

AN ANALYSIS OF INFORMAL READING INVENTORIES
FOR ENGLISH LANGUAGE LEARNERS

A Dissertation

by

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This dissertation meets the standards for scope and quality of
Texas A&M University-Corpus Christi and is hereby approved.

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ABSTRACT

The research examined the various ways in which informal reading inventories (IRIs) demonstrated an increasing awareness of assessment for English language learners (ELLs). The research employed both a content analysis of the key components of IRIs and how they align with practices for the assessment of ELLs, as well as a historical analysis of the impact or perceived impact of specific political and theoretical constructs in the realm of Bilingual/ESL academia.

The six informal reading inventories selected for the study included: *The Basic Reading Inventory* (2012), *Bader Reading and Language Inventory* (2013), *Ekwall/Shanker Reading Inventory* (2010), *Analytical Reading Inventory* (2011), *Classroom Reading Inventory* (2009), and *The Informal Reading Inventory* (2011).

The guiding questions for the study included:

- (1) What materials and procedures of the Informal Reading Inventories align most closely with assessment practices for English language learners?
- (2) How has the content of Informal Reading Inventories been impacted by the historical and political contexts of Bilingual/ESL education?

The results of the study showed that the authors of the *Classroom Reading Inventory* and the *Bader Reading and Language Inventory*, demonstrated an increased awareness of the needs of ELLs. The results of the historical analysis showed that the additions, modifications, and/or deletions made to the individual instruments reflected trends in the literacy field, as opposed to political and theoretical constructs of Bilingual/ESL education.

The implications of the study primarily impact classroom practitioners. Each of the IRIs examined have benefits for all learners. In the selection of an IRI for the classroom, teachers need to consider (1) the purpose of assessment and (2) the characteristics of the IRI that will facilitate lesson design and the achievement of grade-level standards.

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Chapter 1: Introduction

A focus on the academic attainment of English language learners (ELLs) and the provision of high-quality instructional programs have been cornerstones of Bilingual/ESL educational policies since the inception of the *Bilingual Education Act of 1968*. The primary goals of the *Bilingual Education Act of 1968* were (1) to increase English skills, (2) to maintain the student's first language skills, and (3) to support the home culture of ELLs. The most current legislation, Title III of the *No Child Left Behind Act* (NCLB) (2001), the *English Language Acquisition, Language Enhancement, and Academic Achievement Act*, requires that ELLs attain English proficiency and meet state and academic content standards. Additionally, state education agencies (SEAs) and local education agencies (LEAs) are charged to increase their capacity to provide high-quality instructional programs and "to define criteria for progress in learning English, establish performance standard for English proficiency, and set annually increasing performance targets to the number and percentage of ELs meeting these criteria" (Cook, Linquanti, Chinen & Jung, 2012; p.xv). The latter requirement of reporting adequate yearly progress (AYP), coupled with the changing demographics of classrooms across the nation, leaves many districts and schools with an increased urgency to monitor ELLs' academic achievement and facilitate English language acquisition. With the increased urgency, alternative assessments, such as informal reading inventories (IRIs), utilized to find "out what a student knows [and] intended to show growth and inform instruction" (Zainuddin, Yahya, Morales-Jones, & Ariza, 2002, p. 155) can be useful measures to measure student progress toward instructional goals.

According to the National Center for Educational Statistics (2012), the percentage of ELLs in public schools increased from the 2009-2010 academic year to the 2010-2011 school

year. Twenty-six states showed a percentage increase, ranging from .1 to 3.4 percent in the number of students participating in programs for ELLs. The states with the highest concentration of ELLs enrolled in programs for ELLs during the 2010-2011 school year included California, Texas, New Mexico, Colorado, Nevada, Alaska, Hawaii, and Oregon. Additionally, states such as Arkansas, Connecticut, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Missouri, Nebraska, New Hampshire, New York, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Virginia, Washington, and Wyoming also showed increases in the percentage of students participating in programs for ELLs.

Aside from comprising the largest numbers of students entering the public school settings, English language learners (ELLs) present challenges because they enter the classroom with different levels of competence in English, different experiences in formal education, and varied cultural backgrounds (Cloud, Genessee, & Hamayan, 2008; McCallum, Bracken & Wasserman, 2001). Thus, as the American educational system strives to provide for the academic success of all students, policies and programs focused on services provided to ELL students continue to transform and change. While bilingual education continues to stir debate, the changing demographics of the United States require that discussions focus on how ELL students will acquire English and receive the same academic opportunities as native English speaking peers. Successful achievement of academic equality requires that teachers, schools, and districts be knowledgeable of theoretical frameworks and educational practices, in addition to staying current with legislation impacting classroom practices for ELLs.

During the 1980s, Jim Cummins and Stephen Krashen collaborated in putting together a highly influential, policy-relevant theoretical framework for bilingual education in California and elsewhere that continues to positively impact classroom practices for ELLs (Baker & Hornberger,

2001). Both Cummins' and Krashen's work meld theory and research to address the educational practices and policy that impact ELLs. Their publication base is extensive. Cummins' (1981) theories postulated that to ensure ELL students' success in the all-English classroom, they would need to develop English skills beyond Basic Interpersonal Communication Skills (BICS). Basic interpersonal communication skills refer to the students development of fluency in conversations pertaining to daily aspects of life. For example, "Where is the bathroom?", "Can you repeat the page number?", and "What are we having for lunch?" are all examples of BICS. In order to be successful in dealing with academic content, ELL students also need to develop Cognitive Academic Language Proficiency skills (CALP). CALP refers to the students development of language related to the tasks and expectations of content area classrooms. CALP requires students to use specific language related to the topics of study. For example, "Can you describe the process of photosynthesis?", "Describe the events that led up to the British Revolution," and "How do we find the circumference of a circle?" are all examples of CALP. Krashen's (1982) work centered on optimal conditions for second language acquisition including comprehensible input and the development of speaking and listening skills. Comprehensible input refers to the teachers' delivery of content that is understood by the learners despite their inability to understand all words and/or language structures. According to Krashen, comprehensible input allows students to use learning strategies, such as learning words in context and inferring meaning, allowing them to acquire language naturally. The works of Jim Cummins and Steven Krashen on language acquisition and learning have contributed to the knowledge base in support of rich educational experiences for ELLs in the classroom (Baker & Hornberger, 2001).

The Report of the National Literacy Panel on Language Minority Children and Youth (August & Shanahan, 2006) provided teachers a synthesis of research highlighting practices in

literacy instruction for language minority youth. While the report supported the idea that literacy instruction focused on phonemic awareness, phonics, vocabulary, fluency, and comprehension had a beneficial impact on language minority students at word-level skills, it also posited that to have maximum benefit in reading and writing adjustments to instruction needed to be made; oral English development must be incorporated into reading and writing instruction. The report also supported the premise that oral proficiency and literacy in the students' first language helped to facilitate literacy development in the second language. The report did not support the sole use of teacher judgment in identifying students in need of intensive instruction, but rather suggested that teacher judgment could be more reliable if teachers responded to specific criteria. Related to the panel's point, the *Standards for Educational and Psychological Testing* (American Educational Research Association (AERA), American Psychological Association (APA), & National Council on Measurement in Education (NCME), 1999) standard 13.7 stated,

In educational settings, a decision or characterization that will have a major impact on a student should not be made on the basis of a single test score. Other relevant information should be taken into account if it will enhance the overall validity of the decision (p. 146).

The use of informal reading inventories may provide information that is critical for developing instructional objectives to promote literacy development for students. The instruments provide a benefit because ELLs' literacy development does not always align with grade level placement. According to Cloud, Genessee, and Hamayan (2008), the reasons for this mismatch are that (1) ELLs may enter the (English) public school setting at any point during the PK-12 continuum and (2) their primary language may be different from the medium of instruction, thus placing them at varying levels of competence in both their native and second

language. Assessment should be a vehicle for monitoring a student's proficiency in language in both academic and social contexts and be culturally appropriate for the student (Cloud, Genessee, & Hamayan, 2008). Equipped with the appropriate literacy assessment, teachers are more capable of designing instructional objectives and lessons that will advance the achievements of ELLs (Helm, 2004).

According to Abedi and Dietel (2004),

tests become a measure of two skills for the ELL student: subject and language... performance of individuals and groups should be tracked, ideally using multiple measures, in order to identify patterns of improvement or lack of improvement [t]o make the substantial gains required by NCLB (pp. 783,785).

Instruments that allow for ongoing assessment become valuable tools as teachers and administrators strive towards the goal of improved outcomes to facilitate the most effective instructional practices possible for each child, in particular those children whose primary language is not English (Educational Testing Services (ETS, 2009). According to Hurley and Tinajero (2001), literacy assessment, "emphasizes the importance of connecting teaching, learning, and assessment in meaningful ways in the classroom," they also noted that "literacy assessment in the ESL/bilingual classroom is often a difficult task" (p.69).

Ensuring that students are making progress requires teachers to have a mechanism in place to continue gathering data on the student's academic and literacy skills. Teacher- gathered data through checklists and/or observation in instructional or informal learning activities can be utilized so that instructional programs can be adjusted as needed (Johns, L'Allier, & Johns, 2012; Lucas & Wagner, 1999). Utilizing results of informal reading assessments intentionally and strategically can provide a clearer pathway for designing and implementing instruction that

facilitates learning. As the term connotes, Informal Reading Inventories (IRIs) are informal assessments that can be used by classroom teachers to assess different aspects of a student's reading abilities, including word calling ability, oral reading ability and comprehension. Pikulski and Shanahan (1982) posited that the strength of the IRI lies in its ability to link assessment and effective instruction. Afflerbach (2007) also supported the use of informal reading inventories as a vehicle for examining the processes engaged in by the student during reading which could serve as a means of measuring students' ongoing literacy development.

IRIs may also provide subtests to measure various aspects of literacy instruction including those identified by the National Reading Panel (phonemic awareness, phonics, fluency, vocabulary, and comprehension) that may facilitate developmentally appropriate literacy growth for students (Afflerbach, 2007). Informal reading assessments date back to the early 1900s with the works of Waldo (1915) and Gray (1916). Waldo's work was significant because it was the earliest reading assessment that examined silent reading rates and comprehension. Gray's work examined oral and silent reading rates. His work was significant because his passages were standardized and he presented specific criteria for discontinuing oral reading. Overtime, informal reading assessment has evolved. This evolution has included efforts to clarify instructions for administration and provide information on how informal assessments could be used in instruction.

Since the 1950s the idea of an IRI has changed and several commercial IRIs are now available. Current informal reading inventories may address sub-skills in phonemic awareness, phonics, fluency, vocabulary, and comprehension. They consist of graded word lists, oral and silent reading passages, and measures of comprehension and fluency (Johns, 2012). Information obtained from IRIs can be used to match instruction to students' strengths and needs, select

appropriate texts for students to read, and document student progress over time. According to Gottlieb (2006), structured observation coupled with teacher-made or commercial assessments, allows teachers to "focus on the specific aspects of their student's literacy development and systematically document their progress over time " (p. 52). August and Haukuta (1997) supported the use of IRIs in conjunction with standardized measures as a vehicle for ensuring effective literacy instruction for ELLs. Because the information obtained from the informal reading inventory provides a measure of progress overtime, the information obtained can be utilized to ensure that classroom instruction remains within the student's zone of proximal development, ensuring that students experience tailored instruction that builds upon their capabilities and strengthens areas of weakness that can potentially create obstacles in literacy and language development of ELLs (Vygotsky, 1986).

While the use of IRIs is supported as a vehicle for documenting progress and literacy development over time, researchers have noted that IRIs differ in terms of format, comprehension measurements, and specific sub-skills measured. Analysis of commercial reading inventories showed that defining the purpose for and use of an IRIs within the classroom lead to better decisions in the selection of an IRI to meet the needs of the classroom teacher.

Harris and Niles (1982) completed an analysis of informal reading inventories examining the following elements: (1) number of forms, (2) levels of passages, (3) lengths of passages, (4) passage content, (5) assessment of reading rate, (6) inclusion of illustrations, (7) use of titles, and (8) how passages are introduced to the reader (p. 163). Their research showed that commercial reading inventories differed in terms of specific information (or lack of) such as how reading passages should be read (oral or silent), how comprehension should be measured, what constituted an error in fluency, and the criteria for establishing acceptable performance. In

summarizing their findings, Harris and Niles (1982) stated, "...that considerable variation exists among IRIs " (p.172).

Allen and Swearingen (1991) completed a study of IRIs examining the questions. They looked at inferential, main idea and cause/effect questions to determine whether or not the questions were valid and "consistent in the type of task they require[d] for each specific category" (p.1). They analyzed the questions found in five reading inventories. The study suggested that a "high percentage of these questions [were] inaccurately labeled" (p. 7) and recommended a "more open-ended questioning or retelling format" to "allow a more accurate evaluation of the child's comprehension" (p.8).

Nilsson (2008) conducted an analysis of reading inventories examining the manner in which each addressed key issues relevant to their use. Her primary purpose for examining the IRIs was to determine how key features reflected recent policy changes, specifically applicability to Reading First grants. She examined the following elements: (1) number of forms, (2) passage types, (3) comprehension measurements, (4) vocabulary, (5) phonemic awareness, (6) phonics, (7) fluency, and (8) construct validity (p. 527). Nilsson's research showed that "each IRI had its strengths and limitations." She noted that each IRI had specific characteristics that could determine the teacher in determining whether or not it was the best selection for their purposes.

Neither research study addressed the applicability of the IRIs to ELL students, making this study important in terms of selecting an IRI that will assist in making the best placement and instructional decisions for ELLs. While various people have recommended the uses of IRIs with ELLs, other authorities have noted that differences exist with in the IRIs. An unresolved question is which of these IRIs would be best suited with use with ELLs.

Purpose of the Study

The purpose of this research is to examine the various ways in which informal reading inventories address key issues relevant to the assessment of ELLs. In addition, the researcher tracked the development of IRI's in relation to the historical and political contexts of Bilingual/ESL education. The guiding questions for the study are:

- (3) What materials and procedures of the Informal Reading Inventories align most closely with assessment practices for ELLs?
- (4) How has the content of Informal Reading Inventories been impacted by the historical and political contexts of Bilingual/ESL education?

The first research question will be answered through a content analysis across the IRIs selected for the study. The second research question will be answered through an historical analysis of political and theoretical constructs and the perceived impact they had on the development of each instrument.

Definition of Key Terms

Bilingual Education/ English as a Second Language programs (Bil/ESL programs):

Approaches in the classroom that support students and allow for maintenance of native language as they acquire additional language. Bilingual and ESL programs teach academic content to students while making necessary adjustments to ensure the medium of instruction is comprehensible at the student's level of English proficiency (TEA, 2012).

English Language Learner (ELL): For purposes of this study, the acronym ELL refers to ELLs, students who enter the public school system at any point during their Pre-K-12 education whose first language is not English. The term includes both students who are just beginning to

acquire English language proficiency and those who may have developed varying levels of English proficiency (ETS, 2009; Texas Education Agency, 2012).

English Language Proficiency (ELP): For purposes of this study ELP refers to the degree to which an individual is able to perform language tasks across the four domains of language: reading/writing/listening/speaking. In Texas, English Language Proficiency levels include beginning, intermediate, advanced and advanced high (Texas Education Agency, 2012).

First Language (L1): For purposes of this study, the term "first language" will be used to reference the student's native language (Texas Education Agency, 2012).

Informal Reading Inventory (IRIs): For purposes of this study, the term IRI refers to an individually administered assessment constructed to determine a student's strengths and needs in reading instruction (Nilsson, 2008).

No Child Left Behind Act (2001), (NCLB): For purposes of this study, NCLB references the *No Child Left Behind Act of 2001*. This standards-based education reform supports setting high standards and establishing measurable goals for individual achievement (outcomes) in schools. Each state receiving federal funding is required to develop and administer assessments in basic skills to all students. Schools are required to make adequate yearly progress (AYP) in test scores to ensure funding is received

Second Language (L2): For purposes of this study, the term second language will be used to identify the language being learned (Texas Education Agency, 2012).

Multicultural: For purposes of this study, the term multicultural refers to the degree to which the passages in the IRIs reflect varied topics relevant to: age, ethnicity, nontraditional gender roles, location, social economic status, religion and special needs.

Chapter 2: Literature Review

The review of literature and related research is presented under five major headings:

1. A historical overview of Bilingual/English as a second language (ESL) Education
2. A review of the literature specifically on English language learners (ELLs)
3. A review of the theoretical frameworks for ELLs and Bilingual education

4. A review of assessment of ELLs
5. A history of informal reading inventories (IRIs)

A historical overview of bilingual/English as a second language education. Bilingual education has a long history in the United States. Its beginnings can be traced back to schools established by Polish immigrants in the 17th century. The immigrants' schools used Polish as the language of instruction, but included English as a subject as well. During the 18th century, Franciscan missionaries used bilingual instruction to teach American Indians Catholic catechism through the use of indigenous languages (Castellanos, 1983; Kloss, 1977). During the 19th century, several states—including Ohio, Louisiana, and New Mexico—were the first to formally adopt bilingual schooling. Bilingual education included instruction in German, French, Spanish, and other European languages (Ovando & Combs, 2012).

During the years encompassing the first and second World Wars, bilingual education experienced a decline (Ambert & Melendez, 1985), as anti-immigrant sentiments spurred many states to implement English-only instructional practices (Baker, 2011). An interest in the study of non-English languages and bilingual instruction arose in the late 1950s and early 1960s. This renewed interest was spurred by several events: the Soviet Union's launching of *Sputnik*, the influx of Cuban refugees into Dade County, Florida, and the rise of the Civil Rights movement. As a response to the Soviet Union's launching of *Sputnik*, Congress, in 1958, enacted the *National Defense Education Act*, authorizing funds for the study of science, mathematics, and foreign languages (Crawford, 2004). In response to the influx of Cuban refugees and their needs in Dade County, Florida, the Coral Way Elementary School, in 1963, provided dual language schooling for both Spanish and English speaking students (Lessow-Hurley, 2013). The success

of the Coral Way program triggered the development of bilingual programs in several states, including Texas, New Mexico, Arizona, California, and New Jersey (Keller & Van Hooft, 1982).

Bilingual education received national support in the 1960s. After deliberation by both houses of Congress, Senate Bill 428 was signed into law by President Lyndon B. Johnson as the *Bilingual Education Act* on January 2, 1968, “making bilingual education a federal policy for the first time in the history of the United States” (Faltis & Coulter, 2008, p. 9). While Senate Bill 428 was originally intended for Spanish-speaking students, particularly students of Mexican-American heritage, the *Bilingual Education Act* “adopted the broader approach” (Leibowitz, 1980, p. 17) and authorized the utilization of federal monies for the education of all ELLs (Baker, 2011). The *Bilingual Education Act of 1968* made funding available to establish bilingual programs for non-English speakers, many of whom were of low socio-economic status. Three primary functions of the legislation were to (1) to increase English skills, (2) maintain the student's first language skills, and (3) support the home culture of the student. The *Bilingual Education Act of 1968* was the first federal recognition that ELLs had special educational needs and in the interest of creating equal educational opportunities, federally funded programs to meet their needs were necessary (National Clearinghouse for Bilingual Education (NCBE), 1988).

The first revision of the *Bilingual Education Act of 1968* occurred in 1974. The revisions provided a definition of bilingual education, established program goals, called for the design of regional support centers, and provided funding for districts wanting to expand curriculum, increase staff, and conduct research on bilingual programs (NCBE, 1988). A second revision followed in 1978. The revision of 1978 expanded eligibility and set goals for transitional programs. Unlike previous versions of the bill, the *Bilingual Education Act of 1978*, did not provide the funding opportunities contained in the *Bilingual Education Act of 1968* or the first

revision of the *Bilingual Education Act of 1968* that occurred in 1974. The *Bilingual Education Act of 1984* decentralized power and provided districts with more control over the establishment of bilingual programs to meet the needs of their population. Districts could select transitional bilingual programs, developmental programs, or special alternative programs to educate their student population. The *Bilingual Education Act of 1984*, required that parents be made aware of program alternatives and provided funding for excellence programs and family literacy in English. Reauthorization of the Bilingual Act occurred again in 1988 and 1994. The *Bilingual Education Act of 1994* remained in effect for over seven years. On January 8, 2002, President George W. Bush signed into law the *No Child Left Behind Act* of 2001, replacing the *Bilingual Education Act*, or Title VII of the *ESEA*, with Title III, the *English Language Acquisition, Language Enhancement, and Academic Achievement Act*. While Title III addressed language instruction for ELLs and immigrant students, it made no reference to “bilingualism, biliteracy, or native language instruction” (González, Yawkey, & Minaya-Rowe, 2006, p. 85). While Title III centers solely on English (Wright, 2010), it still leaves state and local education agencies the authority to determine the type of instructional approaches to be implemented in their bilingual/ESL education program.

A review of literature related specifically to English language learners. ELLs, also referred to as English as a Second Language (ESL) students, Limited English Proficient (LEP) students, and more recently EL students, are increasingly expanding the diversity of classrooms. According to Migrant Policy Institute (2013), ELL individuals "now represent nine percent of the United States population, or more than 25 million individuals" (Britz & Batalova, 2013). According to McCallum, Bracken, and Wasserman (2001) almost half of all students in kindergarten enrolled in the two largest school districts in California were ELLs. The number of

students who speak a language other than English at home account for almost 19 percent of all K-12 students in public school classrooms in the U.S. By 2030, it is estimated that this percentage will increase to over 40 percent of all K-12 students. Additionally, nearly 68 percent of ELL elementary students reside in Arizona, California, Texas, New York, Florida, and Illinois. However, by 2030, it is estimated that many families will have relocated to new areas where immigration populations have traditionally been very small.

ELL students "enter U.S. schools needing to learn oral language and literacy in a second language, and they have to learn with enormous efficiency if they are to catch up with their monolingual English classmates" (Leseux & Geva, 2005, p. 53) Within the ELL population, Freeman & Freeman (2002) identified four categories of ELLs: (1) newly arrived with limited formal schooling, (2) newly arrived with adequate formal schooling, (3) students exposed to two languages simultaneously, and (4) long term ELL. NCLB designates ELLs as one of four subgroups of students whose progress must be reported annually for districts to meet adequate yearly progress (AYP) requirements. The other three subgroups include (1) students with disabilities, (2) students who are economically disadvantaged, and (3) students from major ethnic and racial groups (No Child Left Behind (NCLB), 2001).

The academic achievement of ELLs is often measured in terms of their performance on standardized tests, grade point average (GPA), and/or drop-out rates (Genessee, Lindholm-Leary, Saunders, & Christian, 2005). The work of Short & Fitzsimmons (2007) cited that drop-out rates for ELLs triple those of their native English speaking peers. According to Collier and Thomas (2009),

the achievement gap between average native English speakers and students who started school with little proficiency in English is very large...[the] achievement

gap is equivalent to about 1.2 national standard deviations, as measured by standardized achievement tests across the curriculum (p. 3).

The statistics are cause for alarm and require that educators remain cognizant of the diverse needs of this population.

A review of theoretical frameworks for ELLs and bilingual education. Most theorists view first language acquisition as a natural, innate process, whether that process occurs because of a specific language acquisition device, or a collection of cognitive skills that facilitates language development (Chomsky, 1965; Pinker, 1994). Children learn the parameters of the first language through exposure to the language and experience with the language (Chomsky, 1965). Second Language Acquisition Theory defines language as a complex system that must be viewed on a number of levels, including phonology, syntax, morphology, semantics, pragmatics, lexis and discourse. Additionally, individual learning is perceived through multiple lenses, including contextual factors, learning differences, learning opportunities, and outcomes (Trumball & Pacheco, 2005). Krashen (1985) posited that individuals acquire language when they are motivated to learn in an environment that is culturally responsive to their needs as ELLs. Through instruction that is delivered through mediums that are comprehensible for the student, individuals are able to acquire the academic language needed for success in the classroom. Krashen and Terrell (1983) identified five stages of language development: (1) preproduction, (2) early production, (3) speech emergence, (4) intermediate fluency, and (5) advanced. As students proceed through each of these stages, the teacher is charged with the delivery of instruction that is comprehensible and also with assessing student progress (Freeman & Freeman, 2002).

Understanding the language proficiency level of learners within the categories mentioned assists teachers in the selection of appropriate assessments that can provide a window into the

student's literacy experiences and knowledge base so that effective instructional decisions can be made (Freeman & Freeman, 2002). Students need to develop communicative competence in English to be able to demonstrate proficiency of the language in social and academic settings. Most children acquire conversational fluency within two to three years. Academic language fluency (language required to achieve in the classroom or workplace) takes between four to seven years to acquire (Cummins, 1979; Trumbull & Pacheco, 2005). Using the constructs of conversational fluency (BICS) and academic language proficiency (CALP), Cummins (2000), helped to delineate the multiple language demands placed on the ELL student in and out of school. Cummins presented the variation in language uses in terms of cognitively undemanding/demanding tasks and context embedded/reduced tasks, presenting teachers a model for assessing the language demands of activities in the classroom (Cummins, 1981; Robson, 1995). Second language acquisition and learning is influenced by multiple factors, including cognitive, linguistic, affective, social, and instructional factors (Farr & Richardson-Bruna, 2005; Trumbull & Pacheco, 2005). A student's first language may help to facilitate the acquisition of language (transfer) or inhibit (interfere with) the acquisition of the second language (Cummins, 1980; Garcia, 2000; Fitzgerald, 1995). Cummins' Common Underlying Proficiency (CUP) Model stated that emphasis on creating avenues for ELLs to use language in functional contexts will assist in the transfer of language skills. The CUP Model posits that individuals have a single system for language processing, thus the four language domain—listening, reading, writing and speaking — can be developed through both the first and second language. While many adhere to the concept of transfer (the individual's ability to generalize knowledge from their first language to the second language), Wong-Fillmore (1991) cited three conditions critical to the success of students acquiring a second language: (1) recognition of the need to learn the target language, (2)

exposure to models of proficiency in the second language from whom they can learn, and (3) a setting in which they can practice and interact with models in the target language on a frequent basis (pp. 52-53).

A review of assessment of ELLs. The expansion of bilingual populations brings to the forefront the importance of ensuring that assessment and instructional practices align with the individualized needs of the students (National Center for Educational Statistics (NCES), 2009).

While Proficiency Level Descriptors (PLDs) are used to determine the level of English Proficiency as determined by a given instrument (i.e. LAS, TELPAS, ISAT) and can vary, assessment of ELLs based on theoretical frameworks of Second Language Acquisition and other principles in the field of linguistics (Bauman, Boals, Cranley, Gottlieb, & Kenyon, 2007; Cummins, 1981) reflect appropriate assessment practices for ELLs. Proficiency descriptors that are aligned with the developmental stages of language acquisition are important to ensure that ELLs are moving forward on the continuum of language development and academic achievement. By tying instruction and assessment to the student's stage of language acquisition (pre-production, early production, speech emergence, intermediate fluency, and advanced fluency) teachers can ensure that students work within their zone of proximal development (Hill & Bjork, 2008; Krashen & Terrell, 1983).

According to Diaz-Rico and Weed (2002), 29 states have specific guidelines for the identification and placement of ELLs in mainstream classrooms. The most commonly used form of identifying ELL students is the Home Language Survey (HLS), a short survey given at the time of enrollment to determine the language spoken at home and identify the need for English proficiency screening. The two basic questions found on the HLS include (1) Is there a language other than English spoken in the home? and (2) What is the "other" language spoken in the home?

Additionally, schools use data obtained from registration and enrollment forms, teacher observations, parent interviews and/or referrals. Once students are identified as possible ELLs, state and federal law require that they are given placement tests and a determination of their level of English proficiency be made before they are placed in the instructional program.

Common assessments for determining the student's level of English proficiency include the *Language Assessment Scales (LAS)*, *Bilingual Syntax Measure (BSM) I*, the *Pre-IPT* and *IPT*, and the *Basic Inventory of Natural Language (BINL)*. The *LAS* instrument measures oral language skills in English and Spanish. It is a standardized test with mean scores and standard deviations across various age groups. The *BSM I* also measures oral proficiency in grammatical structures and language dominance in English and Spanish. The *Pre-IPT* and *IPT* tests measure students oral, reading and writing proficiency. The *BINL* test utilizes pictures to elicit natural responses. The student responses are analyzed based on fluency, length, and syntax. Schools use the results of the testing for the initial placement of students in instructional programs (Diaz-Rico & Weed, 2002). Cheng (1987) recommended that additional sources of input also be utilized in making placement decisions:

- observation of students in multiple settings (classroom, home, playground)
- student histories (medical, family, educational experiences, immigration experience, home language)
- teacher interviews regarding learning style and classroom behavior
- input from school counselor and nurse
- parent interviews regarding student's language and performance skills

Gathering the most amount of information possible is important in order to design a language program that meets the needs of ELL students.

After students are placed, proper assessment is needed to monitor and record their progress; this progress monitoring provides valuable information to school administrators and teachers. The *No Child Left Behind* (NCLB) Act of 2001 required assessments to include four domains (reading, writing, listening, and speaking), measure academic English proficiency and align with the states' English Language Proficiency (ELP) standards (Fast, Ferrara & Conrad, 2004). Teachers must have a measure of how to gauge the students' learning as they progress through each of the stages of language acquisition so they can adjust their academic instruction to the students' ability.

In 2009, the Educational Testing Service (ETS) presented *Guidelines for Assessing ELLs*. The guide was focused on large scale content assessments administered to students in grades K-12. The primary function of the guide was to provide a framework to make appropriate decisions in the assessment of ELLs. Several factors need to be considered in the assessment of ELLs. They include linguistic background, varying levels of proficiency in English and/or in the native language, varying degrees of formal schooling (either in their native language or English), varying degrees of exposure to testing, and varying degrees of acculturation to the mainstream (pp. 6-8). Because most assessments measure some degree of English proficiency, it is important to consider that ELLs will score lower than their native English speaking peers. ETS recommended that prior to administration of an assessment, the purpose of the test should be established, the constructs to be tested should be explicitly defined, and multiple assessment items and response types should be included so that the ELL student can demonstrate their understanding (ETS, 2009). The guidelines recommend the use of visuals, performance tasks

(such as completion of graphic organizers) and oral responses as options for ELL students, as well as those with differing learning styles. The degree of English language proficiency varies among ELL students, so assessment administrators should provide clear directions and accessible language for ELL students. ETS further recommended item try-outs, one-to-one interviews, pilot tests, and field tests to evaluate assessment tasks and determine reliable and valid statistics (ETS, 2009). However, developers of the guide noted that the principles contained could be applied to populations (other than ELL) and other assessments (p. 3).

Rothenberg and Fisher (2007) asserted that a definitive and clear link between the goals and purposes of assessment, such as to inform instruction, directly impacted the learners' experiences in the classroom. They further purported that a multifaceted approach for student assessment one that measures aspects of literacy, language and content learning, ensures a more complete picture of students' current levels of literacy and language levels.

Similarly, the professional organization, Teachers of English to Speakers of Other Languages (TESOL), outlines general assessment standards that afford teachers an opportunity to obtain the most appropriate and useful information for ELLs. The standards support assessment that (1) is designed to measure progress over time, 2) linked to classroom instructional objectives, and 3) represents authentic learning activities in naturally occurring situations. Assessment practices that allow teachers to examine specific criteria afford teachers the opportunity to make informed placement and instructional decisions regarding ELLs (August & Schanahan, 2006).

A historical overview of informal reading inventories. The origin of Informal Reading Inventories (IRIs) can be traced back to the beginning of the 1900s; however, it is the work of

Emmett Betts that popularized the merit of IRIs as “sound, understandable and practicable” (Betts, 1954, p. 163). In his book, *Foundations of Reading Instruction* (1954), Betts relayed the merits of the IRI as three-fold:

- First, the teacher is provided with a clear picture of the achievement and needs of students in terms of instructional materials.
- Second, IRIs provide teachers with a vehicle for determining the needs of students in the classroom.
- Third, IRIs provide a way of informing the student of his/her needs and allows for the development of a systematic plan for improving literacy skills.

The IRI provides the classroom teacher with a lens into the student’s literacy levels, so the teacher has the information to develop effective instruction that offers appropriate support for the student. IRIs are individualized assessments that measure literacy skills such as word recognition, word meaning, reading strategies, and comprehension. A key feature of IRIs lies in their usefulness in identifying a student’s independent, instructional and frustration levels of instruction. The levels of instruction, most often attributed to the work E. Betts (1954), relate to the student’s capacity to read and comprehend the text (Afflerbach, 2007).

In his book titled *Foundations of Reading Instruction* (1954), Betts articulated that in order for teachers to be successful in the development of effective literacy instruction, they should be aware of the reading levels of each student in their class and the readability of the texts in which students are placed. The independent level denoted the highest level at which the student can read without experiencing frustration. The instructional level denoted the highest level at which the student can read with appropriate teacher supervision. The criteria for this

reading level included word recognition 90-100%, oral reading accuracy 98 - 100%, and comprehension 90-100 %. At the instructional level, students may experience difficulty in the recognition of some words (less than 5%). The criteria for this level included word recognition 75 - 89%, oral reading accuracy 95 - 97%, and comprehension 75 - 89 %. The frustrational level denoted the level at which the student experiences significant difficulty, demonstrated by signs of frustration such as a break in the overall rhythm of oral reading, tension movements and finger pointing. The criteria for the frustrational reading level included word recognition below 50%, oral reading accuracy 90% or below, and comprehension below 50% (Betts, 1946, 1954).

While Betts made significant contributions to the development of the IRI, other individuals made contributions prior to Betts' work that shaped the development and growth of the IRI and its use as a measure of reading ability (Johns & Lunn, 1983). In the early 1900s, Waldo designed an informal study to measure students' oral reading ability. Waldo used oral reading expression to gauge students ability to comprehend the text. He utilized the results of the study to measure the effectiveness of teaching methods being used with the students. Following the first study, Waldo continued his investigations and sought measures of silent reading and comprehension. His second investigation included determining a student's reading rate and measuring comprehension by having students summarize and answer ten questions related to the text read. Silent reading rates and comprehension were measured twice during the school year to assist in determining students' growth in reading. Waldo (1915) hypothesized that the greatest gains in the speed of silent reading rate occurred in the early grades. The results of Waldo's studies were used to assist teachers and administrators measure student progress and as a vehicle for improving instruction.

William S. Gray (1916) was also a notable influence in the development of the IRI. The *Gray Oral Reading Test* was regarded as a standard test and included both oral and silent reading paragraphs with specific instructions on the administration of the passages and criteria for discontinuing oral reading. The reading passages used by Gray were standardized and leveled by increasing difficulty. Oral reading passages were used to determine the student's ability to pronounce words at sight and to attain a reading rate. No measure of comprehension followed the oral reading task. Unlike Waldo's assessments, in which students were given five minutes to read and after which a reading rate was determined, Gray's test kept a record of the time required to read and the errors/miscues made in the reading. Gray's criteria for discontinuing oral reading was as follows:

1. A paragraph is not successfully read if it requires 30 or more seconds for the reading, and if four or more errors are made.
2. A paragraph is not successfully read if it is read in less than 30 seconds and 5 or more errors are made (Gray, 1916 as quoted in Johns & Lunn, 1983).

Gray's silent reading passages were administered in a similar fashion to Waldo's silent reading passages except that Gray's exam was administered individually, whereas Waldo's exam was administered to a group or whole class. Following the reading of the passage, students in second and third grade were asked to retell the reading and students in grades four and above were asked to summarize the selection in a narrative. Following the performance task (retelling or summarizing), students were presented with ten questions related to the text to determine comprehension. This was identified by Gray as quality of reading). Current IRIs have retained several characteristics of Gray's tests, including individual testing by a trained individual, a

system for marking reading errors, and comprehension assessment of silent reading, and provide criteria for generating a written evaluation of the student (Guzzetti, 2002).

Current IRIs, while reflecting the works of Waldo and Gray, have evolved through the contributions, feedback, and modifications of other experts in the field of reading. During the 1920s and 1930s, commentary on reading tests centered on the need to continue improving upon informal assessment of reading, increasing effectiveness of reading instructions and addressing individual differences in reading ability. The writings of this era posed questions regarding which elements of the informal testing were appropriate for determining the student's abilities and called for more coherence in determining acceptable standards at each grade level. Writings during the 1920s also called attention to reading behaviors such as finger pointing, vocalization, eye strain, lip, and head movements and wandering attention as possible signs of reading difficulty (Guzzetti, 2002). Bolenius (1919) suggested reading rates be measured in words read per minute with a standard for increased rate with each successive grade. Wheat (1923) proposed improving informal classroom testing through the use of the student's readers (the current reader and the readers from the previous two years). Whipple (1925) voiced the need to individualize standards of performance for students in differing grade levels and also for those at varying levels of reading capacity. Thorndike (1934) asserted that a student's inability to guess at or determine the meaning of a word can cause frustration. Gates (1935) listed the following elements for inclusion in tests of reading achievement: word recognition, sentence reading, silent paragraph reading, oral reading, and techniques of working out recognition and pronunciation of isolated words. Betts (1946) stated that factors such as educational factors, physical factors, and social attitudes could provide information regarding the students' reading behaviors exhibited during poor oral reading. Durrell (1937) centered his commentary on the need for further

developing the paragraph/passage aspects of the informal reading assessments. He suggested using paragraphs of about 100 words from either the basal reader or similar text.

During the 1940s and 1950s, efforts to provide answers to issues surrounding the standardization of IRIs came to fruition as IRIs were introduced into reading clinics and classrooms. This movement was spurred by the work of Betts (1946) and Killgallon (1942) in the Reading Clinic at Pennsylvania State College. The introduction of reading levels-independent, instructional and frustrational- were structured by Betts. The provision of established criteria aided in making it possible for the IRI to be used in educational environments. However, due to the stringent nature of the criteria, not all experts in the field of reading followed Betts' criteria (Guzzetti, 2002). Research conducted through the 1950s examined the criteria for each of the reading levels and continued through the 1960s and 1970s.

During the 1960s and 1970s, with the proliferation of production of commercial IRIs, researchers continued to seek answers as to how reading levels were obtained. Powell (1970) challenged Betts' criteria as being too stringent, stating that "the original criteria are not consistent with the actual reading behavior of children" (p.6). Researchers also focused on concerns regarding comprehension questions, the counting of miscues, and selection of passages. According to Walter (1972), "the validity of the IRI [was] assumed" (p.9) and research "attempted to lend support to the assumptions of validity with empirical data" (p. 9). Researchers also embarked on new pathways, including the impact of motivation and interest in reading and the understanding of miscues (Johns & Lunn, 1983). In addition, studies also looked at comparing IRIs to standardized tests. The premise supported by doctoral dissertations during this period was that standardized tests "overestimated pupil's instructional level" (Johns & Lunn, 1983, p. 70). The work of Kender (1968) focused on whether or not teachers were versed well

enough to administer and interpret the results yielded by the IRI. Research findings were inconsistent and concerns about IRIs continued with regard to how instructional level were determined and the level of consistency with which IRIs could be administered.

The research and writings of Kenneth Goodman on word miscues and miscue analysis in the 1960s and 1970s also had a major impact on reading assessment and how oral reading was assessed. Goodman's (1973) view of miscues focused on the premise that errors in reading were cued by language and personal experience (p. 93). Miscues made during reading could be categorized as graphophonemic, semantic, or syntactic. Graphophonemic miscues referred to miscues involving the relationship between sounds and the written form. Semantic miscues referred to miscues that impact the meaning of the text and may impede comprehension. Syntactic miscues referred to miscues related to the grammar structures. Yetta Goodman and Carolyn Burk produced an oral reading test called the *Reading Miscue Analysis* which through an analysis of oral reading miscues would offer insight into individual needs of students (Goodman & Burke, 1972). This was significant because in order "to comprehend text students must draw on their knowledge of vocabulary, meaning and language structure" (Bernhardt, 2000, p. 799). Therefore through analysis of students miscues, the teacher can gain insight into specific areas for growth and instruction. The introduction of reading miscue analysis "shifted the focus from determining levels of reading to explicating a reader's comprehension and decoding strategies" (Sarroub & Pearson, 1998, p. 99).

McKenna (1983) reviewed important issues related to IRIs and cautioned that IRIs should be used for the purpose of studying student behaviors. He noted concerns in passage reliability and content, noting that the use of basal passages in inventories did not always reflect a "readability equivalence or alternate forms" (p. 671). He also noted concerns with the choice of

questions, scoring criteria for establishing reading levels and allowable miscues. While McKenna did not discourage the use of IRIs, he suggested:

1. in the lower grades, be flexible with the oral accuracy criteria when comprehension is good,
2. always look for signs of frustration in student's behavior,
3. when comprehension scores are 65-75%, interpret the performance as instructional unless there is evidence of frustration.

The Report of the Commission on Reading: *Becoming a Nation of Readers* (1985) provided a synthesis of research and theory on reading that was used to draw implications for reading instruction. The report contextualized reading as the construction of meaning from text and part of the child's general language development which was influenced by experience and quality instruction. The report stressed the need to address the individual needs of readers and to improve instruction, especially for struggling readers; non-English and recent English speakers were included as part of this group.

More recently, Nilsson (2008) conducted an analysis of informal reading inventories examining the manner in which each addressed key issues relevant to their use. Her primary purpose for examining the IRIs was to determine how key features reflected recent policy changes, specifically applicability to Reading First grants. She examined the following elements: (1) number of forms, (2) passage types, (3) comprehension measurements, (4) vocabulary, (5) phonemic awareness, (6) phonics, (7) fluency, and (8) construct validity (p. 527). Nilsson's research showed that "each IRI had its strengths and limitations." She noted that each IRI had

specific characteristics that could assist the teacher in determining whether or not it was the best selection for their purposes.

The review of literature on IRIs suggested that selecting and administering assessments related to academic and nonacademic variables affords educators the opportunity to address the challenges posed by special populations. Bader and Weisendanger (1989) stated that the use of IRIs as “devices that provide teachers and clinicians with a variety of materials and tasks so that affective, perceptual, linguistic, and cognitive aspects of reading can be observed” (p.404) serving as the corner stone of reading diagnosis. As such, IRIs provide a lens into students’ reading strengths and weaknesses, making them a useful tool in providing information to establish a more accurate picture of the student’s level of functioning along the continuum of literacy development. Bell and McCallum (2008) supported the use of informal reading inventories when the purpose of assessment is to determine whether or not the student is on or near grade level. Afflerbach (2007) echoed the same sentiment about informal reading inventories as a vehicle for examining information about the processes engaged in by the student during reading, noting this as the underlying reason for educators to utilize reading inventories as a means of measuring student’s ongoing literacy development.

Summary

This chapter provided an historical overview of Bilingual/ESL education and how policies, legislation, and developing theoretical constructs have impacted the education of ELLs. The chapter addressed the changing demographics of the ELL population across the nation and highlighted the need for appropriate assessment practices (including the use of informal reading inventories) for ELLs as vehicle to monitor literacy development.

This chapter provided a historical overview of the development of Informal Reading Assessments (IRIs). Additionally, it discussed the use of informal reading inventories in the classroom as tools for examining student's ongoing literacy development.

Chapter 3: Methods and Procedures

This chapter describes (1) research questions, (2) research design, (3) the selection of the population (texts) used in the study, (4) content analysis, (5) coding, (6) historical analysis, and (7) analysis.

Research Questions

The following questions guided the investigation:

- (1) What materials and procedures of the IRIs align most closely with assessment practices for ELLs?
- (2) How has the development of IRIs been impacted by political and theoretical constructs of Bilingual/ESL education?

Research Design

The research employed both a content analysis of the key components of IRIs and how they align with practices for the assessment of ELLs, as well as a historical analysis of the impact or perceived impact of specific political and theoretical constructs in the realm of Bilingual/ESL academia.

Content analysis is a useful technique for examining trends and patterns in documents. Holsti (1969) defined content analysis as, “any technique for making inferences by objectively and systematically identifying specified characteristics of messages” (p.14). Through content analysis the researcher can identify patterns and themes pertaining to the focus of the study. The themes and patterns identified are utilized to generate inferences with regard to the research questions. According to Krippendorff (2004) and Neuendorf (2002), content analysis promotes the researcher’s understanding of particular phenomena or ideas pertinent to addressing the research question. Neuendorf (2002) posited that content analysis concerns itself with both manifest and

latent content. Manifest content refers to the actual print information available through text, tables, and graphs. Latent content refers to embedded concepts, those which are implied.

According to Krippendorff (1980), six questions must be addressed as part of each content analysis:

1. Which data are analyzed?
2. How are they defined?
3. What is the population from which they are drawn?
4. What is the content relative to which the data are analyzed?
5. What are the boundaries of the analysis?
6. What is the target of the inferences?

With regard to the data being analyzed, major tenets being examined include whether or not IRIs address elements of assessment practices for ELLs as set forth by *No Child Left Behind Act (NCLB)* (2001), the *Guidelines for the Assessment of ELLs* (2000), and the consideration given to cognitive frameworks of bilingualism and the tenets of first- and second-language acquisition.

Selection of the population

To select the inventories to be evaluated in the study, the principal investigator identified current editions of IRIs through a review of professional literature. While there were many commercial IRIs available, the selection of IRIs for the study was narrowed based on the availability of editions written after the enactment of the *Bilingual Education Act of 1968* and before the amended *Bilingual Education Act of 1984* to ensure that the development of each IRI

could be followed in terms of political and theoretical constructs unfolding in bilingual/ESL education. Only English versions of IRIs were considered for the study as the purpose of the study was to examine how IRIs could provide teachers with useful information about the English literacy development of ELLs. A list of IRIs was generated by the principal investigator and presented to the committee for review. Those committee members who had a degree of expertise in reading assessment approved the inventories as being (1) widely used in the field and (2) available through major publishers. The final selection of IRIs was based on publication prior to 1984 and approval of committee.

The following six commercial IRIs were selected based on the above criteria to be analyzed as part of the study:

- *The Basic Reading Inventory* 11th edition (2012) – Jerry L. Johns (Kendall Hunt) ,
- *Bader Reading and Language Inventory* 7th edition (2013) – Lois Bader & Daniel L. Pearce (Allyn & Bacon/Pearson),
- *Ekwall/Shanker Reading Inventory* 5th edition (2010) – James L. Shanker & Ward A. Cockrum (Allyn & Bacon/Pearson),
- *Analytical Reading Inventory* 9th edition (2011) - Mary Lynn Woods & Alden J. Moe (Merrill/Prentice Hall/Pearson),
- *Classroom Reading Inventory* 11th edition (2009) – Warren H. Wheelock, Connie J. Campbell & Nicholas J. Silvaroli (McGraw-Hill), and
- *Informal Reading Inventory* 8th edition (2011)- Betty D. Roe & Paul C. Burns (Wadsworth Cengage Learning).

The content analysis was performed on the most current editions available as of the time of the study, January 2013. A historical analysis was performed on previous editions to determine the

impact or perceived impact of historical, political and theoretical constructs of Bilingual/ESL education.

Content analysis. In content analysis the researcher develops categories appropriate for the study based on the questions of the study. The researcher established the list of categories for coding of the themes and patterns using both a priori and emergent coding. A priori coding categories were established prior to the analysis and were based on a particular framework to ensure objectivity-intersubjectivity of the scientific method. Additionally, a priori categories were revised as necessary to ensure the categories were exclusive and exhaustive (Weber, 1990). A priori categories used for the content analysis were established based on the outcomes of the National Reading Panel Report (2000) and the Report of the National Literacy Panel on Language-Minority Children and Youth (August & Shanahan, 2006), which identified five areas of reading instruction: phonics, phonemic awareness, fluency, vocabulary, and comprehension.

Emergent coding categories were also identified by the researcher to identify themes and patterns or inferences related to the research question that were not established as part of the *a priori* categories. Emergent coding categories for this particular research study were established using the following model adapted from the work of Haney, Russell, Gulek and Fierros (1998). In the study, the following model was used:

1. Two researchers (both versed in curriculum and teaching of ELLs) aside from the principal investigator assisted in the development of emergent categories. The first held a PhD in Bilingual Education and currently taught as a foreign language teacher. The second researcher held a Masters degree in Educational Leadership and has been working as a bilingual teacher for ten years. Each auditor reviewed a sample of the materials

independently and established a checklist based on *a priori* categories and specific features observed.

2. The researchers (including the principal investigator) met to reconcile their checklists.
3. The principal investigator reconciled and revised the checklist to reflect the consensus of all researchers.
4. Using the revised checklist, the principal investigator and a third researcher (versed in curriculum and instruction and teaching of ELLs) applied the checklist to a set of two IRIs.
5. The researcher and principal investigator met to reconcile their checklist.
6. The principal investigator, reconciled and revised the checklist to reflect the consensus of all researchers.
7. The principal investigator applied the revised checklist to the IRIs to determine patterns or inferences related to the research question. The revised checklist is available in the Appendix A.

The principal investigator established the following categories to complete the content analysis:

- a. Types of passages presented
- b. Passage word lengths
- c. Comprehension measurements
- d. Phonemic Awareness

- e. Vocabulary Knowledge
- f. Fluency
- g. Degree of Multiculturalism (across passages)
- h. Instructions for ELLs

Using the checklist, each researcher independently evaluated two IRIs (not used in the study) and then met to compare results. The level of agreement on the set of IRIs evaluated was 89.1%. Adjustments and clarifications were made to the checklist utilized for the analysis. An additional researcher (auditor) was enlisted to confirm reliability of the adjusted checklist. The third researcher held credentials as a certified bilingual/ESL educator and a Masters degree in Curriculum and Instruction. The auditor was presented with two of the six IRIs evaluated as part of the study and asked to apply the checklist. The principal investigator also applied the checklist to the same set of IRIs. The principal investigator and auditor reached a level of agreement of 95.8%. The checklist was then applied to the remainder of the IRIs by the principal investigator.

Coding. The principal investigator coded and labeled the categories on the checklist which included both a priori and emergent categories. The coding system included the following: (1) Passage types were coded as fiction (interchangeable with narrative texts) and nonfiction (interchangeable with expository texts) ; (2) Passage length was recorded as the number of words; (3) Comprehension measurements were recorded as retellings, summarization, or comprehension questions; (4) Phonics and Phonemic Awareness was coded according the sub-skills measured; (5) Vocabulary knowledge was coded as sight vocabulary, vocabulary questions, or vocabulary in context; (6) Fluency was coded as reading records (used interchangeably with running records), word recognition miscue (used interchangeably with word recognition error), and/or

rating scales; (7) Multiculturalism was coded according to the topic of each passage (age, ethnicity, nontraditional gender roles, location, social economic status, religion , or special needs)and reported by overall percentage of passages that addressed multiculturalism topics; and (8) Implications for ELLs were tallied word counts by phrase. The following words and phrases were tallied as they appeared in the text and directions for administration of tests: "English language learner," "bilingual," " bilingual speaker," "ELL," "non-English speakers," "language minority students," "language differences," "English as a Second Language," and/or "first/second language."

Historical analysis. The purpose of the historical analysis conducted as part of this study was to provide a lens for viewing factors that have impacted the development/evolution of IRIs with regard to their capacity to reflect the needs of teachers working with ELLs. Garraghan (1946) provided six concepts for validating authenticity of materials. They included date, localization, authorship, analysis, integrity, and credibility.

In evaluating the development of the IRIs examined in this study, the researcher focused on assessing components of the inventories within the context of political and theoretical constructs (legislation and cognitive frameworks of bilingualism and language learning) in the field of bilingual/ESL education. The historical analysis component of the research serves to show the impact of past events on the evolution of the informal reading inventory as a valid and useful tool for teachers working with ELLs.

The following four-step procedure adapted from Johnson and Christensen (2008) was used by the researcher to complete the historical analysis: (1) identification of research topic – identification of materials and procedures which align with assessment practices for ELLs; (2) data collection (primary source documents – actual copies of IRIs being evaluated); (3)

evaluation of materials based on authenticity, presentism (in reference to how present day attitudes and experiences impact the perception of past events, for example, the continuous debate surrounding bilingual education), and contextualization (in reference to what was occurring in bilingual/ESL education focused on shift in political and theoretical paradigms); and (4) data synthesis – identifying nuances and ideas that emerged and organizing them into central concepts.

The development of each IRI was analyzed in terms of the impact or perceived impact of key developments in the education of ELLs. For example, how did the enactment of the *Bilingual Education Act of 1968*, which provided funding for teacher training to help language minority students, impact the development of subsequent editions of IRIs? How did the writings of Jim Cummins and Steven Krashen on cognitive frameworks of bilingualism and language learning impact the development of subsequent editions of IRIs?

During the historical analysis, the researcher focused on modifications, additions or deletions of tests, subtests, and/or changes in instructions for each IRI. The researcher developed a chronological timeline delineating the significant political and theoretical constructs and trends in the education of ELLs.

Analysis

The researcher utilized the research questions, data collection methods and the data collected to make a determination of how to analyze data.

To answer the first research question and sub-questions, the researcher utilized a descriptive content analysis. The researcher used the checklist to collect data and then generated tables to show how each IRI compared across authorships.

To answer the second research question, the researcher employed historical analysis. A chronological timeline was generated delineating the significant historical and political issues and trends in the education of ELLs. Additionally, a chronological timeline was created to show modifications, additions or deletions of tests, subtests, and/or changes in the instructions for each IRI.

Summary

This chapter presented the methodology of the study. The researcher utilized both descriptive content analysis and historical analysis to answer the research questions. The study examined which IRIs align most closely with assessment practices for ELLs and examined the development of IRIs within the context of expanding political awareness and developing theoretical constructs of Bilingual/ESL education. The six IRIs selected for the study included (1) *The Basic Reading Inventory* 11th edition (2012), (2) *Bader Reading and Language Inventory* 7th edition (2013), (3) *Ekwall/Shanker Reading Inventory* 5th edition (2010), (4) *Analytical Reading Inventory* 9th edition (2011), (5) *Classroom Reading Inventory* 11th edition (2009), and (6) *Informal Reading Inventory* 8th edition (2011).

Chapter 4: Results

This chapter presents the results of the investigation. The chapter contains two major sections: (1) the findings of the content analysis and (2) the historical analysis.

Overview:

This two part study (1) explored whether or not informal reading inventories demonstrated an increasing awareness of assessment practices for English language learners as and (2) captured the impact or perceived impact of expanding political awareness and developing theoretical constructs related to Bilingual/ESL education. The content analysis of current editions of six informal reading inventories examined how commercially produced informal reading inventories demonstrated an increasing awareness of ELLs and made considerations for the administration and interpretation of the IRI to ELL students. The historical analysis traced the development of the informal reading inventories in terms of expanding political and developing theoretical constructs within Bilingual/ESL education.

Restatement of Purpose:

As the American educational system strives to provide for the academic success of all students, policies and programs focused on services provided to ELL students continue to transform. While bilingual education continues to stir debate, the changing demographics of our country require that discussions focus on how ELL students will acquire English and receive the same academic opportunities as native English speaking peers. The purpose of this research was to examine the various ways in which informal reading inventories address key issues relevant to the assessment of ELLs. In addition, the researcher tracked the development of IRI's in relation to the historical and political contexts of Bilingual/ESL education.

Content Analysis

For the puposes of the analysis and discussion, abbreviations were used for the six IRIs:

Analytical Reading Inventory - ARI

Basic Reading Inventory - BRI

Bader Reading and Language Inventory - BRLI

Classroom Reading Inventory - CRI

Ekwall/Shanker Reading Inventory - ESRI

Informal Reading Inventory - IRI

Table 1 provides a comparison of passage types found across the informal reading inventories. Passage types were coded as fiction (interchangeable with narrative texts) and nonfiction (interchangeable with expository texts). Passages categorized as fiction presented a narrative recounting events and/or telling a story. Passages categorized as nonfiction were texts that informed the reader about real people, things, events and places.

Table 1

Description of IRI Passage Types

IRI	Description of passages found on each form
<i>ARI</i>	Form A presents fiction texts PP-9 Form B presents fiction texts PP-9 Form C presents fiction texts PP-9 Form S presents nonfiction texts 1-9 Form SS presents nonfiction texts 1-9
<i>BRI</i>	Form A presents fiction texts PP1-8 Form B presents fiction texts PP1-8 Form C presents fiction texts PP1-8 Form D presents fiction texts PP1-2 grade and nonfiction texts 3-8 Form E presents nonfiction (informational) text at all levels PP1-8 Form LL presents fiction texts 3-8 Form LI presents nonfiction texts 3-8
<i>BRLI</i>	Elementary form A presents fiction text PP-3 and a balance of fiction and nonfiction in grades 4-8 Elementary form B presents fiction texts in PP-3 and a balance of fiction and nonfiction in grades 4-8 Secondary/Adult Form A presents fiction text PP-3, a balance of fiction and nonfiction in grades 4-8, and nonfiction text for levels 9/10 and 11/12 Secondary/Adult Form B presents fiction text PP-3, a balance of fiction and nonfiction in grades 4-8, and nonfiction text for grades 9/10 and 11/12
<i>CRI</i>	Form A (pre) presents fiction text PP-2 and nonfiction text 3-8 Form A (post) presents fiction text PP-2 and nonfiction text 3-8 Form B (pre) presents fiction text 1-3 and nonfiction text 4-8 Form B (post) presents fiction text 1-3 and nonfiction text 4-8
<i>ESRI</i>	Form A thru D present fiction text PP-3 and nonfiction text in grades 4-9
<i>IRI</i>	Form A presents fiction text PP-6 and nonfiction text 7-12 Form B presents fiction text PP-3 and a balance of fiction and nonfiction text 7-12 Form C presents fiction texts PP-5 and nonfiction text 6-12 Form D presents fiction PP-3 and a balance of fiction and nonfiction text 4-12

Table 1 presented the types of passages found in the six inventories. The results showed that all of the inventories selected for the study utilized fiction and non-fiction texts in their reading selections. Fiction texts were primarily represented in PP-3 passages, with the exception of the *BRI* form E that presented non-fiction texts at all levels PP-8.

Table 2 presents the average passage word length of passages found within the six inventories.

Passage length is recorded as word total.

Table 2

Comparison of Passages by Average Length of Texts per Level

Level	<i>ARI</i> (2011)	<i>BRI</i> (2012)	<i>BRLI</i> (2013)	<i>CRI</i> (2011)	<i>IRI</i> (2011)	<i>ESRI</i> (2010)
PP1	28	25	30	41	66	32
PP2	-	50	-	-	-	-
P	53	100	57	58	100	-
1	80	100	80	56	105	73
2	121	100	100	95	126	98
3	148	143	129	153	161	143
4	160	143	165	177	179	170
5	187	143	186	149	168	153
6	202	143	191	164	183	160
7	267	143	220	175	166	151
8	289	143	202	200	179	158
9	348	251	207	-	170	190
10	-	253	207	-	184	-
11	-	250	288	-	188	-
12	-	250	288	-	176	-

Table 2 presented the average lengths of passages (at each level) found within the inventories. The results showed that passage lengths varied by inventory. Word counts generally increased as levels increased with the exception of the *ARI* and *BRI*. Increases in word counts (noticed primarily at level 6) on the *ARI* reflected the addition of forms S and SS, both containing nonfiction texts passages for levels 1-9. The *BRI* kept word counts standard at each grade level [PP1-25, PP2-50, P-8 (forms A thru E) - 100]. Increases in word count on the *BRI* reflected the addition of forms LL and LI which included longer passages (250 words) for grades 3-12 in both fiction and nonfiction texts.

Table 3 presents how each inventory measured comprehension. Comprehension measurements were recorded as retellings, unprompted memories, and/or comprehension questions. The terms unprompted memories and retelling were interchangeable and defined as provisions for the student to retell the events and information obtained from the text without prompting from the test administrator. Comprehension questions referred to a set of questions that were asked to the student to measure his/her understanding of the text read. When noted by the author, the types of questions utilized are provided.

Table 3

Comprehension Measurements

IRI	Comprehension measurements
<i>ARI (2011)</i>	Retelling all forms and levels Comprehension questions varied by level -6-7 questions levels PP-2 -8 questions levels 3-9 Question types: retells in fact, puts information together, connects author and reader, evaluates, and substantiates
<i>BRI (2012)</i>	Retelling Comprehension questions varied by level - 5 questions levels PP1 and PP2 - 10 questions levels P-12 Question types: topic, fact, inference, experience/evaluation, vocabulary
<i>BRLI (2013)</i>	Unprompted memories all forms thru level 5 Comprehension questions varied by level - 8 questions thru level 7 - 10 questions level 8 and beyond Question types: literal/passage dependent, inferential question separate
<i>CRI (2011)</i>	Comprehension questions (Form A) 5 questions all levels Question types: vocabulary, fact, inference Reader-response format (Form B) Prediction, retelling, problem, outcome
<i>IRI (2011)</i>	Comprehension questions Varied by grade level - 8 questions levels PP-2 - 10 questions levels 3-10 Question types: main idea, inference, vocabulary, detail, sequence, cause and effect
<i>ESRI (2010)</i>	Comprehension questions varied by levels - 5 questions levels PP-P - 10 questions levels 1-9

Table 3 presented the comprehension measurements utilized in the inventories. The results show comprehension questions to be a commonality among inventories. The number of comprehension questions showed variation across grade levels. Three of the six inventories used retelling/ unprompted memories as a form of measuring comprehension. The *CRI* presented two formats for assessing comprehension. Dependent on the form utilized, administrators could opt a subskills format utilizing comprehension questions or a reader-response format.

Table 4 presents measurements of phonics and phonemic awareness across the inventories. For purposes of this study, phonics referred to measurements associated with the student demonstrating knowledge of sounds associated with letters, clusters of letters and/or syllables. For purposes of this study, phonemic awareness referred to measurements associated with the students' ability to identify and manipulate the structure of words. Phonemic awareness encompasses several skills which include, but are not limited to isolating phonemes, blending letter sounds to make words and segmenting words. Measurements were coded according to the sub-skills measured.

Table 4

Measures of Phonics and Phonemic Awareness

IRI	Measurements of Phonics and Phonemic Awareness
<i>ARI (2011)</i>	No measurement
<i>BRI (2012)</i>	Phonemic awareness Spelling (beginning, middle, and ending sounds) Phoneme segmentation
<i>BRLI (2013)</i>	Phonemic awareness -rhyme, initial and ending sounds Phonemic manipulation -blending and segmentation Letter knowledge Phonics -initial sounds, knowledge of blends, long and short vowels, digraphs Structural analysis -compound words, prefixes, suffixes, and inflectional endings Spelling tests
<i>CRI (2011)</i>	No measurement
<i>IRI (2011)</i>	No measurement
<i>ESRI (2010)</i>	Phonics -initial and ending sounds, knowledge of blends, long and short vowels Letter knowledge Structural analysis -word parts, inflectional endings, compound words, affixes, suffixes, and prefixes

Table 4 presented measurements of phonics and phonemic awareness found in the inventories. The results showed that only three inventories provided screening tools for phonics knowledge. The *BRLI* and *ESRI* provided more in-depth measurements for Phonics and Phonemic Awareness.

Table 5 presents how vocabulary is measured across the informal reading inventories.

Vocabulary knowledge was coded as graded word lists and/or vocabulary question. Graded word lists refers to the author's use of word lists and/or sight vocabulary words that the student can read by sight without having to decode them. Graded word lists were presented as a quick screening to discern the student's level for reading. When available, the source or the graded word lists was recorded. Vocabulary questions refer to the author's incorporation of a vocabulary related question within the comprehension questions asked after the student has read the text.

Table 5

Vocabulary Knowledge

IRI	Measurement	Source	Purpose
<i>ARI</i> (2011)	Graded word lists (20 words per list)	Not provided	Initial placement
<i>BRI</i> (2012)	Graded word lists (20 words per list) Vocabulary question	Revised Dolch list * EDL Core vocabulary **	Initial placement Measure word identification strategies, and word recognition ability
<i>BRLI</i> (2013)	Graded word lists (10 words per list) Experiential lists Thematic lists	Graded sight words Readers Field testing	Initial placement Select entry level to paragraphs Quick check for word recognition
<i>CRI</i> (2011)	Graded word lists (20 words per list) Vocabulary question	Not provided	Initial placement Identify word recognition errors
<i>IRI</i> (2011)	Graded word lists (20 words per list) Vocabulary question(s) - 1 levels PP-3 - 2 levels 4-9	Not provided	Initial placement Provide information on decoding, phonics, and structural analysis skills
<i>ESRI</i> (2010)	Graded word lists	La Pray and Ross*** San Diego State (1969)	Initial placement Provide basic sight knowledge, phonics, and structural analysis skills

* Dolch word list is a list of frequently used English words compiled by Edward William Dolch (Johns, 2012).

**EDL Core Vocabulary is a collection of word lists found in textbooks from grades PP - 12 (Johns, 2012).

*** The La Pray and Ross (1969) graded word lists were compiled by randomly picking words from basal readers and Thorndike's list (La Pray & Ross, 1969).

Table 5 showed measurements of vocabulary knowledge across the inventories. The results showed graded word lists to be a commonality. Vocabulary questions were included in three of the six inventories. In addition to graded word lists, the *BRLI* incorporated Experiential and Thematic lists. Experiential lists were generated from instruction and materials list and fundamental forms encountered by adult learners. Thematic lists addressed words found in health and safety, office, and vehicle settings.

Table 6 presents how fluency is measured across the informal reading inventories. Fluency measurements were coded as reading records, rate of reading, and/or word recognition miscue (used interchangeable with word recognition error). Individual IRIs provided similar fluency measurements. For purposes of this study, reading record, rate of reading, and fluency rating scales refer to measures provided by the authors to aid the examiner in noting accuracy, automaticity, and prosodic elements associated with reading. Word recognition miscue/error refer to measurements which record student errors in reading the text. Understanding if miscues/errors are semantic, syntactic, or grapho-phonemic can help the examiner identify reading strategies employed by the student. Additional measurements (rubrics or charts provided to establish a picture of the students' fluency level) provided by the informal reading inventory were also recorded when available.

Table 6

Fluency Measurement

IRI	Measurement of fluency
<i>ARI (2011)</i>	Rating scale Word recognition miscue/error analysis Fluency summary
<i>BRI (2012)</i>	Word recognition miscue/error analysis Rate of reading Fluency considerations
<i>BRLI (2013)</i>	Reading record Word recognition miscue/error analysis Rubric for fluency
<i>CRI (2011)</i> <i>IRI (2011)</i>	Word recognition miscue/error analysis Rate of reading Word recognition miscue/error analysis
<i>ESRI (2010)</i>	Word recognition miscue/error analysis Rate of reading

Table 6 presented the fluency measurements found in the inventories. The results showed that word recognition miscue/error analysis and rate of reading rubrics were a commonality among the inventories. Three of the informal reading inventories provided specific measures that assessed prosody.

Table 7 presents the degree of multiculturalism found within the passages of the informal reading inventory. For purposes of this analysis, multiculturalism was defined as the degree to which the passages in the IRIs reflect varied topics relevant to: age, ethnicity, non-traditional gender roles, location, social economic status, religion and special needs. Passages were coded according to the topic of each passage (age, ethnicity, non-traditional gender roles, location, social economic status, religion or special needs) and reported by raw numbers in each category and overall percentage.

Table 7

Degree of Multiculturalism

Topic	<i>ARI</i> (2011)	<i>BRI</i> (2012)	<i>BRLI</i> (2013)	<i>CRI</i> (2011)	<i>IRI</i> (2011)	<i>ESRI</i> (2010)
Age	1	0	3	0	0	0
Ethnicity	1	1	0	7	3	0
Gender	2	0	0	1	1	0
Location	5	13	6	7	5	6
Social	0	2	1	0	0	0
Economic						
Status						
Religion	0	0	0	0	0	0
Special	0	1	2	0	1	0
Needs						
Total	9/62	17/75	12/44	15/36	10/56	6/40
Overall percentage	15%	23%	27%	41%	18%	15%

Table 7 showed the degree of multiculturalism found within the contents of the reading passages presented in the informal reading inventories. The results show that all IRIs included multicultural passages. The most prominent multicultural topics addressed included location and ethnicity. Examples of passages that addressed location included passages about Kenya, the Carribean Sea, and the wilderness. Examples of passages that addressed ethnicity included passages about African-Americans and Japanese-Americans.

Table 8 presents the number of references made regarding English language learners. Word counts by phrase were tallied as they appeared in the text and in directions for administration of tests. The following words and phrases were tallied as they appeared in the text and directions for administration of tests: "English language learner," "bilingual," "bilingual speaker," "ELL," "non-English speakers," "language minority students," "language differences," "English as a Second Language," and/or "first/second language."

Table 8

Number of References made Regarding English Language Learners

IRI	References made regarding English language learners
<i>ARI (2011)</i>	0
<i>BRI (2012)</i>	0
<i>BRLI(2013)</i>	27
<i>CRI (2011)</i>	3
<i>IRI (2011)</i>	0
<i>ESRI(2010)</i>	0

Table 8 presented the number of specific references made to English language learners in the informal reading inventories. The results showed that two of the six inventories addressed English language learners in the directions for administration and/or interpretation of scores. There was a large difference in the number of references made to ELLs with the *BRLI* having a greater number of references to ELLs than the *CRI*.

Historical Analysis

The *Bilingual Education Act of 1968* was the first federal recognition that English language learners had special educational needs and that in the interest of creating equal educational opportunities, federally funded programs to meet their needs were necessary (NCBE, 1988). Three functions of the legislation were (1) to increase English skills, (2) to maintain first language skills, and (3) to support home culture of the student. The first revision of the *Bilingual Act of 1968* occurred in 1974. The revisions provided a definition of bilingual education, established program goals, called for the design of regional support centers, and provided funding for districts wanting to expand curriculum, staff, and conduct research on bilingual programs (NCBE, 1988). A second revision of *The Bilingual Education Act of 1968* followed in 1978. The revision of 1978 expanded eligibility and set goals for transitional programs. Unlike previous years, the *Bilingual Education Act of 1978*, did not provide the funding opportunities as past Acts.

During this decade, four of the six reading inventories used for the study published their first edition. *The Classroom Reading Inventory*, published editions one through three (1969, 1973, 1976). There was no evidence of the impact of *The Bilingual Education Act* and/or the reauthorizations of 1974 and 1978 on the development of the four IRIs.

Modifications, additions, and/or deletions that were made to the *Classroom Reading Inventory* consisted of the addition of forms C and D, and addition of specific instructions for administration. There was no evidence of the *Bilingual Education Act of 1968* or revisions that followed impacting the first editions of The Analytical Reading Inventory (1977), the Basic Reading Inventory (1978), or the Ekwall Reading Inventory (1979).

During the 1980s and 1990s, Jim Cummins and Stephen Krashen collaborated with the California State Educational Department and others in developing a relevant and influential theoretical framework for bilingual education. In addition to the notions of BICS and CALP, Cummins' writings discussed the interdependence of first and second language proficiency. The common underlying principle (CUP) supports that knowledge in the first language supports learning in the second language. The iceberg hypothesis, or dual-iceberg hypothesis, posits that all languages have surface features that may differ; However, language proficiencies are common and transferable across languages (Cummins, 2000). Krashen's writings discussed hypothesis for language acquisition, providing accessible input for acquisition and approaches to language teaching in the classroom. Krashen's hypothesis include the following (1) acquisition-learning hypothesis , (2) natural order hypothesis, (3) affective filter hypothesis, and (4) the input hypothesis. The acquisition-learning hypothesis posited that acquisition of language is a subconscious process and that learning a language is a conscious process and the result of formal teaching and instruction. The natural order hypothesis posited that grammar acquisition follows a natural and predictable pattern. The affective filter hypothesis posited that variables such as motivation, confidence, and anxiety play a non-causal role in second-language acquisition. In other terms, negative affect can impede language acquisition, but, positive affect alone is not sufficient for language acquisition to take place. The input hypothesis addresses language

"acquisition". According to the input hypothesis, language is acquired when input is one level above the student's proficiency in language (Krashen, 1994).

On the federal level, the *Bilingual Education Act of 1984* decentralized the power and provided districts with more control over the establishment of Bilingual programs to meet the needs of their population. Districts could select transitional bilingual programs, developmental programs, or special alternative programs to educate their student population. The *Bilingual Education Act of 1984* required parents be made aware of program alternatives and provided funding for excellence programs and family literacy in English. Reauthorization of the Bilingual Act occurred again in 1988 and 1994. The latter *Bilingual Education Act* (reauthorized in 1994) remained in effect for over seven years.

On the literacy front, The Report of the Commission on Reading, *Becoming a Nation of Readers* (1985), provided the field with a synthesis of research and theory on reading used to draw implications for reading instruction. The report contextualized reading as the construction of meaning from text and part of the child's general language development influenced by experience and quality instruction. The report iterated the need to address individual needs of readers and improve instruction especially for struggling readers (non-English and recent immigrants were noted as part of this group).

During the 1980s, the following informal reading inventories were published: *Burns & Roe Informal Reading Assessment* (first through third editions), *Basic Reading Inventory* (second through fourth editions), *Analytical Reading Inventory* (second and third editions), *Classroom Reading Inventory* (fourth and fifth editions), and the *Bader Reading and Language Inventory* (first edition). The only inventory that demonstrated an increased awareness of the developing

political and theoretical constructs of Bilingual/ESL education and knowledge of ELLs was the *Bader Reading and Language Inventory*.

During the 1990s, the following Informal Reading Inventories were published: *Classroom Reading Inventory* (sixth through eighth editions), *Basic Reading Inventory* (fifth through seventh editions), *Informal Reading Inventory* (third through fifth editions), *Ekwall/Shanker Reading Inventory* (third edition), *Burns and Roe Informal Reading Inventory* (fourth and fifth editions), *Bader Reading and Language Inventory* (second and third editions), and the *Analytical Reading Inventory* (fifth and sixth editions). A review of the informal reading inventories suggests that the events of the 1980s and 1990s, in relation to the expanding political awareness and developing theoretical constructs, had no impact on the modifications, additions, or deletions made to the *Classroom Reading Inventory* (1982, 1986, 1990, 1994, 1997), *Basic Reading Inventory* (1981, 1985, 1988, 1991, 1994, 1997), *Analytical Reading Inventory* (1981, 1985, 1989, 1995, 1999) and/or the *Ekwall Reading Inventory* (1986, 1993).

The modifications, additions, and/or deletions that were made to *The Classroom Reading Inventory* during the 1980s and 1990s included clarification of individual versus group testing (1982); clarification of the sub-skills format, reader response format and customized format (1986); addition of information on background assessment and clarification on significant and insignificant errors (1990); clarification on major uses of each form (1994); and slight changes in form A sub-skills and form B reader response versions and addition of form C, which included a diagnostic sub-skills test for high school students and adults (1997).

The modifications, additions, and/or deletions that were made to the *Basic Reading Inventory* during the 1980s and 1990s included replacement of passages, comprehension measurement assessed with five types of questions, addition of scoring guide, and revision of

the summary sheet (1981); the manual was reorganized, a new section on administration was provided, and a section on the history of the IRI was added (1985); changes were made to clarify and increase usefulness of data, modifications were made to comprehension questions, titles were added to activate the students' prior knowledge, and a distinction was made between Form A (oral reading) and Form B (silent reading) (1988); two new forms (long narrative and long expository) were added, scoring guidelines were separated for word recognition, comprehension and retelling (1991); the inventory was extended to 10th grade (1994); and addition of early literacy assessment, inventory was extended to 12th grade (1997).

The Analytical Reading Inventory published five subsequent editions during the 1980s and 1990s. The modifications, additions, and/or deletions that were made included clarification on administering and interpreting the ARI and addition of a sample student case study (1981); no changes were noted in the 1985 publication; passages were updated, further explanation and clarification were provided on administering and interpreting the ARI (1989); instructions were expanded (1995); instructions were expanded and information on background knowledge was added (1999).

The *Ekwall/Shanker* reading inventory published two editions during the 1980s and 1990s. The modifications, additions, and/or deletions included the following: the addition of a diagnostic flowchart and measurements for assessing reading sub-skills were added (1986); new tests for measuring phonics and structural analysis were added; instructions for administration and scoring interpretation were revised, and the inclusion of new charts, crib sheets, summary sheets, and diagnostic sheets (1993).

The first edition of the *Informal Reading Inventory* was published in 1980. Four subsequent editions were published during the 1980s and 1990s. The modifications, additions,

and/or deletions included replacement of passages, revision of comprehension questions, and expanded instructions on administration and usage of the IRI were provided (1985); comprehension questions were revised (based on feedback from users), new information on word recognition and comprehension was added (1989); information on background was revised, administration protocols were added; a case study was added and figures and flowcharts to summarize procedures were added (1993); background information was revised to incorporate flexible ways to use the IRI including retelling, use of context clues, and partial assessment (1999).

The first edition of the *Bader Reading Inventory* was published in 1983. The following modifications, additions, and/or deletions made during the 1980s and 1990s included suggestions for administering the inventory were added, a flowchart for testing sequence (Pre-literacy, K-12, and Adult literacy was added (1994); a separate booklet for passages was added, instructions included an emphasis on authentic assessment, and an ESL test (ESL Quick Start) and ESL checklist were added to the inventory.

During the 21st century, several reports and federal legislation influenced the field. *The National Reading Panel Report* (2000) provided a synthesis of research on instructional topics in reading instruction. The report highlighted five elements of reading instruction: phonics, phonemic awareness, vocabulary, fluency, and comprehension. The report did not address second language acquisition or learning. On January 8, 2002, President George W. Bush signed into law the *No Child Left Behind Act (NCLB)* of 2001, replacing the *Bilingual Education Act*, or Title VII of the *ESEA*, with Title III, the *English Language Acquisition, Language Enhancement, and Academic Achievement Act*. The enactment of NCLB produced notable changes in the support structures (federal) for bilingual education. The act de-emphasized the use of bilingual

education techniques to promote English language acquisition for students, promoted the use of classroom and teacher training practices based in research, and limited the funding available for support services and professional development. In 2006, the *Report of the National Literacy Panel on Language Minority Children and Youth, Developing Literacy in Second-Language Learners* supported the findings of the National Reading Panel on the elements of reading instruction, but emphasized a focus on oral language and adjustments to approach were necessary for students to achieve academically in reading and writing. A review of the modifications, additions and/or deletions suggests that the events of the 21st century had minimal impact on the development of the informal reading inventories. With the exception of the *Bader Reading and Language Inventory*, modifications, additions, and/or deletions to the IRIs focused on revisions to passages, word lists, instructions for administration, and organization of the informal reading inventory.

The Classroom Reading Inventory published three subsequent editions during this time period. Additions, deletions, and/or modifications made to the inventory included replacement of passages, additional information provided on miscue analysis, and addition of an audiotape for practice scoring (2001); pre-tests and post-tests were added for each form of the inventory (2004); revision of passages to include more multicultural stories, addition of online high school and adult testing, and addition of online resources to assist the administrator (2009).

The Basic Reading Inventory published four subsequent editions during this time. The modifications, additions, and/or deletions to the inventory included addition of new passages to Form B, addition of informal miscue tally, and addition of a CD (2001); addition of a new Form E, addition of a generic miscue summary sheet, additional information on determining reading rate, and addition of practice scenarios for teachers (2005); no notable changes were made to the

tenth edition (2009); addition of expert noticing observation guide, addition of evaluation criteria on performance booklets, and addition of new video clips (2012).

The Analytical Reading Inventory published three subsequent editions during this time period. No notable changes were made to the seventh edition (2003); addition of charts and rubrics to expand instructions (2007); revision of examiner's page, addition of DVD, addition of profile sheets, and reorganization of the manual (2011).

The Informal Reading Inventory published three subsequent editions during this time period. The modifications, additions, and/or deletions to the inventory included: addition of appendix: "Choosing books to develop and support Children's reading proficiency" (2002); revision of reading passages, addition of new tabbing system, addition of a rubric for retelling, expanded appendix for trade books (2007); revision of retelling rubric (2011).

The Ekwall/Shanker Reading Inventory published two subsequent editions during this time period. The modifications, additions, and/or deletions made to the inventory included addition of new tests for emergent literacy skills and concepts of print, addition of quick check for basic sight words, and addition of reading interest form (2000); reorganization of the inventory and addition of 39 diagnostic tests to measure ten areas of reading sub-skills (2010).

The *Bader Reading and Language Inventory* published 4 subsequent editions during this time period. The modifications, additions, and/or deletions made to the inventory included revision of reading passages, revisions to the organization of the inventory, and clarification on the use and administration of subtests (2002); revision to format, addition of more case studies, revision of comprehension questions, and addition of a videotape to assist administrators (2005); additional information on fluency was added, revision to Phonemic assessment, revision to ELL

Quick Start screening instrument, and update on the reliability measures of the inventory (2009); revised to include two sets of reading passages (elementary and secondary); revision to graded word lists, revisions to checklist and screening instrument for ELLs, and update of training DVD (2013).

The following tables (9 -14) show the development of each informal reading inventory, highlighting the revisions and modifications made to editions.

Table 9

Development of the Analytical Reading Inventory

Edition	Year	Revisions/Modifications
First	1977	
Second	1981	Clarification on administration and interpretation Expanded instructions Added sample student case study
Third	1985	No changes noted
Fourth	1989	Revisions to passages Further clarification on administration and interpretation
Fifth	1995	Expanded instructions on administration provided
Sixth	1999	Expanded instructions on administration Provided information on background knowledge
Seventh	2003	No changes noted
Eighth	2007	Added charts and rubrics to expand instructions
Ninth	2011	Revised examiner's page layout Included DVD Provided profile sheets Changes made to manual organization

Table 9 traced the development of the *ARI*. While revisions were made for most editions, none of the revisions specifically addressed English language learners/bilingual children.

Table 10

Development of the Basic Reading Inventory

Edition	Year	Revisions/Modifications
First	1978	
Second	1981	Passages replaced Comprehension questions revised (5 types) Scoring guides added Summary sheets revised
Third	1985	Manual reorganized New section on administration procedures New section on history of the Informal Reading Inventory
Fourth	1988	Titles added to passages Modifications made to comprehension questions Clarification on how to interpret and use data provided Distinction made between Form A (oral) and Form B (silent)
Fifth	1991	Two new forms added (LN, LI) Scoring guides separated for word recognition, comprehension, and retelling
Sixth	1994	Addition of passages and word lists through 10th grade
Seventh	1997	Addition of early literacy assessment Addition of passages and word lists through 12th grade
Eighth	2001	New passages added to Form B Addition of informal miscue tally CD provided
Ninth	2005	Addition of Form E Generic miscue summary sheet provided Information on determining reading rate provided Practice scenarios for teachers provided
Tenth	2009	No changes noted
Eleventh	2012	Expert noticing observation guide Evaluation criteria on performance booklets provided New video

Table 10 traced the development of the *BRI*. While revisions were made for each edition, none of the revisions specifically addressed English language learners/bilingual children.

Table 11

Development of the Bader Reading and Language Inventory

Edition	Year	Revisions/Modifications
First	1983	
Second	1994	Suggestions for administering the inventory Flowchart for testing sequence (Pre-literacy, K-12, and Adult literacy) Renamed supplementary word lists to Experiential
Third	1998	Separate booklet for reading passages Emphasis on authentic assessment Inclusion of ESL test (ESL Quick Start) Inclusion of ESL checklist
Fourth	2002	Revisions on reading passages Added additional case studies Revisions to comprehension questions Addition of videotape to assist administrators
Fifth	2005	Revisions made to format Added additional case studies Revisions made to comprehension questions Addition of videotape to assist administrators
Sixth	2009	Provided additional information on fluency Revisions to phonemic assessment Revisions to ELL Quick Start screening instrument Provided update on reliability measures of the inventory
Seventh	2013	Revised to include two sets of reading passages (elementary and secondary) Revision of graded word lists Revisions to checklist and screening instrument for ELLs Updated DVD

Table 11 traced the development of the *BRLI*. Specific elements related to ELLs appeared in the third edition (1998) with the inclusion of the ESL Checklist and ESL Quick Start test. Revisions to the ELL Quick Start screening instrument appeared in the sixth and seventh editions (2009, 2013).

Table 12

Development of the Classroom Reading Inventory

Edition	Year	Revisions/Modifications
First	1969	
Second	1973	No changes noted
Third	1976	Addition of form C Specific instructions for administration
Fourth	1982	Clarification of individual versus group testing New form D added
Fifth	1986	Clarification of sub-skills format, reader response format, and customized format
Sixth	1990	Included background knowledge assessment Clarified significant and insignificant errors
Seventh	1994	Provided clarification on major use of each form
Eighth	1997	Changes to form A (sub-skills version) and form B (reader response version) Form C includes diagnostic sub-skills for high school and adults (available on-line)
Ninth	2001	Replacement of stories that are more inclusive, multiethnic and contemporary Passages increased in length Added information on miscue analysis Audio tape for practice scoring provided
Tenth		No changes noted
Eleventh	2009	Multicultural stories and themes added On-line high school and adult testing On-line video clips and explanations

Table 12 traced the development of the *CRI*. Specific references related to ELLs appeared in the eleventh edition (2009) with the revision of passages to include multicultural characters and global themes.

Table 13

Development of the Ekwall/Shanker Informal Reading Inventory

Edition	Year	Revisions/Modifications
First	1979	
Second	1986	Added instruments for assessing reading sub-skills Added a diagnostic flowchart
Third	1993	Added tests for measuring phonics and structural analysis Revised instructions for administration, scoring, and interpretations Added new charts, crib sheets, summary sheets, and diagnostic sheets
Fourth	2000	Added new tests for emergent literacy skills and concepts of print Added quick check for basic sight words Added reading interest forms
Fifth	2010	Edition reorganized Edition included 39 diagnostic tests to measure ten areas of reading sub-skills

Table 13 traced the development of the *ESRI*. While revisions were made for each edition, none of the revisions specifically addressed English language learners/bilingual children.

Table 14

Development of the Informal Reading Inventory

Edition	Year	Revisions/Modifications
First	1980	
Second	1985	Passages replaced Questions revised More explicit instructions on administration and usage were provided
Third	1989	Questions revised New information on word recognition added New information on comprehension added
Fourth	1993	Revised background information and administration protocols Added case studies Added figures and flowcharts to summarize procedures
Fifth	1999	Revised background section to include flexible ways to use IRI including retelling, use of context clues, and partial assessment
Sixth	2002	Addition of appendix "Choosing books to develop and support Children's reading proficiency"
Seventh	2007	Revisions made to reading passages Added a new tabbing system Included a rubric for retelling Expanded appendix of trade books
Eighth	2011	Revised retelling rubric

Table 14 traced the development of the *IRI*. While revisions were made for each edition, none of the revisions specifically addressed English language learners/bilingual children.

Summary:

The purpose of the study was to (1) explore how informal reading inventories align with assessment practices for English language learners, and (2) capture the impact or perceived impact of expanding political awareness and developing theoretical constructs related to Bilingual/ESL education on the development of informal reading inventories.

Chapter 4 presented the results of the two-part study in tables and narratives. The findings were as follows: (1) IRIs are assessment tools to measure student's ongoing literacy development. Current informal reading inventories include sub-skills tests in areas of reading. They consist of graded word-lists, reading passages (both silent and oral), measures of comprehension, and measures of fluency. Only two informal reading inventories made specific references made to the ELL population (either in directions for administration or interpretation of results); (2) The impact or perceived impact of events related to changes in political legislation and developing theoretical constructs of Bilingual/ESL education were reflected in the *Bader Reading and Language Inventory* (2013) and the *Classroom Reading Inventory* (2009). Both inventories provided multiple ways to assess comprehension, included a higher percentage of passages that addressed multicultural topics, and addressed ELLs in the directions for administration and interpretation of results. The *Bader Reading and Language Inventory* also included sub-skills tests in phonics and phonemic awareness.

In conclusion, the content analysis revealed a commonality among informal reading inventories with regard to formatting and sub-skills measured. Additions, modifications, and/or deletions noted in the development of each IRI reflected trends in the field of literacy. The impact or perceived impact of legislation and trends related to Bilingual/ESL education were not noted across all IRIs. In examining various components of the IRIs, it is noted that IRIs reflect

assessment practices that are appropriate for the ELL population even though specific reference to ELLs may not have been made. The *Analytical Reading Inventory*, *Basic Reading Inventory*, *Bader Reading and Language Inventory*, and *Classroom Reading Inventory* each provided more than one way to measure passage comprehension. The *Basic Reading Inventory*, *Bader Reading and Language Inventory*, and *Ekwall/Shanker Reading Inventory* each provided sub-skills tests measuring phonics and phonemic awareness. The *Basic Reading Inventory*, *Classroom Reading Inventory*, and *Informal Reading Inventory* each included measures of vocabulary knowledge for words in isolation as well as in context. The *Bader Reading and Language Inventory* included experiential and thematic word lists designed to test word knowledge related to daily experiences. The *Analytical Reading Inventory*, *Basic Reading Inventory*, and *Bader Reading and Language Inventory* each included multiple measures of fluency to assess both word recognition and prosody. All IRIs included passages that addressed multicultural topics, with the *Bader Reading and Language Inventory* and *Classroom Reading Inventory* having the highest percentage of passages that addressed multicultural topics. The *Bader Reading and Language Inventory* and *Classroom Reading Inventory* included specific references to ELLs in the directions for administration and interpretation of results. Each of the IRIs examined have benefits for all learners. In the selection of an IRI for the classroom, teachers need to consider (1) the purpose of assessment and (2) the characteristics of the IRI that will facilitate lesson design and the achievement of grade-level standards.

Chapter 5: Conclusions

This chapter presents the conclusions and recommendations from the study. The chapter is divided: (1) Purpose, (2) Discussion, (3) Limitations, and (4) Suggestions for future research.

Purpose

The purpose of the study was to determine how informal reading inventories reflect assessment practices for English language learners. The first question of the research study investigated how informal reading inventories align with assessment practices for English language learners. This question was addressed through a content analysis of six commercially published IRIs selected for the study. The second question of the research study investigated the impact or perceived impact of historical and expanding political awareness and developing theoretical constructs of Bilingual/ESL education on the development of informal reading inventories. The review of literature conducted for this dissertation provides a historical view of Bilingual/ESL education, a historical view of the development of informal reading inventories, and a framework for viewing the educational needs of English language learners.

Discussion

Content analysis. A content analysis of six commercially printed informal reading inventories was conducted to ascertain how informal reading inventories reflect assessment practices for English language learners. The content analysis examined passage types, passage length, comprehension measurements, phonetic and/or phonemic skills measured, fluency measurements, degree of multiculturalism present in the IRI passages, and the number of specific

references made in reference to English language learners. Tables 1 through 8 present the findings.

Passage types and passage length. According to the Guidelines for Assessment of English Language Learners (2009), the use of accessible language is a critical consideration in order to reduce construct-irrelevant variance that can impact the assessment outcomes. The guidelines do not support simplifying language (especially if that is the construct being measured), but support instead (1) the use of language that is accessible to students, (2) the use of simple sentence structures, and (3) use of a fictional context that is familiar and avoids material that is highly controversial or offensive. The data collected on passage types and passage length suggests that authors of IRIs show an increasing awareness of the language needs of ELLs. With regard to passage types, narrative versus expository, the IRIs analyzed as part of this study contain a mix of both fiction and nonfiction texts throughout the passages. Fiction texts were more pervasive within the pre-primer (PP) through 3 levels. Non-fiction texts were more pervasive from level 4 through 12. The combination of fiction and non-fiction texts supports ELLs because both types of text are encountered in the school setting. Additionally, by providing multiple forms of passages that contain both types of texts, teachers and administrators are able to capture a more accurate picture of the student's strengths and weaknesses in reading.

An analysis of passage length shows that passages increase in the number of words as the level increases with the exception of the *BRI* (2012). Passage lengths of the *BRI* were controlled to increase the flexibility of using the passages with younger children and students at the emergent stage of reading development: pre-primer passages contained 25 words, primer passages contained 50 words, level 1 through 8 passages contained 100 words in forms A, B, C, D, and E. Longer passages were included in forms LL and LI for levels 3 - 8; these passages

contained 250 words and gave teachers and administrators an opportunity to assess students' reading ability on longer fiction and non-fiction texts (Johns, 2012). All other IRIs analyzed for the study showed a gradual increase in passage length as the graded passage level increased. The IRIs reported the use of computer readability programs, readability formulas (such as the Spache, Fry, Dale-Chall, Harris-Jacobson), and/or field testing to validate the graded level of the passages.

Comprehension measures. Reading comprehension is a complex task. There are many variables that can impact a student's ability to comprehend the text including background knowledge, student decoding ability, and knowledge of language. For purposes of this study, the principal investigator sought to analyze how comprehension was measured versus how the variables of comprehension were addressed (i.e.: activation of background knowledge). Consistent with the findings of Nilsson (2008), the student's reading comprehension is assessed through a set of comprehension questions or a combination of questions and retelling/summarization guide. The results show comprehension questions to be a commonality among inventories. The number of comprehension questions showed variation across grade levels. Comprehension questions commonly covered (1) main idea, (2) fact and detail, (3) cause and effect, and (4) vocabulary questions. Most IRIs also included an inference question within the comprehension section. The BRLI (2013) provided an inference question separate from the comprehension questions which were predominantly text/passage-dependent as the objective of the questions was to assess understanding and recall (Bader & Pearce, 2013). Three of the six inventories also used retelling/ unprompted memories as a form of measuring comprehension. The CRI presented two formats for assessing comprehension. Administrators could select a subskills format utilizing comprehension questions or a reader-response format,

both forms would provide information to determine the student's reading level. While the inventories varied in specific measurements of comprehension, all six provided comprehension measurements. This adheres to the ETS Guidelines for the Assessment of English Language Learners (2009), that state providing multiple ways (i.e.: retellings, unprompted memories, and/or comprehension questions) of assessing ELLs increases the likelihood that the assessments will provide opportunity for the students to show their strengths (p. 10).

Vocabulary knowledge. Word lists found in the IRIs provide information related to word recognition of high-frequency or sight words. Word lists are administered at the beginning of the informal reading inventory to assist the examiner in identifying the student's word identification strategies (decoding, phonics, and structural analysis skills), and also to assist in determining the passage level to begin the test. Authors utilized graded sight words lists, basal readers, and field-testing to develop graded word lists. Nation (2005) stated that there is a group of 1,500 - 2,000 high frequency words "so frequently and widely used that they need to be well learned as quickly as possible because of their usefulness" (p. 582). In addition to graded wordlist, the BRLI (2013) includes separate "experiential" and "thematic" word lists. The experiential word list was comprised of words found within instructional lists, materials and environments encountered in daily routines. The thematic word lists were developed around the topics of health, safety, office and vehicles (Bader & Pearce, 2013). According to Nilsson (2008), the inclusion of these word lists "could be useful with English-language learners and adult literacy students" (p.534) in allowing an opportunity for the student to demonstrate strengths in areas of experience. In some of the inventories, a vocabulary question was included in the comprehension questions, providing the examiner an opportunity to look at how students decode words in context versus words in isolation. Krashen's (1993) work provided support for the use of vocabulary questions,

stating that for ELLs, "picking up word meanings by reading is much more efficient than intensive vocabulary instruction" (p. 19-20). Overall, the analysis of vocabulary knowledge revealed that the extent to which the IRIs measured sight or high frequency vocabulary and not word knowledge, represented a limitation of the six IRIs, given the role that vocabulary knowledge plays in comprehension (Anderson & Nagy, 1991; Zunker & Pearce ,2010). This position is also echoed in the work of August, Carlo, Dressler and Snow (2005), who stated that various aspects related to vocabulary knowledge such as connotations and morphology are equally as important as learning many words because slow/weak vocabulary development impedes the students' ability to comprehend grade level texts.

Fluency. There is a strong correlation between reading fluency and reading comprehension (Allington, 2000; Johns, 1994). Karen Ford (2012) posited that for ELLs, effective fluency measures should include all three aspects of fluency: reading accurately, automaticity, and prosody. Additionally, Ford supported that as students practice reading in English accurately, with automaticity and prosody, they gain information about the English language cadence and develop vocabulary skills that can have a positive impact on oral language development and reading and listening comprehension. Each of the IRIs, with the exception of the CRI, included a measure of reading behaviors and/or fluency to measure prosodic elements of reading. All IRIs provided a measurement for analysis of reading miscues/errors. According to Hudson, Lane and Pullen (2005), "without accurate word reading, the reader will have no access to the author's intended meaning, and inaccurate reading can lead to misinterpretations of the text" (p. 703). Analysis of miscues/errors provides the administrator with an opportunity to find patterns and guide the design of an instructional program that is beneficial for the student by taking into account how language components (phonology, syntax, semantics, and pragmatics)

are interrelated (Mercer, Mercer & Pullen, 2010). Additionally, Gottlieb (2006) reported that "with increased literacy development and the ability of students to balance the use of [cuing systems] " (p. 52) ELL students will develop efficiency and accuracy in "making meaning from print" (p. 52). According to Bader and Pearce (2013), "[k]nowing a student's strengths and needs in relation to reading for meaning is essential for planning" (p. 35). An area for future development of the IRIs would be to match the graded passages and reading performance with levels of language proficiency.

Phonics and Phonemic Awareness. Not all IRIs analyzed as part of this study included assessments measuring a student's knowledge of phonics or provided measurements of phonemic awareness. Knowledge of phonics and phonemic awareness measurements presented were included as supplemental or optional assessments. For ELLs, phonics and phonemic awareness instruction is an important component of literacy instruction. According to Genessee (2008), difficulty with these phonics and phonemic awareness skills can impede text comprehension by impeding acquisition of word decoding skills that may impede sentence processing skills and the students ability to extract meaning from text. While not all IRIs provided measurements of phonics and phonemic awareness, authors of the BRI, BRLLI, IRI and ESRI suggest that word lists could be used to examine students word call and decoding abilities including phonics and structural analysis. If the teacher's interest was to measure these tasks, the four IRIs mentioned above would be beneficial for students (including ELLs).

Degree of Multiculturalism. For purposes of this study, multiculturalism refers to the use of texts, materials and examples that appeal to students from varied cultural backgrounds. Multiculturalism was coded according to the topic of each passage (age, ethnicity, nontraditional gender roles, location, social economic status, religion, or special needs) and reported using raw

numbers and overall percentage of passages addressing multicultural topics. In the analysis, the researcher defined age as it referred to passages that referenced relationships across age groups. For example, in the BRLI, the passage "New People" addresses the relationship between a young neighbor boy and elderly gentleman who moved in next door. Many IRIs addressed ethnicity with passages about historical figures and customs of specific ethnic groups (such as Native Americans). Location was another predominant topic across passages within the IRIs analyzed. Location referred to passages that addressed places and regions of interest to the reader. Location topics included passages about Mount Kilarna, Pompei, and the wilderness. Similarly, special needs was defined by the researcher as topics that showed individuals who overcame adversity and/or required assistance due to injuries as it was felt that such passages would appeal to student interest. The analysis revealed that all IRIs addressed one or more multicultural topics in addition to providing a balance between fiction and non-fiction passages. The emphasis on multicultural topics and global themes demonstrates that the authors of the inventories have an increased awareness regarding the connection between readers and text. Multicultural education supports the idea that "becoming aware of one's self, one's culture, and/or other cultures provides an effective formula for functioning successfully within a larger society" (Zainudin et al., 2002, p. 4). Additionally, the incorporation of multicultural topics provides students with opportunities to understand the world around them (Colby & Lyon, 2004).

References made for English language learners. According to Cohen and Cowen (2007), IRIs are useful to teachers of students learning English because identifying the students' strengths and weaknesses allows the teacher to make, "appropriate decisions regarding classroom instruction (p.376)." Additionally, Cohen and Cowen (2007) posited that because ELLs enter the classroom at varying degrees of English language proficiency, an instrument such as the IRI can

be useful in determining an approximate reading level so that instructional decisions can be made with the students in mind (p. 376). Given the increase in the number of ELLs in the nation's school systems, "schools must strive to develop alternative forms [of assessment] by collecting a variety of information to learn about students' ability as well as their attitudes toward reading and knowledge about reading" (Zainuddin et al., p.279). Of the six inventories examined for the study, two (the BRLI and the CRI) made specific reference to the implications for use of the IRI with English language learners.

While the content analysis revealed a commonality among informal reading inventories with regard to formatting and sub-skills measured, additions, modifications, and/or deletions noted in the development of each IRI reflected trends in the field of literacy. The impact or perceived impact of legislation and trends related to Bilingual/ESL education was not noted across all IRIs. In examining various components of the IRIs, it is noted that IRIs reflect assessment practices that are appropriate for the ELL population even though specific reference to ELLs may not have been made. The *ARI*, *BRI*, *BRLI*, and *CRI* each provided more than one way to measure passage comprehension. The *BRI*, *BRLI*, and *ESRI* each provided sub-skills tests measuring phonics and phonemic awareness. The *BRI*, *CRI*, and *IRI* each included measures of vocabulary knowledge for words in isolation as well as in context. The *BRLI* included experiential and thematic word lists designed to test word knowledge related to daily experiences. The *ARI*, *BRI*, and *BRLI* each included multiple measures of fluency to assess both word recognition and prosody. All IRIs included passages that addressed multicultural topics, with the *BRLI* and *CRI* having the highest percentage of passages that addressed multicultural topics. The *BRLI* and *CRI* included specific references to ELLs in the directions for administration and interpretation of results.

While each IRI has its strengths, the usefulness of the instrument can be determined only after the purpose for assessment has been established. While not part of the study, the author of the *BRI* (Jerry L. Johns) also authored the *Spanish Reading Inventory* (currently in its second edition). Teachers inclined to assess the student's spanish reading proficiency could find the instrument helpful with Spanish speaking ELLs. In terms of addressing the first research question, the *BRLI* showed an increased awareness and consideration of ELLs as a subgroup.

Historical analysis. The historical analysis presented a mechanism for determining how landmark legislation, policy, and writings on Bilingual/ESL education impacted the development of IRIs. The impact and/or perceived impact of (1) The *Bilingual Education Act of 1968*, (2) The *Bilingual Education Act of 1984*, (3) The *No Child Left Behind Act (2001)*, and (4) *The Report of the National Literacy Panel on Language Minority Children and Youth (2006)* was explored. The impact and/or perceived impact of the works of Stephan Krashen and Jim Cummins pertaining to expanding theoretical constructs was also explored.

Prior to the year 2000, Bilingual/ESL political and theoretical constructs explored included the *Bilingual Education Act (1968)*, the works of Jim Cummins and Stephan Krashen, the reauthorization of *The Bilingual Education Act (1984)*, and the report *Becoming a Nation of Readers (1985)*. With regard to having an impact on the development of the IRIs, no direct impact or perceived impact was noted across the IRIs. The *Bader Reading and Language Inventory* was the only inventory that demonstrated an increasing awareness of ELLs as a subgroup evidenced by its inclusion of an ESL Quick Start test, ELL checklist, and references made with regard to Ells in the directions for administration and scoring.

However, an analysis of additions, deletions, and modifications made to the IRIs during this time reflected occurrences and trends in the literacy field. Most IRIs included clarifications

in administration and scoring, addition of information on background knowledge, and revision of graded passages. The additions, deletions, and modifications reflected on-going research on the criteria for establishing reading levels, comprehension measurements, and the importance of teacher knowledge in interpreting and applying results obtained from the IRI.

Beyond the year 2000, Bilingual/ESL political and theoretical constructs explored included the *NCLB Act* (2001) and the *Report of the National Literacy Panel on Language Minority Children and Youth* (2006). While not mentioned directly, the perceived impact of *NCLB* (2001) with regard to increased accountability in setting performance standards for all students (of which Ells are a mandated subgroup) is evident as IRIs continue to be regarded as "comprehensive instruments" (Walpole & McKenna, 2006) to identify students who are experiencing difficulty in reading. According to Bell and McCullum (2008), "effective educators use information from these assessments to plan further instruction" (p.5), monitor student progress, and meet accountability standards, all critical components in increasing reading attainment for all students (International Reading Association, 2007).

The analysis of additions, deletions, and modifications made to IRIs during this period, reflected trends and occurrences in the field of literacy that included comparison studies of IRIs and focus on levels of thinking and reading skills.

In summary, the research suggests that there is a commonality among informal reading inventories with regard to formatting and sub-skills measured. IRIs are becoming more uniform and reflect trends and occurrences in the field of literacy. What the research did not find were specific impacts or perceived impacts of developing political and theoretical constructs of occurrences in the bilingual/ESL field, with the exception of one IRI. When examined individually, the review of the modifications, additions, and/or deletions made to the informal

reading inventories suggest that the development of *The Bader Reading and Language Inventory* was most influenced by the expanding awareness of the needs of English language learners. The *BRLI* provided an ELL Quick Start test that can be utilized "for initial screening or progress testing" (p.16). The ELL Quick Start test offers language proficiency levels and descriptors that can be used by teachers to design instruction at the student's level of language proficiency. Additionally, the ELL checklist provides "a sequence of language learning common to acquiring facility in English" (p. 16). The *BRLI* also reflects appropriate assessment practices for ELLs by providing (1) multiple measures of comprehension, (2) word lists designed to measure experience knowledge as well as graded word lists, (3) fluency measurement for word recognition and prosody, (4) sub-skills tests for phonics and phonemic awareness, (5) passages that addressed varied multicultural topics, and (6) specifically addressed ELLs in the directions for administration and interpretation of results.

Limitations and Delimitations

The delimitations of the study included (1) choice of other IRIs frequently used and available were not chosen based on publication dates; and (2) political and theoretical constructs examined were not inclusive of all historical events and theoretical understandings of Bilingual/ESL education. An additional delimitation of the study was that the measures selected for the content analysis did not reflect all factors that can be measured in the reading process.

A primary limitation of the study was that the most recent editions of the IRIs used varied in the date(s) of publication. A second limitation of the study was that some IRIs did not provide measurements of each sub-skill being investigated.

Areas for future research

Areas of further research prompted by this study related to IRIs include (1) analyzing the effectiveness of comprehension measures in terms of ELLs, (2) analyzing passages in terms of sentence length and complexity, and (3) investigating how a student's performance on the IRI can be tied to a measure of language proficiency in English.

While conducting the study, the following questions arose as potential topics for further research: (1) What percentage of classroom teachers currently use informal reading inventories and to what extent do they utilize the results to shape instructional decisions, and (2) What alternative measures of informal assessment are most used by teachers of ELLs?

Summary

The purpose of the research was to compare current editions of IRIs with the goal of determining how the instruments addressed issues relevant to the assessment of ELLs. While research on the assessment of ELLs is limited (ETS, 2009), the need to collect relevant data that reflects on-going student progress remains important as teachers across the nation work to improve academic outcomes for the ELL population. According to Ehlers-Zavala (2002), the assessment of ELLs is a "process of collecting and documenting evidence of student learning and progress to make informal, instructional, placement, programmatic, and/or evaluative decisions to enhance student learning" (pp. 8-9). Informal reading inventories have the potential to provide teachers with data that can positively impact instructional decisions for ELLs. While each IRI has its strengths and limitations, the research suggests that the *Bader Reading and Language Inventory* (2013) best addresses issues relevant to the assessment of ELLs.

Appendix A: Checklist for Content Analysis

Name of Informal Reading Inventory: _____

Types of passages presented:

Fiction

Nonfiction

Passage word lengths:

Lowest:

Highest:

Comprehension measurements:

Retelling

Comprehension questions

Other: _____

Phonics and Phonemic Awareness:

List measures of phonics and phonemic awareness:

Vocabulary Knowledge:

Graded word lists

Words in Context

Other: _____

Fluency:

List measures of fluency measurement:

Degree of Multiculturalism (across passages):

Number of passages addressing multicultural topics:

age: _____ ethnicity: _____ nontraditional gender roles: _____

location: _____ social economic status: _____ religion: _____

special needs: _____

Total number of passages: _____

Instructions for English language learners:

Tally number of references made regarding English language learners in the administration of the informal reading inventory or interpretation of results:

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