as Cognitive Academic Language.
Proficiency (CALP). As students become more proficient in the language, more and more surface area of the iceberg is exposed, so to speak. For example students demonstrate their CALP when they are required to read an assignment about the habitats of mammals, participate in a discussion on the topic, or write an essay comparing and contrasting the habitats of two of the animals presented in the text. It can take more than five years to reach the oral and writing competency level of their native-speaking peers (Cummins, 1980; Thomas and Collier, 1997). Some researchers contend that it is realistic to expect that an EL needs four to seven years to reach proficiency (Cook et al., 2011).

Annual Assessments

Prior to the 1980’s, accountability for academic growth of students, as shown on test scores, was the responsibility of the students. Then, state and federal governments began holding classroom teachers and schools accountable for student academic progress (Chalhoub-Deville & Deville, 2006 as cited in Deville & Chalhoub-Deville, 2011). The effects of this shift have been disputed. Theoretically, these accountability measures should motivate district leaders, teachers, and students to work harder to show student academic progress and avoid sanctions.

Academic Progress for All

The No Child Left Behind (NCLB) Act of 2001 put teachers and districts on high alert with regard to measures of academic progress of their students. NCLB changed education in a dramatic way due to the federal demand that every student, including ELs and those receiving special education services in public schools across the country, make acceptable progress, starting in grade three. Academic proficiency needed to be reached
within 12 years no matter what the linguistic or cognitive level of the learner was when entering school. This legislation ushered in required statewide testing at grade levels determined by the government and the government’s accompanying standards for acceptable progress (Peregoy and Boyle, 2005 p. 19). Under this legislation, academic progress of all students is monitored and reported to the federal government. States and school districts whose students do not perform at the required levels are penalized (Deville & Chalhoub-Deville, 2011).

At the surface, the results from an assessment in a content area produces information that shows to what degree the student knows and understands that topic. However, vocabulary as well as grammar use and sentence structures are different in each of the content areas. Consequently, academic achievement assessments require students to demonstrate the English language proficiency needed to approach the language of the assessment as well as knowledge of the content it was intended to measure. Undoubtedly, all students are tested for both language and content proficiency when taking a content test. However, ELs are at a marked disadvantage because they are behind their peers in language proficiency (Cook et al., 2011). For example, a math assessment might require test takers to determine which of three trains is the fastest, given the distance and time each of them traveled. To solve the problem, the correct formula has to be used. Equally important, the students have to understand the superlative (fastest) presented in the question. If a student does not understand the important meaning of the morpheme –est, the wrong answer choice might be selected even though the student is proficient in the use of the formula needed to find velocity. Researchers contend that this example
illustrates the need for government officials to recognize that proficiency must be defined in relation to “the language demands of academic classrooms” and that extensive time is required to develop the skills necessary to “meet those demands” (Cook et al., 2011, p. 69).

Some districts have demonstrated student academic growth. However, this improvement may have been achieved because not every student enrolled in the district was assessed. Teachers, schools, and districts have engaged in dishonest practices in order to show adequate student progress and avoid punishment. Tactics employed have included denying grade promotion, excluding students from taking assessments, discouraging enrollment, and encouraging students to drop out of school as well as erroneously reporting key facts and figures. As a result, test scores have been manipulated, resulting in schools being rewarded unjustly. Moreover, the students who needed the support were denied the education that is their right (Heilig and Darling-Hammond, 2008).

Language Proficiency Assessments

In the same year the federal government established NCLB, the state of Minnesota launched its own assessment for ELs. The Test of Emerging Academic English (TEAE) and Minnesota Student Oral Language Observable Matrix (MN SOLOM) provided the state as well as districts, teachers, parents, and students data related to proficiency levels and subsequent progress in the four domains of language: reading, writing, listening, and speaking. The data helped inform EL program and
curriculum decisions as EL teachers and districts strove to help students meet the proficiency standards set by NCLB (T. Cerda, personal communication, March 4, 2014).

As mentioned above, the federal government defines language proficiency in part as “the ability to meet the states’ proficient level of achievement on state assessments.” It should be emphasized that the government does not require ELs to *be proficient* (emphasis added) on state assessments but to have the *ability* (emphasis added) to pass the assessments administered by the state. For the purpose of this review, I concentrate on the academic aspects of these definitions, particularly as they relate to proficiency in writing.

In 2012, Minnesota joined the World-Class Instructional Design and Assessment (WIDA) consortium and replaced the TEAE and MN SOLOM with ACCESS for ELLs (Accessing Comprehension and Communication in English State-to State). This resulted in many changes at all levels involving ELs, from the standards teachers use for instruction to statewide testing and federal reporting. The state benefited by avoiding sanctions because it complied with federal accountability requirements associated with the K-12 EL population (L. Schleicher, personal communication, July 7, 2014).

Under NCLB, states were required to implement a language assessment that met the federal guidelines. Some states designed their own. Some designated an assessment that was available commercially and that met the rigorous standards of the government as their state assessment. The majority of the states developed an assessment collaboratively, as encouraged by the U.S. Department of Education with grants to
support their efforts. The following table identifies the four consortia and the name of the test associated with each (Bunch 2011, p. 329).

Table 1
Consortia and Test Names

<table>
<thead>
<tr>
<th>Consortium Name</th>
<th>Test Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountability Works</td>
<td>Comprehensive English Language Learner Assessment (CELLA)</td>
</tr>
<tr>
<td>LEP SCASS</td>
<td>English Language Development Assessment (ELDA)</td>
</tr>
<tr>
<td>Mountain West</td>
<td>Mountain West Assessment (MWA)</td>
</tr>
<tr>
<td>WIDA</td>
<td>Assessing for Comprehension and Communication in English State-to-State for English Language Learners (ACCESS for ELLs)</td>
</tr>
</tbody>
</table>

For the purpose of uniformity of data available from the assessments, the Secretary of Education operating through the Office of English Language Acquisition (OELA), established that assessments designed to meet the requirements of NCLB needed to have the following features:

- rigorous content standards in comprehension, speaking, listening, reading, and writing
- performance level descriptors specifying multiple levels of achievement
- test items definitively aligned to the rigorous content standards
- test forms of high technical quality
- performance standards established through technically and legally defensible procedures
- state plans establishing progress and attainment goals (Bunch, 2011, p. 327-8)

**Language Assessment for ELs in Minnesota**

EL teachers in Minnesota must understand measures the students in their classrooms will be judged on by the Minnesota Department of Education. This information can help teachers implement lessons that will prepare students for these assessments. ELs in this state are required to show progress in their language proficiency on the ACCESS for ELLs test.

ACCESS for ELLs is a standards-based, summative assessment designed in partnership with the Center for Applied Linguistics. It was developed to monitor the yearly progress of ELs’ acquisition of academic English. Annually, EL K-12 graders in Minnesota (and 32 other states and territories of the United States that are members of the consortium) have their academic skills assessed via this assessment provided by the WIDA consortium. The four domains of language (listening, speaking, reading, and writing) are assessed with test items written from WIDA’s five English Language Proficiency (ELP) standards: Social & Instructional Language, The language of Language Arts, The language of Mathematics, The language of Science, and The language of Social Studies (*WIDA’s 2012 Amplification of the English language development standards, Kindergarten-grade 12*, p.3).

As reported by Bunch (2011), it is important to note that the assessments designed by the consortia exist primarily to meet the requirements of the government in providing data that is reliable and accurate. The tests, however, do not serve the students and their
need for regular, on-going information regarding their academic gains. Likewise, this annual assessment does not provide teachers with what they need to make appropriate adjustments in classroom instruction so that their students can make progress in their skills. In order for those things to be possible, teachers and students need progress-monitoring tools in the form of formative assessments.

Frequent Progress Monitoring

Curriculum-Based Measures

The once-a-year snapshot of the language proficiency of students, as described above, may not inform students and teachers in detail about the progress the students have made throughout the year. One tool available for meeting this need is a Curriculum-Based Measurement (CBM). In response to the need for valid and reliable data that could be obtained quickly and efficiently at the local level, CBMs were developed. According to Deno (2003), CBMs are products of a research and development study directed by the University of Minnesota Institute for Research on Learning Disabilities (IRLD). Reading, spelling, and written expression can be assessed throughout the year using carefully defined procedures. This multi-dimensional approach for assessing reading with curriculum-based measures offers hope for ELs, according to Sandberg and Reschly (2011). Additionally, Hosp and Hosp (2003) comment on the use of monitoring the math, reading, and spelling progress of students using CBM.

Curriculum-Based Measures in Writing (CBM-W) have received relatively little attention. An early study examined written expression of middle school students in one school, none of whom was identified as EL. Their findings indicate that the proficiency
of a middle school writer can be assessed by correct minus incorrect word sequences. The researchers admit that their study is preliminary because of several of its limitations (Espin, Shin, Deno, Skare, Robinson, Benner, 2000). A literature study by McMaster and Espin (2007) examined a host of studies across grade levels. Their evaluation does not provide a distinct reference to ELs, however. Results of a human-subject study questioning whether high school writing could be adequately assessed with CBMs was reported by Diercks-Gransee, Weissengurger, Johnson, and Christensen (2009). While their study participants were not reported to be ELs, the research has the promise of applications for them.

The type of writing prompt used determines the ideal length of timed writing sessions for high school ELs (Campbell, Espin, and McMaster, 2013). This study, which I will expand upon in Chapter Four, examined writing samples that were scored for nine elements using CBM-W. It also sheds light on the advantage of focusing on non-percentage measures instead of percentage measures as well as other factors.

Chapter Four elaborates on these studies and the possible use of CBM-W for monitoring the progress of the writing of ELs.

Rubrics

Formative and summative assessments with the use of a rubric have been accepted in education for many years. As discussed above, EL students’ writing skills are assessed with a rubric designed by the WIDA Consortium. Several years ago, the National Center for Education Evaluation and Regional Assistance published a guide (and offered professional development) for assessing student writing with a rubric in five
to seven predetermined traits of writing. This report by Coe, Hanita, Nishioka, and Smiley (2011) discusses the effect of the 6+1 Trait Writing model on a group of 5th grade writers. Their research showed that use of the model had a statistically significant impact on the writing scores of the students. This researcher was not able to locate any studies that reported on the effect of the 6+1 Trait Writing rubric on ELs.

Andrade (2007), Andrade, Du, and Mycek (2010), Goodrich (1996) and O’Malley and Pierce (1996), advocate for getting students actively involved in designing the rubrics that will be used to assess their work. Al-Jarf (2011) promotes the use of computer-designed rubrics that teachers and students develop together. The craft of writing rubrics as a teaching team and having them translated is presented by Meyer, Young, and Solera (2012). Implementing a system in which teachers who teach the same material work together to create common formative and summative assessments takes commitment and a willingness to work as a team (DuFour, DuFour, Eaker, and Many, 2006).

FLARE

Since few research studies that address the secondary EL writer are available, it seems clear that research in this area needs to be expanded. Likewise, there is a need for valid and reliable tools that classroom teachers can use to conduct ongoing formative assessments. The WIDA consortium is in the process of developing such a resource, Formative Language Assessment Records for ELLs (FLARE). FLARE began in 2009 as a five-year project to create a valid and reliable formative assessment system for secondary students and teachers. The purpose of the FLARE tools, according to the FLARE brochure, is “to improve the learning and achievement of ELL students and to
provide teachers with practical tools for keeping ELLs on track for academic success and post secondary opportunities” (WIDA-FLARE). The FLARE resources and formative progress-monitoring tools remain in the development stage (P. White, personal communication, July 9, 2014).

Summary

This chapter has presented a wide lens of research on monitoring the progress of EL writers with overviews on the following topics: the uniqueness of EL writers, language proficiency, annual assessments, and finally, frequent progress monitoring.

Research in the area of monitoring the writing progress of secondary school ELs is meager. As a researcher, I am obligated to dig deeper and wider while restricting the focus of this literature review to the following questions: What are researchers saying about using progress monitoring in writing, particularly that of secondary school ELs? What progress-monitoring tools are available for measuring the writing of these students? The next chapter describes the methodology used to collect data for this literature review.
CHAPTER THREE: METHODOLOGY

This literature review is designed to explore progress monitoring for secondary school EL writers. The research is guided by the following questions: What are researchers saying about using progress monitoring in writing, particularly that of secondary school ELs? What monitoring tools are available for measuring the writing progress of these students? This chapter presents the definition, purpose, and goals of a systematic review. An explanation of different methods of review is included. The remainder of the chapter explains how this systematic review was conducted.

Systematic Review

The objective of a systematic review is to carefully locate, evaluate, and synthesize all studies relevant to the theme or question(s) of the researcher. The intention of a systematic review is to gather the evidence that is preeminent and deliver an unbiased, inclusive summary. Petticrew and Roberts (2006, p.10) add that with the systematic review it is appropriate to include quality unpublished literature. A meta-analysis review, as described by the authors, results in a solitary quantitative estimate as a result of the application of a precise statistical method that synthesizes the outcomes of several studies. An alternative to the meta-analysis review is the narrative review which aims at synthesizing facts or theories, resulting in a written summary of the disparities among the primary studies investigated. D. Gough (2007) is careful to describe a
systematic review as rigorous with a very clear procedure and purpose. As a result, the quality and significance of what is discovered in the research will be without bias, apparent or hidden. Given this, Gough (2007, p. 216-217) identifies six methods of systematic and non-systematic reviews. This literature review is an explicit systematic review, which will be explained in the next section.

By definition, a systematic review demands a clear and purposeful procedure. Researchers agree that such studies permit variation in approach as long as the end result is an unbiased, thorough synopsis of the information available. The key to systematic reviews is a transparent plan, beginning with a question or hypothesis that is clearly stated. Such a review must also have an explicit plan for gathering evidence, making decisions for inclusion and exclusion of studies, evaluating the information gathered, synthesizing it, and finally, sharing the results of the study with its intended audience (Gough, 2007; Petticrew & Roberts, 2006). Gough (2007. P. 218) provides a simple flowchart in two distinct phases. During the first phase, “Systematic map of research activity”, five steps are suggested.

Formulate review question and develop protocol

Define studies to be considered (inclusion criteria)

Search for studies (search strategy)

Screen studies (check that studies meet inclusion criteria)
Describe studies (systematic map of research)

Three additional steps make up the second phase, “Systematic synthesis of research”.

Appraise study quality and relevance

Synthesize findings (answering review question)

Communicate and engage

Petticrew and Roberts (2006, p. 284-287) suggest a systematic review that begins with the researcher answering the following questions:

Question 1. Is a systematic review actually needed?

Question 2. Do you have the resources?

They go on to say that only if the answers to the questions are “yes” can the review be carried out.

Designers of a systematic review, as well as readers of them, whether these reviews are intended for publication in a professional journal or not, should be mindful that there is no assurance of their degree of robustness or relevance. Oxman and Guyatt (1991) recommend checking the study against valid questions as a means of assessing the quality of systematic reviews.

1. Are the review’s inclusion and exclusion criteria described and appropriate?

2. Is the literature search likely to have uncovered all relevant studies?

3. Did the reviewers assess the quality of the included studies?
4. Did the reviewers take study quality into account in summarizing their results?

5. If there was a statistical summary (meta-analysis), was it appropriate (that is, were the studies similar enough to be statistically synthesized)?

6. Was study heterogeneity assessed?

7. Were the reviewers’ conclusions supported by the results of the studies reviewed? (Petticrew and Roberts, 2006, p. 296)

This Systematic Literature Review

There are several types of systematic reviews. This literature review is referred to as an explicit systematic review because the seven steps followed are sequential, explicit, and provide a thorough investigation into studies related to the research questions (Gough, 2007, p. 216). The steps are as follows:

1. Review questions formulated
2. Inclusion and Exclusion criteria determined
3. Literature search conducted
4. Results of literature search managed
5. Study quality criteria determined
6. Studies synthesized and heterogeneity judged
7. Discoveries disseminated

The first five steps of this systematic literature review will be discussed in this chapter. Step six, studies synthesized and heterogeneity judged, will be discussed in Chapter Four: Results. Chapter Five: Discussion and Conclusion, will discuss what was
discovered through this literature review and will offer some possibilities for implementation of the findings in secondary EL classrooms as well as suggestions for future studies. The last step, discoveries disseminated, will occur when this literature review is approved and made available in print and online via the Bush Library, Hamline University.

**Review Questions**

The guiding questions for this systematic review are:

1. What are researchers saying about using progress monitoring in writing, particularly that of secondary school ELs?

2. What monitoring tools are available for measuring the writing progress of secondary school ELs?

**Inclusion and Exclusion Criteria**

In order for a study to be included in the evaluation step, it had to address the guiding questions as stated above. Consequently, one of the main criteria was that a study had to concern secondary school EL writers in the United States. Studies of native-English speaking writers were considered for inclusion if the study also addressed EL students. Gender and first language of the subjects of the studies were not a consideration for exclusion. Some studies did not make reference to a level of education of the participants of the study, so they were excluded from this literature review. If a reference was made to indicate that the research and its discussion were solely reflective of adult learners, it was not considered for the purpose of this study. Articles that addressed the topic of progress monitoring of EL writers, but which were not based on research studies,
were read by this researcher solely for the purposes of gaining insight to the EL writing classroom or reading the perspective of teachers in such classrooms.

Studies had to be current. Only studies from the year 2000 to the present were considered. Research previous to this date was examined if it appeared to have led to contemporary research or provided essential background information.

**Literature Search**

This literature review consisted of a compilation of peer-reviewed journal articles and professional books. Materials were gathered from Education Full Text, Education Source (replaced Education Full Text), ERIC, JSTOR, Linguistics and Language Behavior Abstracts, Wiley Online Library, and WorldCat databases. Keywords (phrases) used were monitor, monitoring, formative, assessment, progress, measures, secondary school, secondary, and writing, paired with second language and the commonly used EL, ELL, and ESL. In addition, resource lists accompanying articles were examined for additional studies that might fit the designated criteria. Further, this researcher made inquiries directly to researchers who had published works that addressed the guiding questions of this study. These email correspondences sought suggestions for additional resources which led me to a few new articles that provided helpful historical information but no new studies.

Informing EL and content-area teachers as to possible ways to monitor the progress of EL writers in their classrooms throughout the year is the purpose of this study. The guiding research questions were the basis for selecting articles to be considered for this literature review: What are researchers saying about using progress
monitoring in writing, particularly that of secondary school ELs? What monitoring tools are available for measuring the writing progress of these students? Multiple searches in the area of progress monitoring of the writing of secondary school ELs were not very fruitful. In fact, the limited number of articles located proves that this topic is in need of more research.

A common theme that arose was implementing rubrics as a means of assessing writing. Many of the studies supported the concept of student-teacher designed rubrics. However, studies of these topics did not reveal how the ELs’ progress in their writing could be monitored. Another area of research that strongly related to the guiding questions compared the writing of first and second language writers. These studies involving elementary grade learners were excluded from this literature review due to differences in the general curriculum when compared with that of secondary school learners. In the lower elementary grades, all students (L1 and L2) have multiple exposures throughout the day to a variety of writing instruction and practice across the curriculum. In addition, more time is allotted for the direct teaching of writing skills. As an example, the elementary schools in the school district where this researcher works provide a 20-minute writing block every day. Further, these young learners have a two-hour reading and word study period during which the students are frequently involved in writing activities related to the reading lesson. Research on adult learners was not considered for the purpose of this literature review because they are different in numerous ways. Their underlying motivation to learn is usually different. In general, adults are driven by advancing skills that will lead to securing a job in order to provide
for a family. That is something secondary school learners are not generally focused on. By design, the learning environment for adults is different from that of the K-12 system. These differences make it difficult to compare the writing progress of adult and secondary school ELs.

**Management of Literature Search Results**

Electronic as well as paper copies of articles, located via Internet library systems, that appeared to be potentially useful for the purpose of this literature review were procured. The documents were then given a cursory reading and minimal notes were made in the margins. If an article did not meet the criteria described above, a note was made on the first page briefly stating why it should not be considered for the purpose of this literature review. If an article did meet the criteria, it was set aside to be read more thoroughly. Later, these articles were read a second time. Key ideas were highlighted, and notes were made in the margins. This procedure was beneficial in that during the second read, this researcher not only found herself anticipating the author’s next point but also was able to reflect on material read earlier. This researcher began to mentally integrate and synthesize the main points given by the various authors.

The articles were then organized by main topic(s) in a portable file tote equipped with hanging files. With this organizational system, it was fairly easy to retrieve desired resources on given topics as well as refer to works of specific authors. Additionally, each article that appeared to fit the inclusion criteria or contained information that could potentially be used to provide supportive or historical information was added to a folder in RefWorks, an electronic resource available through the Hamline University library. If
a resource was obtained by means other than an electronic database via the university library, the reference information was manually added to the reference list.

**Study Quality Criteria**

Studies that met the inclusion criteria, as described above, were then evaluated for quality. This is an important step of a systematic review. With it, there is a guarantee that the systematic review is of studies that present adequate research findings judged to be valuable and applicable to the systematic review (Gough, 2007). Studies for this literature review were deemed to be appropriate for the next phase of the review if

- the purpose of the study was clearly stated.
- the procedures for conducting the study were detailed and comprehensible.
- the study discussed the reliability and validity of the data collection.
- the limitations of the study were transparent.

**Conclusion**

This chapter describes how studies were selected for this literature review. Keeping the guiding questions in mind, studies were selected based on their content and application to secondary school ELs. The following chapter features the findings of the literature search in relation to the research questions and provides educational implications. The intended audience for this literature review is professionals in secondary education. Thus, the results presented in Chapter Four will be of particular interest to high school teachers and administrators who are interested in knowing what researchers are saying about using progress monitoring to help improve the writing of
high school ELs and what monitoring tools are available for measuring the writing progress of these students.
CHAPTER FOUR: IN-DEPTH REVIEW

Introduction

Writing at the secondary level takes many forms. Writing tasks might include copying notes as the teacher presents them on an interactive white board or in a PowerPoint presentation, contributing to a group project by writing a few sentences related to the topic, composing multiple-paragraph narratives or essays, or writing short answers to questions for an assignment or test. With the exception of the last task, it can be assumed that students do not write in isolation at school. Peers, teachers, and even technology such as grammar and spell check on computers help them complete writing assignments. Although ELs in Minnesota have to pass the ACCESS for ELLs tests in listening, speaking, reading and writing in order to exit EL services, there is no writing test required for graduation at this time. Consequently, people outside of the field of education might wonder why we should concern ourselves with the writing ability of EL students or of any student for that matter.

Educators and other stakeholders want students to be proficient writers because our society depends on it. Individuals who are able to write clearly about their opinions and experiences or about what they have read are more likely to be successful after high school. They will have more opportunities in higher education, will be at an advantage for promotions in the workforce, and will be more likely to be involved in their
communities (Graham & Perin, 2007). This need for capable writers goes beyond our local communities. This is especially true for EL students. According to Graham and Perin, “. . . the U.S. remains far behind other counties in its ability to close gaps between socioeconomic and immigrant categories across the board” (Graham & Perin, 2007, p. 3). Therefore, it seems obvious that educators need to be serious about making concerted efforts to close these gaps by teaching ELs how to improve their writing skills. As they work toward improvement, both teachers and students need to know how much progress the students are making.

When I hold writing conferences with the EL students in my classroom, the conversations always turn to the quality of their writing. We compare past writing assignments. examining my editing marks, the comments I wrote in the margins, and the results shown on the accompanying rubrics. The editing marks identify specific errors. My written comments to the students praise specific areas of writing, ask for clarification, or offer general encouragement. The rubrics show the writers’ strengths and weaknesses on each assignment. They indicate how students performed on each category of the assignment. However, as with most analytical rubrics, there are several traits within each writing category, so the rubrics do not always give accurate information. For example, in the category “writing conventions”, spelling, punctuation, and capitalization are assessed. It is feasible that over time a student has shown improvement in the use of the capitalization rules but not in the use of those for spelling and punctuation. As a result, the score in the “writing conventions” category of the rubric may remain static. Anyone
looking at the rubric might erroneously think that the student’s writing has not improved at all.

A measure of the degree of change in the various writing skills of a teacher’s students could provide concrete evidence of the effectiveness of instruction. Teachers could use the data from such a measure to make decisions for future instruction. Additionally, the information could be used by the students to record their scores on a graph and to set goals for improvement in specific writing skills. This would benefit students because when they are involved in recording their progress, both their self-confidence and their motivation to succeed increase (Stiggins and DuFour, 2009).

The Alliance of Excellent Education carried out a meta-analysis on the effectiveness of formative assessments of writing and found that when writing progress is monitored regularly, the students’ writing improves (Graham & Perin, 2007). Although this analysis did not specifically discuss EL writers regarding formative assessments or progress monitoring, it is reasonable to assume that the statement would hold true for all subgroups. It should be noted that this report was published prior to the studies discussed in this chapter.

This systematic literature review focuses on the following questions: What are researchers saying about using progress monitoring in writing particularly that of secondary school ELs? What monitoring tools are available for measuring the writing growth of these students? Chapter Three outlined the inclusion and exclusion criteria used to screen research studies for consideration for this review. Studies that met the
criteria were then evaluated for quality. This screening process resulted in three research studies that met all of the predetermined criteria.

**Progress Monitoring**

An explanation of progress monitoring needs to be provided before research studies can be evaluated. Fuchs & Fuchs specify three characteristics of progress monitoring, no matter the design.

Progress monitoring is conducted frequently (at least monthly) and is designed to

- estimate rates of improvement.
- identify students who are not demonstrating adequate progress and therefore require additional or alternative forms of instruction.
- compare the efficacy of different forms of instruction and thereby design more effective, individualized instructional programs for problem learners (Fuchs and Fuchs, 2011).

The authors stress that progress monitoring is useful in that it allows instructional decisions to be made for individual students in a class based on each student’s progress.

The field of progress monitoring of the writing of ELs is relatively new, and very little research has been conducted with high school ELs (Campbell et al., 2013). McMaster and Espin (2007) reviewed more than twenty-five technical reports and published articles related to CBM. None of the reviews focused solely on ELs. Consequently, it is not surprising that the extensive search conducted for this systematic literature review resulted in only three studies. An explanation of CBM and CBM-W and background information are needed to understand the studies that follow. Next, the three
studies and their findings are presented in chronological order, followed by a synthesis of all three.

**CBM and CBM-W**

Before discussing CBM-W, a general explanation of Curriculum-Based Measures (CBM) is necessary. CBM are one type of progress-monitoring tool. Researchers refer to CBM as being indicators of performance. This is important because CBM are useful in helping to predict a student’s success in academic areas such as reading, spelling, math, and writing. Often called probes, CBM activities are a type of formative assessment that allows teachers to monitor student progress by assigning a specific task to students, scoring the task by specific methods, and plotting the scores on a graph. The resulting visual representation allows the teacher to see students’ growth and make instructional decisions based on the results. Looking at their graphs, students can make personal achievement goals based on the pattern they see. Stability is another key feature of CBM. The probes are different every time they are given, but they are of the same difficulty and the same measures are used to assess the students’ performance. CBM are administered at regular intervals, as often as once a week, but at a minimum, once a month. Finally, because of the frequency of their administration, they need to be easy and practical to give. Administration of a CBM should consume only a small portion of the class period, generally fewer than 10 minutes. (Deno, 1985, Fuchs, Deno, & Mirkin, 1984, Fuchs & Fuchs, 1989, Stecher, Fuchs & Fuchs, 2005).

It should be noted that in the research studies reviewed in this chapter, Curriculum-Based Measurement in Writing was referred to as CBM-W by Campbell
(2010) and Campbell et al. (2013), but not by Espin et al. (2008). However, for consistency, CBM-W will be used in this analysis. It is reasonable to assume that this acronym came into use over time since there was one researcher (H. Campbell) who participated in all of these studies.

Reliability and validity

When considering CBM as a progress-monitoring tool, it is important to be familiar with the concept of reliability. CBM are reliable because they provide consistent, trusted results. For example, when evaluating writing probes for the number of words written (WW), the count of WW in a writing probe is reliable in that it will not change; if a writing sample is assessed for WW, the count will be the same if counted today and again tomorrow or by different individuals. Further, WW can be obtained from any writing probe (Deno et al., 1982; Deno, 1985; Fuchs, et al., 1984; Fuchs, L. S. & Fuchs, D. 1989, Stecher, Fuchs & Fuchs, 2005).

CBM are considered valid because results of the measures relate to results on other assessments of general performance. Researchers studying CBM and CBM-W for more than 30 years have shown them to be valid. Because of the validity of CBM-W, it is assumed that if the students’ scores are improving on the skill that is being measured, such as WW, the skill is improving. In other words, one might expect that students who show improvement in their CBM scores will perform better on an alternative measure that evaluates the same skills (Campbell, 2010; Campbell et al., 2013; Deno et al., 1982; Deno, 1985; Deno, 2003; Espin et al., 2008; Germann & Tindal, 1985). This is important because when CBM-W are used to monitor the writing progress of students, educators
can be confident that the CBM-W scores are good predictors of the students’ success on achievement tests.

Data Analysis

As mentioned previously, CBM are valid because the results of the measures relate to the results on other assessments of general performance. The studies presented in this literature review evaluated Curriculum-Based Measures in Writing (CBM-W) against other summative assessments, referred to as criterion variables.

The criterion variables used in these studies were the Minnesota Basic Skills Test/Minnesota Comprehensive Assessment (MBST/MCA)-in writing, the Test of Written Language-Third Edition (TOWL-3), Test of Emerging Academic English (TEAE), and teacher ratings. The following is an explanation of these assessments.

MBST/MCA-writing subtest. A high-stakes test administered to all 10th graders in Minnesota, the MBST was intended to evaluate minimum basic writing skills. As mentioned earlier, a writing assessment is not currently required for graduation. However, at the time the studies reviewed in this report were conducted, passing the MBST/MCA-writing subtest was required for graduation. Students who failed the assessment could retake it until they passed. The writing session was not timed. Compositions were assessed for clarity of central idea, focus, organization, supporting details, and language conventions. Reliability was addressed through the scoring procedure. Two readers using a holistic rubric read and scored each test. Scores ranged from one to four. A passing score was three. After the two readers read each essay, an average of the scores was used if there was no more than a one-point discrepancy. For
example, if one reader scored the test as a 2 and the other scored it as a 3, the score was 2.5. If this criterion was not met, a third “expert” reader decided the final score.

According to the researchers who conducted the studies presented in this literature review, additional information related to reliability and validity of this assessment is not available (Campbell, 2010, Campbell et al., 2013, Espin et al., 2008).

**TOWL-3.**

The written language of 7-18 year-olds is assessed by the TOWL-3. This standardized test can be administered in groups. Reliability and validity have been established. Two of the studies presented in this literature review used the scores on the spontaneous writing subtest of the TOWL-3 as a criterion variable. Students had 15 minutes to respond to a black and white picture prompt. Compositions were scored on the basis of plot, prose, character development, and interest to the reader. Writing conventions were also assessed (Campbell, 2010, Campbell et al., 2013).

**Teacher ratings.**

In two of the studies, EL teachers were directed to rate each participant on their general writing ability. A scale of 1 (less skilled) to 4 (more skilled) was used (Campbell, 2010, Campbell et al., 2013).

**CBM-W Scoring Procedures**

Several CBM-W measures, also referred to as scoring procedures, are used for monitoring the writing progress of students. Different elements on the page are physically counted. For example, one element might be the number of word units written, even if they are spelled wrong or grammatically incorrect. Based on the description Espin et al.
(2008) provide for the procedures used for scoring writing, I composed the following writing sample and have provided a demonstration of some of the CMB-W used by the researchers in the studies I examined. The first passage is written correctly to serve as a reference for the other illustrations. Following it is the same passage purposefully composed with errors along with three demonstrations of the application of a CBM-W. For this illustration five such measures will be used as described by Espin et al. (2008). Words written (WW) refers to the total number of words written, regardless of spelling and usage. Words written correctly (WWC) refers to the total number of words spelled correctly. Correct word sequences (CWS) refers to the number of sequences of two words next to each other that are spelled correctly. For a sequence to be scored as correct at the beginning of a sentence, the first word had to be capitalized; for it to be correct at the end of the sentence, the correct punctuation had to have been used. Additionally, the criteria set by Videen et al., (1982) that the words in each sequence had to be syntactically and semantically appropriate was included in this measure (as cited in Espin et al., 2008). Correct minus incorrect word sequences (CIWS) refers to the number of correct word sequences minus the number of incorrect word sequences. Finally, incorrect word sequences (IWS) refers to the number of sequences of two adjacent words that do not meet the requirement for CWS as described previously. It should be noted that none of the studies presented in this literature review included IWS as one of the measures evaluated; however, it is obviously necessary to count the number of these sequences in order to calculate CIWS.
Passage written correctly (used for reference):

One of my earliest memories is eating popsicles. The scene is very clear in my mind. The setting for this memory is a warm summer day at my childhood home. My little sister and I were sitting on the little hill by our house with one of our friends. Our mom came outside with a box of fruity popsicles and let us pick the flavor we wanted. She was pregnant. I remember her belly looked so round under her shirt and the beads of sweat on her face made it glow. She was so pretty!

1. Count the number of words written and words written correctly (ignore grammar and punctuation errors):

One of my earliest memories is eating popsicles. The scene is very clear in my mind. The setting for this memory is a warm summer day at my childhood home. My little sister and I are sitting on the little hill by our house with one of our friends. Our mom comes outside with a box of fruity popsicles and let’s us pick the flavor we want. She is pregnant. I remember her belly looked so round under her shirt and the beads of sweat on her face made it glow. She is so pretty!

WW: 89  Note: The 5 words from the prompt shown in bold type are not counted
WWC: 80  Note: 9 spelling errors are underlined in the sample above: eating, popsicles, little, little, friends, fruity, popsicles, remember, beads

2a. Mark sentence units with a slash mark (/).

One of my earliest memories is eating popsicles / the scene is very clear in my mind. / The setting for this memory is a warm summer day at my childhood home. / My little sister and I are sitting on the little hill by our house with one of our friends / our mom comes outside with a box of fruity popsicles and let’s us pick the flavor we want. / She is pregnant / I remember her belly looked so round under her shirt and the beads of sweat on her face made it glow / she is so pretty! /

2b. Mark incorrect word sequences with an inverted caret (^).

The sentence units marked with a slash(/) are used as a guide for marking the incorrect word sequences.

One of my earliest memories is eating popsicles / the scene is very clear in my mind. / The setting for this memory is a warm summer day at my childhood home. / My little sister and I are sitting on the little hill by our house with one of our friends / our mom comes outside with a box of fruity popsicles and let’s us pick the flavor we want. / She is pregnant / I remember her belly looked so
round under her shirt and the \textit{beads} of sweat on her face made it glow. She is so pretty!

IWS: 37

3. Mark correct word sequences with a caret (^).
   The sentence units marked with a slash(/) and the incorrect word sequences marked with an inverted caret (\textbackslash) are used as a guide for marking the correct word sequences.

\textbf{One of my earliest memories} is \textit{eattting popcycles} the \textit{seen} is \textit{very clear} in \textit{my mind}. The \textit{setting four} this \textit{memory} is \textit{a warm summer day} at \textit{my childhood home}. My \textit{little sister} and \textit{I} are \textit{sitting} on \textit{the little hill} by \textit{our house} with \textit{one of our freinds our mom comes outside with a box of fruit popcycles and let's us pick the flavor we want}. \textit{She is pregnant} \textit{I rember her belly looked so round} under \textit{her shirt} and \textit{the beads of sweat} on \textit{her face} made it glow. She is so pretty!

CWS: 60

4. Calculate correct minus incorrect word sequences.
   \begin{align*}
   \text{CWS:} & \quad 60 \\
   \text{IWS:} & \quad 37 \\
   \text{CIWS} & \quad 23
   \end{align*}

   It is clear from this illustration of a CBM-W that scoring using these measures requires a great deal of attention. In presenting this literature review, this issue is further complicated because some of the studies discussed in this chapter describe the same measure in exactly the same way, and other measures are described with a slight difference. One example of a measure being used in the same way in more than one study is correct incorrect word sequences (CIWS). The measure is described in two studies as
“... the number of correct word sequences minus the number of incorrect word sequences . . .” (Espin et al., 2008 p. 179; Campbell et al., 2013 p. 437). Alternately, an example of a measure described with a slight difference in two or more studies is WW. Espin et al. (2008) described words written (WW) as “... the total number of word units written in the sample, regardless of spelling or usage . . .” (p. 179) and Campbell et al. (2013) described the same measure as “... the total number of words written in the passage . . .” (p. 437). This later study considers spelling, grammar, and usage in a different measure, correct words (CW). This is described as “... words with correct spelling, grammar, and usage in the sentence . . .” (Campbell et. al, 2013, p. 437). Espin et. al (2008) measured correctness of words spelled in the passage with a measure called “number of words written correctly” (WWC). According to Espin, et al., “Any correctly spelled English word was counted regardless of the appropriateness of usage . . .” (p. 179). Campbell (2010) addressed this skill with the words spelled correctly (WSC) measure. The researcher provides no further explanation.

From these examples it is obvious that close attention to the description of the measures used by each study is required. To avoid confusion, as I present each study, I will provide the researchers’ description of the measures they examined. Additionally, the number of acronyms that represent the variety of CBM-W requires the reader to concentrate on their meaning. Because some of the measures use the same letters in the acronyms but in a different order, I found it helpful (sometimes necessary) to translate the acronyms as I came to them in my research. For example, when I saw WSC, I had to say, words spelled correctly in my head and correct word sequences when I saw CWS. The
CBM-W along with researchers descriptions used in each study is presented in Appendix A. The following are the findings of the three studies examined in this literature review.

Study 1: CBM-W and Predicting Success on State Tests

Espin et al. (2008) published the first study that included an examination of CBM-W for ELs. When the researchers set out to investigate the reliability and validity of CBM-W use as a predictor of the achievement level of high school students on standardized state assessments, they focused on four research questions.

Research Questions

1) What is the alternate-form reliability of CBM in writing? Does alternate form reliability differ with scoring method or timeframe?

2) What is the validity of CBM for predicting performance on a state writing test for high school students? Does validity differ with scoring method or timeframe?

3) Can the relation between performance on CBM measures and the state standards test be presented in a usable format?

4) Do reliability and validity differ for ELL and non-ELL students? (Espin et al., 2008, p. 178).

The first three questions are beyond the scope of this literature review because they address the entire participant population, and the focus of this literature review is EL writers. I will address the results related to the fourth question after I summarize the study.
Participants and Methods

The 183 high school students who participated in this study came from two large city schools. The initial plan for this study did not include a separate analysis of the EL data. However, when it was discovered that approximately 20% of the participants of the study were ELs, the researchers piloted an investigation as stated in the fourth question. The staff of the schools participating in the study determined the need for EL support based on home language, educational background, and language assessments. Scores on a norm-referenced comprehension assessment were also taken into consideration for fluent ELs. Three EL categories were used for five levels of English language proficiency for these schools: non-English speaker (level 1), limited-English speaker (levels 2 and 3), fluent English speaker (levels 4 and 5). The 38 EL participants in this study were members of a general education English class and were identified as nearly fluent English speakers in levels 4 or 5. Half of the EL participants identified Somali as their home language, and 23% of the EL participants spoke Spanish at home. Other home languages represented were identified by the researchers as Hmong (13%) and Laotian (more commonly referred to as Lao) (7%). The remainder of the ELs identified their home language as Oromo Ethiopian (an ethnic minority in Ethiopia), Yoruba Nigerian (an ethnic group in Nigeria), or Chinese. The authors do not mention their writing proficiency level. There was a considerably larger proportion of EL female students (62%) than males (38%).

In this study, the researchers set out to explore the possibility of using student writing samples to predict success on a standardized state writing test. The standard for
judging the students’ success in writing, referred to as the criterion variable in this study, was the results on the written expression sub-test of the MBST/MCA. As mentioned above, this high-stakes assessment, taken by all high school sophomores, was intended to evaluate minimum basic writing skills. This assessment was determined to be valid because of the alignment of its content with what it was designed to measure.

The predictor variables, data used to predict student success on a standardized state test, were the scores on the following CBM-W measures:

- **WW** (words written): “. . . the total number of word units written in the sample, regardless of spelling or usage” (Espin et al., 2008, p. 179).

- **WWC** (words written correctly): “. . . the total number of correctly spelled words in the sample. Any correctly spelled English word was counted, regardless of the appropriateness of usage” (Espin et al., 2008, p. 179).

- **CWS** (correct word sequences): “. . . the number of sequences between two adjacent correctly spelled words. Correct sequences were considered to be acceptable within the context of the sample and both syntactically and semantically correct (Videen et al., 1982). In our scoring of CWS, we also took into consideration the beginning and end of sentences. For a word sequence to be scored as correct at the beginning of the sentence, the first word had to be capitalized; for it to be correct at the end of the sentence, correct punctuation needed to be present” (Espin et al., 2008, p. 179).

- **CIWS** (correct minus incorrect word sequences): “. . . the number of
correct word sequences minus the number of incorrect word sequences” (Espin et al., 2008, p. 179).

The study was carried out during one class period. The 10th grade student participants were allowed 30 seconds to think about the prompt and 10 minutes to write. The researchers needed to collect data at four time points for each of the two writing samples. The students were directed to draw a slash mark at the 3, 5, and 7-minute marks to show how much they had written at each point. The 10-minute mark was indicated by the last word written at that moment. Two narrative writing prompts were selected for the study: “It was a dark and stormy night . . .” and “I stepped into the time machine and . . .” (Espin et al., 2008, p. 181). The researchers chose narrative prompts because based on past experience, they were easier to create and score. Expository prompts require students to spend time organizing their ideas and related supporting details. The researchers had a limited time to gather the data. As a result, they decided not to ask participants to respond to an expository prompt.

Results

The study included non-EL as well as EL students; however, the following pertains only to the results of EL participants. The researchers stressed that their analysis is tentative because they did not originally plan to compare EL and non-EL data. In addition, the EL participants had a high level of English proficiency, so the researchers are unsure if their outcomes pertain to typical ELs. Nonetheless, they contend that several factors, including the size of the sample which mirrored the demographics of the schools
in the study, and the balance of the two major language groups represented, warranted a cautious examination of the data of the EL participants.

The researchers scored the two narrative writing samples using four CBM-W measures (WW, WWC, CWS, CIWS) at the 3, 5, 7, and 10-minute marks. This process allowed them to examine 16 data points for the two writing samples, totaling 32 data points for each participant. The data show that time was a crucial factor in predicting success on the MBST/MCA. Reliability increased with each of the time intervals: the 7 and 10-minute marks were especially reliable. Two measures, WW and WWC, did not show strong reliability and validity. CWS proved to be a stronger measure than WW and WWC; however, CIWS proved to have the strongest reliability and validity at each of the four timed data points. Upon further examination, it was determined that CIWS at the 5 and 7-minute marks showed the strongest alternative-form reliability. Both time periods had identical results. Consequently this measure and these two time frames were the strongest predictors of performance on a standardized written assessment (MBST/MCA) for EL participants of this study.

As previously mentioned, the ELs participating in this study were relatively fluent in English as indicated by their proficiency level of 4 or 5. The researchers commented that if educators are assessing student writing on a regular basis, 5-minute writing samples might be adequate since results at the 7-minute mark were the same as those at the 5-minute mark, and there were only slightly stronger results at the 10-minute mark. Additionally, the researchers remarked that samples from longer writing sessions are not ideal because they generally require more time to score as more words are written.
Study 2: Passage Copying and CBM-W

Campbell (2010) wondered whether a passage-copying technique was valid and reliable as a CBM-W to assess the approximate writing proficiency of secondary school ELs. In monitoring the progress of the writing of ELs, it can be assumed that if the successive CBM-W scores are increasing, the students’ writing is improving overall. The researcher cited several studies that supported passage copying as a CBM-W task. One such study by McMaster (2008) with English proficient elementary school students indicated that a passage-copying task scored for correct word sequence (CWS) was a valid and reliable CBM-W for that population. The researcher speculates that passage-copying assessments could draw on the idea that there is a relationship between short-term memory and writing. The researcher based this notion on a comment by McCutchen (as cited in Campbell, 2010) who suggested that students’ short-term and long-term memory have different functions in writing. The former is employed for tasks such as letter formation, spelling, grammar, and syntax. Writing tasks such as implementing creativity and knowledge of sentence structure and genre are the role of a writer’s long-term memory. Campbell (2010) wondered if emergent writers are slower to copy text because they have to spend time focusing on the spelling of each word as well as placement of punctuation marks. Proficient writers, on the other hand, might be able to copy text faster due to their familiarity with these language conventions.
Research Question

The purpose of this study was to investigate the use of CBM-W with passage-copying as a technically-adequate, or reliable and valid, method for assessing approximate writing proficiency of secondary ELs.

Participants and Methods

Fifty-seven 9-12 grade high school students were the subjects of this study. They were enrolled in one of three levels of EL classes. For this study, the students copied four passages (see Appendices C and D for samples of the passages). Two of the passages were constructed for the sole purpose of the study while two were taken from an elementary school textbook. Using the Flesch-Kincaid readability formula, a method for determining the comprehension difficulty of a passage, the passages specifically constructed for the study were determined to be at the 4.3 grade level. The sentences in these constructed passages were short and contained internal punctuation marks. In the text sample provided in the research article (see Appendix C), a driver has run out of gas. The seven-sentence passage contains ninety-three words, an average of 13 words per sentence. The internal punctuation includes one apostrophe (possessive s), one colon, and three commas. Internal capitalization occurs after the colon, and six words are used to name streets. Three numbers are written as words, and one is presented as a digit.

The two curriculum-based passages were obtained from a third grade textbook (Cooper & Pikulski, 1999) used in the district (as cited in Campbell, 2010). These passages, with their more complex sentence structure, were evaluated with the Flesch-Kincaid readability and were determined to range from the 5.8 level (fifth grade, eighth
month) to the 6.0 level (beginning of sixth grade). In the sample provided in the research article (see Appendix D) a portion of a fractured fairy tale based on the familiar story of *The Three Little Pigs* is used. The six-sentence passage contains 91 words, an average of 15 words per sentence. Six commas were used internally. There was no internal capitalization in this passage. One sentence had an irregular structure in that it did not begin with an article, as might be expected in this situation. “Next day the big bad pig . . .” (Campbell, 2010, p. 307).

For each passage the students were given a piece of paper that contained a copy of the text and numerous blank lines for writing. The researcher read the passage, and the students were directed to quickly and neatly copy as much of the passage as possible in 1.5 minutes. The researcher did not explain the significance of this time limit; however, one could assume that this amount of time allowed the participants to provide an adequate writing sample that would be manageable to assess. The researcher used the following measures to evaluate the writing the students copied:

- **WW**: “. . . words written . . .” (Campbell, 2010, p. 294)
- **WSC**: “. . . words spelled correctly . . .” (Campbell, 2010, p. 294)
- **CIW**: “. . . correct minus incorrect words . . . An incorrect word (or punctuation mark) was defined as any word or mark that deviated from the passage to be copied.” (Campbell, 2010, p. 294)
- **%CW**: “Percent correct words . . . was calculated by dividing WSC by WW.” (Campbell, 2010, p. 294)
• CWS: “. . . correct word sequence . . . adjacent, correctly spelled words or punctuation marks that were correct when compared to the original passage.” (Campbell, 2010, p. 294)

• IWS: “. . . incorrect word sequences . . .” (Campbell, 2010, p. 294)

• CIWS: (Campbell, 2010, p. 294) (the researcher did not give a description)

• % CWS: “. . . percent correct word sequences . . .” (Campbell, 2010, p. 294)

While analyzing this study, I noted two inconsistencies that need to be discussed. First, the researcher identifies the measure WSC (words spelled correctly) in the presentation of measures used in the study (Campbell, 2010, p. 294). Though that measure is absent in the remainder of the study, the measure CW (correct words) is present. It seems reasonable that this substitution was inadvertently made because most of the labels for the other measures begin with the “C” for “correct” (WW and IWS are the exceptions). Second, Campbell (2010) did not define all of the measures used. However, based on the other descriptions provided in the study, it is reasonable to make some assumptions. Consequently, for this discussion, I interpreted IWS to be adjacent words that were spelled incorrectly or punctuation marks that were not correct when compared to the original passage. Likewise, I interpreted CIWS to be CWS minus IWS. Finally, it is safe to assume %CWS is the result of CWS divided by the total number of word sequences. Consequently, this last measure would entail counting the number of CWS and IWS in order to determine the %CWS.
Results

The focus of this research study was to determine the reliability and validity of passage copying as a gauge of overall writing proficiency for secondary ELs. Four criterion variables were used for this study: ratings from the participants’ EL teachers, the Test of Written Language-3rd Edition (TOWL-III; Hammill & Larsen, 1996); the Test of Emerging Academic English (TEAE; Minnesota Department of Education, 2002); and the writing segment of the Minnesota Basic Skills Test (MBST; Minnesota Department of Education, 2005). The score results from the criterion variable assessments showed that there is some correlation between the four criterion variables. Thus, Campbell, (2010) contends that they reflect a measurement of overall writing proficiency.

For the constructed passage copying, which contained short simple sentences, three scoring procedures proved to be reliable: CIW, CWS, and CIWS. These CBM-W were then further examined for validity. The results showed CWS was the only valid scoring procedure for all four criterion variables. Thus, CWS was the only scoring procedure that had sufficient reliability and validity for constructed passage copying in this study.

In scoring the curriculum-based passage copying passages, which were comprised of longer complex sentences, five scoring procedures proved to be reliable: WW, CW(WSC), CIW, CWS, CIWS. When these CBM-W were examined for validity, this type of passage copying demonstrated that CW, CWS, and CIWS were the three scoring procedures that were valid. Thus, the scoring procedures that proved to be reliable and valid in this part of the study were: CW(WSC), CWS, and CIWS. Again, it should be
noted that CW (correct words) and WSC (words spelled correctly) were used interchangeably in this study (Campbell, 2010).

Study 3: Reliability and Validity of CBM-W

The last study that will be presented in this literature review, Study 3, is the most current study that met the criteria described in Chapter Three. The purpose, procedures, and limitations of the study were transparent. The explanation of the reliability and validity of the study were clear. Campbell et al. (2013) analyzed writing samples of high school ELs in nine different ways. The study set out to identify which prompt types, measures, and writing session times could be used to monitor progress and indicate potential performance on standardized assessments. The samples were generated from picture, narrative, and expository prompts with writing time frames of 3, 5, and 7 minutes. This study was part of a study examined previously in this chapter (Campbell, 2010).

Research Questions

In this study, the researchers hoped to identify which CBM-W had the potential to indicate progress and performance for secondary EL writers. With these factors in mind, they based their investigation on two questions.

1) What is the alternative-form reliability of CBM-W measures for EL students?
2) What is the validity of CBM-W measures as indicators of general writing proficiency for ELs?

This study is related to my research question concerning what tools are available for monitoring the writing progress of secondary ELs. CBM-W that have been proven to
indicate general writing proficiency of ELs could be used on a regular basis to gather formative data, and teachers could make instructional decisions based on the results.

Participants, Method, and Procedures

The 36 high school participants (grades 10-12) in this study were in a moderately English proficient EL class (17 students) or in a highly proficient EL class (19 students). These students attended an urban Midwestern high school with a student population of approximately 1,200. Most of the participants were East African (92%) and spoke an African language. According to the researchers, this is a significant limitation because these students were not literate in their first language. The performance of students who are literate in their first language might be different from the performance of the participants in this study.

Four criterion variables were used for this study: ratings from the participants’ EL teachers, the Test of Written Language-3rd Edition (TOWL-III, Hammill & Larsen, 1996); the Test of Emerging Academic English (TEAE, Minnesota Department of Education, 2002); and the writing segment of the Minnesota Basic Skills Test (MBST, Minnesota Department of Education, 2005). Two of the four criterion variables were administered through the school district, the Test of Emerging Academic English (TEAE) and the Minnesota Basic Skills Test (MBST). The EL teacher provided the teacher ratings. The first author of this study administered the Test of Written Languages-3rd Edition (TOWL-III).

The participants responded to three different writing prompts: a picture prompt, a narrative prompt, and an expository prompt. Two CBM-W tasks were administered each
day. The participants were allowed 30 seconds to think about their responses before starting to write. Each writing session was seven minutes long. Students inserted a slash mark on their papers at the 3 and 5 minute marks. In addition to the CBM-W scoring procedures described below, the writing samples were scored for T-units. According to Campbell et al. (2013, p. 433), “A T-Unit, introduced by Hunt in 1965, is defined as a main clause (or independent clauses) with all subordinate clauses, phrases, or modifiers attached to or embedded with it” (Endicott, 1973; Hunt, 1977; Isaacson, 1984; Perkins, 1983). The samples in the study were scored using the CBM-W scoring procedures described below.

- **WW**: the total number of words written in the passage
- **CW**: the number of words with correct spelling, grammar, and usage in the sentence
- **%CW**: the percent of words correct, i.e., the number of correct words divided by the total number of words written
- **CWS**: correct word sequences, any two adjacent, correctly spelled words acceptable within the context of the sample to a native speaker of the English Language (as cited in Videen, Deno & Marston, 1982)
- **%CWS**: the percent of correct word sequences, i.e., the number of correct word sequences divided by the total number of word sequences
- **CIWS**: the number of correct sequences minus the number of incorrect word sequences (as cited in Espin et al., 1999)
• T-units: main clauses or independent clauses with all subordinate clauses, phrases, or modifiers attached to or imbedded with in them (as cited in Endicott, 1973; Hunt, 1977; Isaacson, 1984; Perkins, 1983)

• WW + CIWS: words written plus correct minus incorrect word sequences

The researchers debuted the WW + CIWS procedure for this study in order to avoid a negative measure. ELs might have a negative CIWS score if the number of their incorrect sequences is greater than that of their correct sequences. The researchers did not provide an example for this situation, but I will do so in order to illustrate how the students could benefit when WW and CIWS are combined. If a student wrote 36 CWS and 59 IWS, the difference between these measures, CIWS, would be -23. Students might be frustrated when they see the negative scores, especially if they are recorded on a graph for the purpose of monitoring their progress. On the other hand, if the same writing passage resulted in 89 WW and that measure was added to the previously computed -23 CIWS, the result would be 66, a positive number. By using the WW + CIWS scoring procedure, the students are less likely to get frustrated, and all of the numbers they record on their graphs will be positive.

Results

As stated above, the focus of this research study was to identify which CBM-W had the potential to indicate progress and performance for secondary EL writers. The study set out to identify which prompt types, measures, and writing session times could be used to monitor progress and indicate potential performance on standardized
assessments. This study involved scoring the samples in nine different ways: scoring each of the three prompts (picture, narrative, expository) at three intervals, the 3, 5, and 7-minute marks. However, T-units were calculated only at the 7-minute mark in the writing samples because numerous partial T-units were present at the 3 and 5-minute marks.

Both reliability and validity results suggest that ELs responded much better to picture or narrative prompts than to expository prompts. The analysis of these results shows that CIWS and WW + CIWS are the strongest indicators of potential performance on standardized assessments and are the most useful for monitoring the writing progress of secondary ELs if used with specific prompt types and writing session time frames. Results from the 5-minute picture prompt response and those from the narrative prompt at 3, 5, and 7-minutes suggest the greatest potential. Additionally, the results from the %CWS measure for the 5 and 7-minute picture prompt and for the 7-minute narrative prompt show the possibility for using these measures in predicting success on standardized writing assessments and for progress monitoring. However, the researchers advise that scoring procedures involving percentages may not show subtle improvements, so these are not recommended for progress monitoring.

Studies Synthesized and Heterogeneity Judged

The studies discussed in this chapter sought to validate the use of CBM-W with high school ELs. More than 10 different scoring procedures were investigated. CIWS was the only scoring procedure that met both reliability and validity criteria in each of the three studies reviewed: therefore, it can be considered a good indicator of student performance and may be useful for monitoring the writing progress of secondary ELs.
The results of Espin et al. (2008) indicate that this measure holds the most promise when students respond to a narrative prompt in a 5 or 7-minute writing session. Campbell’s study (2010) shows this measure can be an indicator of performance when students copy curriculum-based passages. Finally, the results of Campbell et al. (2013) indicate that responses to a picture prompt for 5 minutes or a narrative prompt for 3, 5 or 7 minutes are the most dependable gauges of student performance and may be the most useful for progress monitoring.

It should also be noted that when EL high school writers copy curriculum-based passages, CW and CWS are also good performance indicators in addition to CIWS, as discussed earlier (Campbell, 2010). CWS also seems to be an appropriate scoring procedure for constructed passage copying (Campbell, 2010). The researcher suggests that caution should be taken with these results because one limitation of the study was that many of the participants were not literate in their first language. Results might be different for students who have basic penmanship skills and can write in the Roman alphabet (Campbell, 2010).

Implications for Educational Professionals

In the introduction to this chapter, I mentioned that teachers need to know the degree of change in the writing skills of their students so that they can see concrete evidence of the effectiveness of their teaching and can make decisions for future instruction. The three research studies presented in this chapter open the door for using CBM-W as a tool for monitoring the writing progress of secondary ELs. I also referred to the description of progress monitoring provided by Fuchs and Fuchs (2011) as a tool for
estimating the rate of student improvement on a specific skill. To be effective, the use of this tool should be deliberately planned for, and progress monitoring activities should be conducted on a regular basis. Changes in instruction for individual students can be made based on the results so that the desired level of proficiency is reached. In implementing CBM-W, teachers need to consider the EL proficiency level of the students, the type of writing task assigned, and the time allotted for the writing task when deciding which scoring procedures to use. As this field of research grows, it is likely there will be additions to or changes in the list of the strongest indicators of EL writing progress. Thus, recommendations for using CBM-W for monitoring the writing progress of secondary ELs will change.

Reliable and valid research on the progress monitoring of secondary school ELs is sparse. The three studies that were discussed in this chapter present several similarities and some differences. It is important to keep in mind that many factors of the studies varied. As a result, it is not possible to compare them and arrive at a determination of which CBM-W are the best indicators of writing progress. Two of the important differences relating to the participants of the studies discussed are English proficiency levels and degree of first language literacy. Passage copying may be an appropriate CBM-W for a teacher to use in a classroom of ELs with varying proficiency levels and can be scored in several ways. This type of formative assessment would be a time-saver for teachers who have students of several levels in one class.

Learning to write effectively in a new language is often a slow process. ELs sometimes get frustrated because they feel they have not made any progress. Adding a
regular CBM-W to class activities would provide students with evidence of their writing growth in the form of a graph. Likewise, this evidence would inform the teacher about what instructional changes are needed, resulting in increased student achievement (Stecker et al., 2005).

Summary

In this chapter I presented the findings of my systematic literature review. In Chapter Five I will discuss my major findings and their implications and make suggestions for their application to secondary school EL instruction.
CHAPTER FIVE: DISCUSSION AND CONCLUSION

Introduction

This capstone investigated research studies that dealt with progress monitoring of secondary school ELs’ writing. I designed an explicit systematic literature review in order to answer two research questions: What are researchers saying about using progress monitoring in writing, particularly that of secondary school ELs, and what monitoring tools are available for measuring the writing progress of these students?

In Chapter Four, I presented results from a number of research studies regarding these questions. In this chapter, I summarize and reflect on the major findings of my research. I also address the limitations of this study and present some recommendations for further research.

Major Findings

My literature review focused on two research questions. In this section, I discuss the major findings of the research I examined to address these questions. To answer the first research question regarding what researchers are saying about using progress monitoring in writing, particularly that of secondary school ELs, I began by investigating what makes EL writers different from first language writers. I discovered that there is little consensus among researchers in this area of study, particularly regarding how ELs manage the writing process. Some researchers claim that all writers approach the writing
process in the same way whether writing in a first language or in another language (Peregoy and Boyle, 2005). Other researchers present evidence to the contrary (Hedgecock, 2005, O’Malley and Pierce, 1996, Ortmeier-Hooper, 2013, & Silva, 1993). In an extensive literature review, Silva (1993) showed that errors in the writing of ELs are different from those of their peers who are writing in their first language. Common errors include not applying morpheme rules correctly and the misuse of major parts of speech, nouns, verbs, articles, and prepositions in particular. ELs also struggle with sequencing events in their writing, choosing appropriate vocabulary, and structuring their sentences; in addition, applying rules of orthography, that is, those of spelling and punctuation, is a challenge. Furthermore, ELs set fewer writing goals for themselves. Related to this, Ortmeier-Hooper (2013) asserts that EL writers generated fewer ideas in the pre-writing process, ideas that would probably be included in the final product in most cases..

In discussing the differences between EL writers and their native-speaking peers, DelliCarpini (2012) presents suggestions for supporting these writers in the classroom. Along with offering direct instruction in and providing adequate practice with the writing process, she stresses the importance of giving ELs clear, specific feedback and targeting a few aspects of their writing with each assignment. For example, for a particular writing assignment, a teacher might direct the students to focus on three elements: a strong topic sentence, a minimum of two past tense irregular verbs, and two conjunctions. The resulting feedback would address only those aspects.
It is obvious that the instructional needs of ELs in learning to write are demanding. Moreover, these needs have been steadily increasing as the EL population in this country has grown; the population of ELs in this country grew substantially between the 1980 and 2010 census. Simultaneously, the population of native English speakers decreased. According to future census projections (2020), the number of people in the United States who speak another language will continue to increase. Although Shin and Ortman (2011) do not provide specific projections of the number of non-English speaking school age children, as an EL teacher, this data shows that the demand for EL teachers is likely to continue for many years.

To understand the instructional needs of ELs, it is necessary to understand concepts related to language acquisition. All language, native or new, is learned in two phases. Basic Interpersonal Communication Skills (BICS) allow us to communicate with others to get our basic needs met. Cummins (1980) describes this first stage as the tip of the iceberg. Speakers at this stage, no matter their age, use telegraphic speech whereby they utter the most important words to get their message across (Freeman & Freeman, 2014, p. 29) as exemplified in the following questions: “Pencil?” or “Pencil, please?”

Cognitive Academic Language Proficiency (CALP) is the other phase of language acquisition all speakers experience. Here, the language skills of reading, writing, listening, and speaking necessary for academic success develop. Extending the iceberg metaphor, as students become more proficient in the language, more and more surface area of the iceberg is exposed, (Cummins, 1980).
Continuing to address the uniqueness of ELs, I provided a brief history of state and federal annual assessments for all students and included those particular to ELs. Since the No Child Left Behind (NCLB) Act of 2001, annual standardized assessments have been required in the United States. Minnesota students have experienced changes in how tests are administrated in both general education and in EL assessment. As an EL teacher, it is important that I understand what is expected of my students on the annual EL assessment. In Chapter Two, I highlighted key features of the writing portion of the ACCESS for ELLs (Accessing Comprehension and Communication in English State-to-State).

In writing about my second research question regarding progress-monitoring tools for ELs, I discussed assessments. Annual standardized assessments are not designed to give teachers and students details about the progress students make throughout the year. Frequent progress-monitoring tools are necessary to show incremental progress or development. Results from these instruments can help teachers make appropriate instructional decisions so that they can provide students with the education they need for academic success. CBM are one such monitoring tool; CBM provide valid and reliable data that can be obtained quickly and efficiently at the local level throughout the year (Deno, 2003). Thus, I investigated the feasibility of Curriculum-Based Measurements in writing (CBM-W) with ELs in the secondary setting.

Teachers and students use rubrics to assess writing. A published report by Coe et al., (2011) highlighted a research study on the 6 + 1 Trait Model (a writing rubric). Their results showed that using this writing model had a statistically significant impact on the
students’ writing scores. However, I was not able to locate any studies that reported the effect of the 6+1 Trait writing rubric on the writing scores of secondary school ELs. Several researchers advocated for using rubrics as a formative assessment tool (Al-Jarf, 2011, Andrade, 2007, Andrade et al., 2010, DuFour et al., 2006, Goodrich, 1996, Meyer et al., 2012, and O’Malley & Pierce, 1996). Again, no studies with EL participants were found.

A new formative assessment resource is now available to address the needs of secondary EL students. MacDonald, Boals, Castro, Cook, Lundber, and White (2015) provide an outline for developing a cycle of valid and reliable formative language assessments for secondary ELs. *Formative Language Assessment for English Learners* (MacDonald et al., 2015), is the result of the Formative Language Assessment Records for ELLs (FLARE) project in which information and data was gathered from middle and high schools in three large metropolitan school districts during a five-year period, in collaboration with the WIDA consortium.

**Major Findings of Literature Review**

The method for this capstone was an explicit literature review. Based on studies by Gough (2007), Oxman & Guyatt (1991), and Petticrew & Roberts (2006), the focus of Chapter Three was an eight-step process for this literature review. The process assured that my review would be conducted in a systematic and rigorous manner, and it allowed me to design a literature search focusing on my research questions: What are researchers saying about using progress monitoring in writing, particularly that of secondary school
ELs? What monitoring tools are available for measuring the writing progress of these students?

As a result of the explicit literature search, Chapter Four presented three studies examining progress monitoring of EL writers. All of the studies investigated the technical adequacy of using CBM-W to monitor the writing progress of secondary school ELs. CBM-W, like curriculum-based measures for other content areas, has proven reliability and validity. This type of formative assessment is designed to be administered at frequent intervals rather than at the end of an instructional unit or as an annual assessment. A line graph displays the data gathered in a CBM-W. The data chart can help teachers make instructional decisions and provide students with a visual representation of their progress.

The authors of the studies I investigated felt that using a CBM-W to monitor the writing progress of secondary school ELs could provide useful data. Additionally, they all commented on the need for more research. Nonetheless, the studies of CBM-W I reviewed indicated that they are reliable and valid scoring procedures that can be used to monitor the writing progress of secondary school ELs. Therefore, they can probably be used to predict student performance on high-stakes standardized assessments.

There are numerous scoring procedures available for assessing writing with CBM-W. Below is an alphabetical list of the scoring procedures that the studies I investigated discussed.

- CIW: correct minus incorrect words
- CIWS: correct minus incorrect word sequences
- CW: correct words
• CWS: correct word sequences
• IWS: incorrect word sequences
• T-Units: (not an acronym)
• WSC or CW: words spelled correctly, sometimes noted as CW, correct words
• WW: words written
• WWC: words written correctly
• WW + CIWS: words written plus correct minus incorrect word sequences
• %CW: percent of correct words
• %CWS: percent of correct word sequences

These studies used a minimum of four of the above scoring procedures. One study examined EL writing with eight different scoring procedures. When assessing for technical adequacy, meaning that the measure was a good indicator of student performance on high-stakes tests, CIWS was the only scoring procedure to meet both reliability and validity criteria in all three studies. In the research, the recommended writing activities are as follows: copying curriculum-based passages (Campbell, 2010), responding to a picture prompt for five minutes (Campell et al., 2013) or to a narrative prompt for three, five or seven minutes (Campell et al., 2013, & Espin, et al., 2008).

The reviewed studies determined that CW, CWS, and CIWS are good performance indicators for EL high school writers when they are copying curriculum-based passages. Further, CWS proved to be an appropriate scoring procedure for copying
constructed passages. For a quick reference tool, see the table in my narrative summary findings.

Implications

The results of this literature review have implications for me and for the broader community of EL teachers. In my own setting, I will share my findings with my principal, my EL teacher colleagues, and other district officials. After examining the results of this literature review, I know which scoring procedures are likely to be appropriate for students of different language proficiencies. Before implementing CBM-W in our EL program at the secondary level, our EL staff needs to explore training opportunities so that they can use these scoring procedures as part of their on-going assessment of EL students.

Significantly, using CBM-W would provide both teachers and students with appropriate and helpful data. The data points plotted on the graph would inform the teacher about instructional changes, resulting in increased student achievement (Stecker et.al., 2005). Regular CBM-W would also provide students with evidence of their writing growth via a graph and could aid them in establishing personal writing goals.

Another important implication of this study related to the national census data discussed in Chapter One demands consideration. As the EL population increases in schools, it will be even more critical for content teachers to learn more specifically about the differences between the ELs and the English-first students in their classrooms. This would include instruction in language acquisition, in how ELs approach the writing
process, and in strategies educators can use to support ELs as they work towards English proficiency.

Limitations and Suggestions for Further Research

An important limitation of this literature review is that only three studies (131 participants) met the reliability and validity criteria determined at the onset of my research. There is an obvious need for further research related to progress monitoring of the writing of secondary school ELs.

Additionally, each of the researchers of the studies investigated suggested that caution be taken with the results presented because of limitations inherent in their respective studies. A list of limitations follows: small sample size, English proficiency levels of participants, degree of literacy in participants’ first language, and limited analysis of data for each level of proficiency. In the passage-copying study, there were three levels of proficiency among the participants; however, each level’s results were not examined separately. Many participants were not literate in their first language. Campbell (2010) warns that students who have basic penmanship skills and can write in the Roman alphabet might have different results.

The studies examined for this literature review provide tools for monitoring the number of errors students make in their writing. It might be helpful for students and teachers to know if there is improvement in a measure such as CIWS. However, the CBM-W presented in the three research studies of this literature review do not identify the specific errors that students make. For example, the CIWS measure does not inform the student and teacher if the student is correctly applying the rules for subject-verb
agreement or tense. EL students often make errors in subject-verb agreement and tense, but these CBM-W do not show whether students are making progress in eliminating these basic errors. Further, the studies reviewed do not address how CBM-W monitor the progress of other aspects of writing such as voice, word choice, and sentence complexity. Teachers in a secondary setting need to be able to monitor these aspects as well because secondary students are expected to develop their writing in these areas.

The studies reported on in Chapter Four did not test for technical adequacy with the ACCESS for ELLs assessment. This is the current state-required EL assessment in Minnesota. As mentioned in Chapter One, oftentimes ELs at the secondary level are able to pass the listening, speaking, and reading segments of that assessment before they display proficiency on the writing assessment. Low writing scores prevent ELs from being exited from EL services. This discrepancy suggests a call for further study. Exploring teacher and peer feedback to EL writers as a type of formative assessment could provide significant data. Additionally, it would be beneficial if future studies assessed secondary ELs’ writing using different scoring procedures or combinations of them to determine the technical adequacy of such procedures. An example of this might be scoring writing for word choice or sentence complexity. Finally, as technology which assesses writing online advances, it is probable CBM-W will be integrated into such programs. In this event, WW and WSC could be applied with a high degree of reliability and validity. However, measures which analyze sequences of correct words would need to be sensitive enough to account for the nuances of the English language.
Conclusion

As discussed in the opening paragraph of this paper, teens implement their own form of progress monitoring when they communicate with each other through text messages. They know how well their thoughts and ideas are conveyed by how well they are received by their peers. If their messages are misunderstood or ignored, they make corrections until they get the reaction they desire from their peers. When they spend less time (fewer seconds) texting a message and do not have to clarify a misunderstood one, teens know their texting has improved. They have monitored their own progress.

It is our responsibility as teachers to monitor the progress of the academic writing of our students. One objective of an EL teacher is to prepare students to pass high-stakes tests. With that objective in mind, teachers need to help them convey their ideas through written expression in English. Using progress monitoring, we should be aware (and make our students aware) of how much each student’s writing has improved and respond by making necessary instructional changes along the way. Research on formative assessments is growing rapidly. Studies pertaining to the EL population will continue to be conducted. At this time, progress monitoring of secondary ELs’ writing through the use of CBM-W has been proven valid and reliable. Furthermore, we can anticipate additional tools will also be proven appropriate and effective.
APPENDIX A
Table 2: Curriculum-Based Measures - Writing (CBM-W)
Appendix A

Table 2: Curriculum-Based Measures - Writing (CBM-W)

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>CIW Correct minus incorrect words “An incorrect word (or punctuation mark) was defined as any word or mark that deviated from the passage to be copied.” p. 294</td>
<td>CIWS Correct minus incorrect word sequences p. 294 (The author does not give a description.)</td>
<td>CIWS Correct minus incorrect word sequences “. . . the number of correct sequences minus the number of incorrect word sequences.” (Espin et al., 1999) p. 437</td>
</tr>
<tr>
<td>CIWS Correct minus incorrect word sequences was the number of correct word sequences minus the number of incorrect word sequences.” p. 179</td>
<td>WSC Words spelled correctly (also referred to as CW) p. 294 (The author does not give a description.)</td>
<td>CW Correct words “. . . words with correct spelling, grammar, and usage in the sentence . . .” p. 437</td>
</tr>
<tr>
<td>CWS “Correct word sequences was the number of sequences between two adjacent correctly spelled words. Correct sequences were considered to be acceptable within the context of the sample and both syntactically and semantically correct (Videen et al., 1982). In our scoring of CWS, we also took into consideration the beginning and end of sentences. For a word sequence to be scored as correct at the beginning of the sentence the first word had to be capitalized; for it to be correct at the end of the sentence, correct punctuation needed to be present.” p. 179</td>
<td>CWS “A correct word sequence for passage copying was defined as adjacent, correctly spelled words or punctuation marks that were correct when compared to the original passage. This was slightly different from the definition of CWS for free-writing samples, in which capitalization is ignored except at the beginning of sentences and punctuation is ignored except at the end of sentences (Videen, Deno, &amp; Marston, 1982).” p. 294</td>
<td>CWS Correct word sequences “. . . any two adjacent, correctly spelled words acceptable within the context of the sample to a native speaker on the English language . . .” (Videen, Deno &amp; Marston, 1982) p. 437</td>
</tr>
<tr>
<td>IWS Incorrect word sequences p. 294 (The author does not give a description.)</td>
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</table>
### Appendix A

#### Table 2: Curriculum-Based Measures - Writing (CBM-W) Continued

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>WW</td>
<td>WW</td>
<td>WW + CIWS</td>
</tr>
<tr>
<td>“Words written was the total number of word units written in the sample, regardless of spelling or usage.” (p. 179).</td>
<td>Words written (p. 294) (The author does not give a description).</td>
<td>Words written plus correct minus incorrect word sequences “This score was included because ELs are likely to obtain negative CISW scores (i.e., producing more incorrect sequences than correct sequences). If used for progress monitoring the negative numbers would be difficult to represent on a graph and might prove to be discouraging to the teacher and student. Adding the total number of words written to the CIWS score generates a positive number. In addition, it adds the amount written as an extra component in the score.” p. 437-8</td>
</tr>
<tr>
<td>WWC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Words written correctly was the total number of correctly spelled words in the sample. Any correctly spelled English word was counted, regardless of the appropriateness of usage (in the same way that a spell-checker in a word processing program would score words spelled correctly). p. 179”</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **T-Units**
  “… main clauses or independent clauses with all subordinate clauses, phrases, or modifiers attached to or embedded with it.” (Endicott, 1973; Hunt, 1977; Isaacson, 1984; Perkins, 1983). p. 437
Appendix A
Table 2: Curriculum-Based Measures - Writing (CBM-W) Continued

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>%CW</td>
<td>%CW</td>
<td>%CW</td>
</tr>
<tr>
<td>Percent correct words</td>
<td>Percent correct words</td>
<td>Percent correct words</td>
</tr>
<tr>
<td>“. . . as calculated by dividing WSC by WW.” p. 294</td>
<td>“. . . number of correct words divided by the total number of words written . . .” p. 437</td>
<td></td>
</tr>
<tr>
<td>% CWS</td>
<td>% CWS</td>
<td>% CWS</td>
</tr>
<tr>
<td>Percent correct word sequences p. 294</td>
<td>Percent correct word sequence</td>
<td>Percent correct word sequence</td>
</tr>
<tr>
<td>(The author does not give a description.)</td>
<td>“. . . number of correct word sequences divided by the total number of word sequences . . .” p. 437</td>
<td></td>
</tr>
<tr>
<td>Note: The manuscript abbreviates this as %CIWS. I assume this is a typo.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B
Table 3: CBM-W Performance Indicators for ELs

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELs Score</td>
<td>85</td>
</tr>
<tr>
<td>Progress</td>
<td>90</td>
</tr>
<tr>
<td>Compliance</td>
<td>80</td>
</tr>
</tbody>
</table>
Appendix B
Table 3: CBM-W Performance Indicators for ELs

<table>
<thead>
<tr>
<th>Participants</th>
<th>Study 1 Espin et al., 2008</th>
<th>Study 2 Campbell, 2010</th>
<th>Study 3 Campbell, et al., 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade</td>
<td>10</td>
<td>9-12</td>
<td>10-12</td>
</tr>
<tr>
<td>Class</td>
<td>General Education English with ELs enrolled</td>
<td>EL class</td>
<td>EL class</td>
</tr>
<tr>
<td>No. of Participants</td>
<td>38</td>
<td>57</td>
<td>36</td>
</tr>
<tr>
<td>Proficiency Level</td>
<td>Levels 4 &amp; 5 (nearly fluent)</td>
<td>3 Levels (few literate in L1)</td>
<td>Moderate to high</td>
</tr>
<tr>
<td>Criterion Variables</td>
<td>MBST/MCA-Writing</td>
<td>MBST/MCA-Writing TOWL-3 TEAE Teacher rating</td>
<td>MBST/MCA-Writing TOWL-3 TEAE Teacher rating</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study Results Recommended CBM-W Scoring Procedures</th>
<th>Study 1 Espin et al., 2008</th>
<th>Study 2 Campbell, 2010</th>
<th>Study 3 Campbell, et al., 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>CW</td>
<td>N/R</td>
<td>Curriculum-based passage copying</td>
<td>N/R</td>
</tr>
<tr>
<td>CWS</td>
<td>N/R</td>
<td>Curriculum-based passage copying</td>
<td>N/R</td>
</tr>
<tr>
<td>CIWS</td>
<td>Narrative prompt 5, 7 minutes</td>
<td>Curriculum-based passage copying</td>
<td>Picture prompt 5 minutes Narrative prompt 3, 5, 7 minutes</td>
</tr>
<tr>
<td>WW + CIWS</td>
<td>N/R</td>
<td>N/R</td>
<td>Picture prompt 5 minutes Narrative prompt 3, 5, 7 minutes</td>
</tr>
</tbody>
</table>

Other comments: Researchers consider analysis tentative, did not set out to examine EL writing independently of whole group.

N/R = not recommended, based on reliability and validity
APPENDIX C
Constructed Passage Copying
Appendix C
Constructed Passage Copying

Jane’s gas tank was empty. She stopped her car and asked a police officer for directions to the closest gas station. These are the directions she received: Make a left at Elm Street. Go through four stop signs to the corner of Second Street and Elm Street, where there is a bus stop on your left. Make a right immediately after the bus stop. Drive two blocks until you reach a traffic light. On the next block, on the left, you will see the gas station that is open 7 days a week.
APPENDIX D
Curriculum-Based Passage Copying
APPENDIX D
Curriculum-Based Passage Copying

One wall was of marigolds, one of daffodils, one of pink roses, and one of cherry blossoms. The ceiling was made of sunflowers, and the floor was a carpet of daisies. They had water lilies in their bathtub, and buttercups in their refrigerator. It was a rather fragile house and it swayed in the wind, but it was very beautiful. Next day the big bad pig came prowling down the road and saw the house of flowers that the three little wolves had built. He rang the bluebell at the door.
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Retrieved from


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doi:http://dx.doi.org/10.1016/0895-4356(91)90160-B


