Examining Early Reading Skills in Native Ewe-speaking Children in Cape Coast Metropolis of Ghana

by

Princess Korsah

BA, University of Ghana, 2011
M.Ed, University of Cape Coast, 2016

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We acknowledge and respect the Lək̓ʷəŋən (Songhees and Esquimalt) Peoples on whose territory the university stands, and the Lək̓ʷəŋən and W̱SÁNEĆ Peoples whose historical relationships with the land continue to this day.

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Supervisory Committee

Dr. Gina Harrison, Supervisor
Department of Educational Psychology and Leadership Studies

Dr. Donna McGhie-Richmond, Departmental Member
Department of Educational Psychology and Leadership Studies

Abstract

This study aimed to adapt the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) to assess reading abilities in Ewe and English among young learners in the Cape Coast Metropolis of Ghana. Using a correlational research design, first-grade students (n=42) from two Ewe community schools completed a collection of early literacy measures in English and Ewe. Results from the paired samples t-tests revealed that at one-minute of administration, students performed higher in English Letter Naming Fluency than Ewe Letter Naming Fluency. Yet, no significant differences were found in Phonemic Segmentation Fluency or Word Reading Fluency for both languages. At overall minutes, students' performance in English Letter Naming Fluency was still higher than Ewe Letter Naming Fluency, with no differences in Phonemic Segmentation Fluency or Word Reading Fluency. Ewe Oral Reading Fluency Accuracy was significantly higher than English Oral Reading Fluency Accuracy. Again, the correlation matrices at both time scales revealed that there were some associations between different fluency measures. However, these relationships varied in strength and significance across languages and tasks. Finally, English Phonemic Segmentation Fluency explained 15% of English Oral Reading Fluency, with Letter Naming Fluency contributing an insignificant 6%, and Word Reading Fluency significantly improving the model by 27%. Ewe Phonemic Segmentation Fluency and Letter Naming Fluency did not significantly explain Ewe Oral Reading Fluency variance, but Ewe Word Reading Fluency explained 12% over a one-minute interval and 39% overall.

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Dedication

To Sampson, Kuukua and Fiifi

Introduction

Background to the Study

One of the most important skills a student must learn, from Kindergarten to grade three and beyond (depending on languages and orthographies), is how to read, as reading is critical for academic success. It is an important milestone that facilitates learning throughout a child's life. Beyond grade three, academic work usually changes from learning to read to reading to learn (Alexander & Salza, 2019). The implication is that the ability to read is fundamental to learning since the teacher does not necessarily teach everything that learners know or learn (Menn & Dronkers, 2017). Failure to provide children with literacy experiences until they are in school can gravely limit the reading and writing levels they ultimately attain (Neuman et al., 2000). While the cultural context in which children learn to read may differ across countries and languages, the academic expectations may be the same.

Additionally, different languages have different orthographies (i.e., the knowledge of spelling patterns or the correct sequence and spelling of specific words). However, phonological processing has a robust predictive relation to reading development and reading difficulties across orthographies. Orthographies have been classified broadly into alphabetic (with symbols generally approximating phonemes, e.g., English, Spanish, and Russian: each symbol represents an individual sound known as phoneme), syllabic (with symbols representing syllables, e.g., Japanese), and logographic (with symbols representing words or morphemes e.g., Chinese). According to Mascolo et al. (2014), memorizing

orthographic letter patterns is vital to accurate spelling and reading development. Orthographic sequences allow students to form connections between the precise sequence of phonemes in the spoken words and the letters (i.e., graphemes) used to represent those phonemes in printed words. Eventually, word families and their sequences become familiar and unitized for fluent recognition.

Despite the recognized role of reading, not all children are reading proficiently globally, particularly in developing nations. For instance, a 2021 United Nations International Children's Fund (UNICEF) report indicates that child literacy rates among developing nations are generally low when compared to developed nations. A case in point is the report on Ghana, where, according to the 2021 Foundational Learning data, as of 2018, only 21% of children between the ages of 7 and 14 could read grade-appropriate texts with fluency and comprehension. Other research reports corroborate this. The United States Agency for International Development (USAID) Early Grade Reading (EGR) report (2018) shows that the majority of young learners in Ghana struggle with basic reading skills. According to the National Early Grade Reading Assessment (EGRA) 2018, about half of Ghana's young learners could not read a word by the end of grade 2. Only 2% of the sample studied in EGRA schools in Ghana could read grade-appropriate texts with fluency and comprehension, regardless of the prescribed Ghanaian language. In general, several studies have revealed that poor home literacy environments (a scenario in which children are unable to engage in a range of child literacy activities, such as reading story books aloud, playing language games, singing, and letter-sound correspondence activities,

(either by themselves or in collaboration with older readers with more expertise), parents' low educational attainment, their lack of dedication to their children's education, and their low socioeconomic situation are some sociocultural factors that impact how well children learn to read (Burgess et al., 2002; Wood, 2002; Steensel, 2006; Tebekana & Cishe, 2015). For instance, the children who participated in this study are located in communities in which the dominant occupation of parents is small-scale fishing. Thus, the parents spend much time on the basic necessity of providing food for their families. Because most parents are uneducated or are semi-literate themselves (mostly teenage parents who left formal education early), they are challenged to create stimulating home literacy environments for their children. For these children, their first language is their home language (not English and not necessarily Ewe) Beginning Kindergarten and formal literacy instruction is therefore pivotal to children's acquisition of literacy, in Ewe, the dominant language of the area, and in English which is also taught to children.

Evaluating children's early literacy and literacy-related skills is essential in identifying children who may require additional support and targeted instruction. Professional evaluation requires standardized instruments to assess learners' foundational reading skills and levels. In the case of Ghana, there needs to be more research on the relevance and importance of assessing foundational reading skills in African languages. However, there are no readily available standardized instruments for this purpose. The current study thus seeks to adapt a standardized measure, Dynamic Indicators of Basic Early Literacy Skills

(DIBLES), to assess young learners in the Cape Coast metropolis on their ability to read in Ewe (a native Ghanaian language) and English and compare the reading outcomes for both languages. This study is a preliminary attempt to validate this well-used measure, which was developed for English, in the context of children who speak Ewe as a first language and are also English Language Learners. Validating and adopting this measure will help the researcher and other early childhood educators in Ewe school settings and the whole Ghana Education Service to identify children who may require additional support and targeted instruction. The outcome of this study will inform future intervention endeavors.

Phases of Reading Development

To understand how reading develops and what factors might contribute to reading difficulties, literacy experts theorize how reading knowledge and skills take place and develop instructional models to ameliorate such difficulties. One such model is “Phases of Learning to Read”, proposed by Linnea C. Ehri (1998). Ehri argues that grapheme-phoneme and alphabetic knowledge are essential for literacy acquisition to reach a mature state, especially for English and other alphabetic orthographies. She explains that three graphophonemic capabilities enable children to begin to secure the complete spelling of a word in memory: knowledge of letter shapes, how graphemes typically symbolize phonemes in words and phonemic segmentation skills. As children begin to learn to read, different associations between these skills emerge aiding in memorizing written forms, pronunciations, and meanings of words. Ehri divides these associations

into four stages of sight word learning development: Pre-alphabetic, Partial-alphabetic, Full-alphabetic, and Consolidated-alphabetic.

During the *Pre-alphabetic* phase of reading, children read sight words by making connections between salient cues or attributes and the overall meaning or pronunciation of the word. In this reading phase, letter-sound (or grapheme-phoneme) relationships are not used. Connections are formed between visual cues and word meanings, such as the two round eyes in the word ‘look’ or the two bedposts in the word ‘bed.’ As children learn to recognize letters, they enter the *Partial-alphabetic* phase. During this phase, some connections are made between recognized letters and the sounds they represent in word pronunciation. Children begin to connect and segment these salient sounds, particularly those represented in the letter names (e.g., ‘ess’ for S and ‘tee’ for T.). However, readers in this phase still need *Full-alphabetic* knowledge of all the letters, the sound they represent and the ability to fully segment speech into phonemes that link to graphemes. This knowledge is solidified in the subsequent *Full-alphabetic* phase with complete connections between letters and phonemes. Finally, more and more words are retained in memory during the *Consolidated-alphabetic* phase, and letter patterns that recur in words are consolidated to the point where most words can now be read by sight. Instruction is necessary to assist children in acquiring letter name knowledge, phonemic awareness, and phonemic segmentation skill.

The current study assessed children’s *Partial-alphabetic* and *Full-alphabetic*, as well as *Consolidated-alphabetic* knowledge using DIBELS 8

assessment toolkits. Grade one learners were assessed with four subsets (Letter Naming Fluency, Phonemic Segmentation Fluency, Nonsense Word Fluency and Word Reading Fluency) of the DIBELS (English and adapted Ewe measures) that have a direct link with Ehri's *Partial-alphabetic*, *Full-alphabetic*, and *Consolidated-alphabetic* phases of reading development.

The Role of Literacy Assessment in Education

Assessment is integral to successful teaching because instruction needs to be delivered according to learners' knowledge, skills, and interests (Paris, Paris & Carpenter, 2001). Assessment results then guide the selection and use of additional support, instruction, and time to help the learner gain the weak or lacking skill (Helman, 2005). When providing support for learners at risk of poor reading outcomes, it is imperative to ensure that the decisions made have the highest likelihood of accuracy possible and lead to improving the targeted reading outcomes.

The effective use of reading literacy assessment data to plan and critically review instruction is a fundamental competency for good teaching (Nel, 2015). According to a study conducted by the National Institute of Child Health and Human Development in the United States (2000), there are no simple or swift solutions for heightening reading achievement, nor is there a single assessment that screen, diagnose, benchmark, and monitor learners' reading achievement progress. Numerous indicators from different types of assessments present a complete picture of learners' reading processes and achievement identification system. (Edwards et al., 2008). However, there has been a sense of urgency in

the United States regarding the teaching of the "big five" concepts of early literacy—phonemic awareness, phonics, fluency, vocabulary, and comprehension—since the passage of the "No Child Left Behind Act" and the National Reading Panel's 2006 report. see National et al., 2006; Doering, 2011). This legislation has heightened the demand for early intervention, which in turn has increased the need for high-quality assessments that identify pupils' literacy levels prior to their entry into the third grade. (Doering, 2011; Rouse & Fantuzzo, 2006). High-stakes testing consequently became commonplace in American education, with numerous school districts utilizing the Dynamic Indicators of Basic Literacy Skills (DIBELS) assessment (see Good & Kaminski, 2002; Kuhn et al., 2010; Doering, 2011, among others). For example, according to Hoffman et al., 2009, as cited in Doering (2011), “8,293 schools used the DIBELS data system during the 2004-2005 school year, making it most likely the most frequently used single assessment of connected text reading fluency in the United States” (Kuhn et al., 20 I 0). Doering (2011) also indicates that, the DIBELS is used by many schools to gather data about students' performance in reading assessments, their knowledge, and any advancements they may be making over the academic year.

The Dynamic Indicators of Basic Early Literacy Skills (DIBELS) Assessment

A collection of guidelines and measures for evaluating the development of literacy abilities is called the Dynamic Indicators of Basic Early Literacy Skills (DIBELS). These measures are intended to be quick (one-minute) assessments of fluency that can be used to track the progress of early literacy and reading abilities from Kindergarten to the eighth grade, as well as to periodically identify

risk. It can be utilized for many different purposes, such as determining whether students require additional support, universal screening, benchmark evaluation, progress monitoring, screening for dyslexia, and assessing the efficacy of therapies. Teachers can estimate each student's status and progress using the standards provided by DIBELS 8. (Oregon, n.d.). Like Curriculum-Based Measures, it was designed to be an economical and efficient indicator of a learner's progress toward achieving a general outcome. The University of Oregon Centre on Teaching and Learning asserts that DIBELS subtests help predict future reading difficulty and identify students who need intervention early and accurately (Good et al., 2001) and conducted longitudinal studies to validate its use as an effective tool for predicting developing reading skills in children.

The measures consist of six subsets, including Letter Naming Fluency (LNF) which is an indicator of a child's knowledge of rapid naming ability. It assesses a student's ability to say the "names" of upper and lowercase letters. Phonemic Segmentation Fluency (PSF) also assesses a child's skill at producing the individual sounds within a given word. Nonsense Word Fluency (NWF) assesses the child's letter sound correspondence and the ability to blend letters into nonsense words. Word Reading Fluency (WRF) assesses children's reading ability in isolation. Oral Reading Fluency (ORF) tests the child's ability to read text accurately and automatically and whether children understand what they are reading. Finally, the Maze task assesses students' ability to understand what they read. Apart from the PSF, which measures phonemic awareness abilities, the NWF, WRF, ORF, LNF, and the Maze are reading-related tasks assessing early

literacy and early reading skills in children. On the LNF, learners are given one minute to name as many letters (upper and lower case) as possible from a page before them. The LNF is used for benchmark screening and progress monitoring in only Kindergarten and grade one. When taking the PSF assessment, learners are orally presented with a word and then asked to identify each phoneme in the word. For example, if given the word “bat,” learners are expected to respond with */b/ /a/ /t/.* Like the LNF, the PSF is used in only Kindergarten and grade one. NWF measures children’s ability to blend sounds into nonsense or make-believe words. The words presented are usually pseudowords comprising consonant-vowel-consonant (CVC) sequences. For example, when given the nonsense word “vuf,” children are expected to respond with the sounds /*v*//*u*/ */f/* or pronounce the entire nonsense word-’vuf’. The NWF is used in Kindergarten through to grade three.

The WRF assesses children’s ability to read words from a list. Children are presented with a list of actual words and tasked to identify them verbally. Word Reading Fluency (WRF) forms include both decodable and non-decodable high-frequency words. The WRF is used in Kindergarten through to grade 3.

The ORF measures children’s fluency and accuracy with connected texts. It is made up of three one-minute readings of different passages. Learners are given a passage and are asked to read it aloud for one minute. The ORF is used from grade one through to grade eight. The Maze consists of fill-in-the-gap passages from second grade through to grade 8. The difficulty level of the passages is according to the grade level. Children are presented with three passages - one at a time, and they are tasked with filling in the gaps, choosing

from three options provided the one that correctly completes the sentence. Instructors administer this assessment to all learners in a class three times a year (i.e., fall, winter, and spring) and progress monitor learners who are at risk once or twice a week. When monitoring progress, the instructor assesses the learner only in the aspects where they have difficulty.

Advantages of Using DIBELS

DIBELS and other similar assessment tools have been in use for many years. In addition to their use in identifying learners who may be at risk for early literacy-based learning difficulties, they have also been used as a benchmark for identifying learners requiring special education support, for improving reading instruction, monitoring learner progress, and in predicting reading achievement outcomes on state-mandated assessments in the U.S. (Valencia et al., 20I0). DIBELS, in particular, has many important uses for teachers, learners, administrators, and parents. According to Glover and Albers (2007), “early screening is a critical component in the provision of targeted prevention and intervention services” (p. 118). DIBELS can be administered to Kindergarten pupils, providing teachers and other school personnel with the data needed to begin appropriate interventions for struggling learners and inform instruction for the rest of the class.

Hoffman et al. (2009) carried out an investigation on the use of DIBELS among International Reading Association members through surveys and interviews. The ability to identify at-risk learners through the assessment, the way DIBELS informed instruction and assisted teachers in tracking the progress of their at-risk

students, and the assessment's relative ease and efficiency—which frees up teacher time for instruction—were among the most noteworthy positive comments. Numerous benefits like this urge numerous school districts to choose the DIBELS evaluation. Pool and Johnson (n.d.) noted that the cost and time associated with DIBELS and how often each assessment can be repeated to monitor a learner's progress suggest that it is effective. By progress monitoring learners once or twice weekly, educators are then able to make instructional plans based on learner-specific needs. DIBELS can also be used to monitor the progress of at-risk students on a regular basis. If a student is consistently making little or no progress, the teachers can use this information to make changes in the type of instruction the student receives.

Disadvantages of Using DIBELS

Despite the numerous strengths, one noticeable downside of DIBELS has to do with the diversity of students in classrooms. As classrooms become more diverse, some learners (e.g., English Language Learners; ELL) may have difficulty with standardized tests like DIBELS. DIBELS often does not consider the social and cultural aspects of the examination. Learners with varying values and experiences who take the test may be at a disadvantage. Responding to these concerns, a series of studies on DIBELS has documented the reliability and validity of the various DIBELS subtests and their sensitivity to learner change (DIBELS 8 Technical Manual, 2018-2020). To address the issue of diversity, the developers have created the Indicadores Dinámicos del Éxitoen la Lectura (IDEL) for the screening and progress monitoring of Spanish-speaking students.

Reliability and Validity of DIBELS

Test *validity* and *reliability* are two essential words that need to be operationally defined when addressing any measure. The degree to which a test assesses what it is intended to measure for assessing each student's status and progress is known as validity. (McKenna & Stahl, 2003), while the Reliability refers to the degree to which a test score is a consistent and stable indicator (University of Oregon, Center on Teaching and Learning, 2018), or the extent to which an instrument measures whatever it is measuring consistently when used on the same people and in the same settings. In short, “it is the replicability of measurement or its general dependability” (Field, 2018). According to the developers, the DIBELS assessment tool has been applied to thousands of child subjects from different geographical backgrounds in the US, and the test can accurately predict outcomes (see Good & Kaminski, 2002).

Data from the DIBELS 8 Technical Manual (2018-2020) indicates that the developers of DIBELS (the University of Oregon’s Center on Teaching and Learning) examined five forms of test reliability for the DIBELS 8th Edition: *concurrent alternate form reliability*, *delayed alternate form reliability*, *test-retest reliability*, *intercept and slope reliability for progress monitoring*, and *standard errors of measurement* (University of Oregon, Center on Teaching and Learning, [UO, CTL], 2020), and have provided detailed data on the various forms of reliability tested in the DIBELS 8 Technical Manual (2018-2020). They have demonstrated strong reliability for DIBELS 8, the most robust evidence being the concurrent alternate form reliability (UO, CTL, 2020). As with the reliability test,

the UO's CTL researchers also provided data for concurrent and predictive validity evidence for using DIBELS 8 measures for screening and progress monitoring purposes. They documented the most robust evidence concerning its primary use as a screener for learners at risk of reading difficulties, including reading disabilities such as dyslexia (UO, CTL, 2020**).**

Rouse and Fantuzzo (2006) conducted a study focusing on 330 Kindergarteners who attended an urban public school to determine if DIBELS was a valid indicator of early literacy for these children. The majority of the learners were children from low-income families. The authors found a positive relationship between each early literacy skill and each of the DIBELS subtests (Rouse & Fantuzzo, 2006). They found the most vital relationship between each DIBELS subtest was with the Developmental Reading Assessment (DRA) instructional reading level (Rouse & Fantuzzo, 2006). They concluded that complementing these two assessments (DIBELS and DRA) could help districts obtain useful literacy information about each learner.

Curriculum-Based Measures (CBMs) Involving English Language Learners

Results of numerous studies support the use of CBMs for screening and progress monitoring in schools. CBMs have been shown in numerous studies to be useful tools for tracking progress in response to instruction (Fletcher & Vaughn, 2009), to identify specific skill deficits more easily (Shapiro, 2011), and to serve as markers of academic skill capacity (Deno, 1985; Deno et al., 1982). CBMs are intended to assist in writing, spelling, math, and reading. However, almost all of this work has been undertaken in English (Keller-Margulis et al.,

2012). Two R-CBMs that have been created in another language (Spanish) are the Indicadores Dinámicos del Éxitoen la Lectura (IDEL) and the “Star CBM Lectura DEL is a research-based formative assessment collection of measures created by the University of Oregon, the the developers of DIBELS, to evaluate the foundational early literacy skills of young Spanish-speaking readers. On the other hand, Renaissance's 2020 introduction of Star CBM Lectura, a computer-adaptive assessment tool, gauges students' early reading and numeracy abilities from Kindergarten to grade 6. It is administered one-on-one through paper-based, online, remote, or in-person methods. (https://www.renaissance.com).

Like DIBELS, both IDEL and Star CBMs provide reliable and validated data about using them to make predictions on reading outcomes. For instance, Keller-Margulis et al. (2012), conducted a study to examine the relationship between R-CBMs in Spanish and performance on the reading Spanish Texas state-wide achievement test, the TAKS (Texas Education Agency, 2010), and the utility of Spanish R-CBMs for identifying English Language Learners (ELLs) at risk of poor performance in third and fourth grades in a school district in the south-eastern United States. The application of R-CBMs in Spanish for screening purposes is suggested by the results, which showed a moderate correlation at the third and fourth grade as well as diagnostic accuracy results utilizing the 25th percentile and the determination of cut scores using receiver operating characteristic curves.

Similarly, Baker et. al (2020), evaluated the predictive power of English and Spanish language screeners for reading comprehension at the end of grades one and two using a sample of 1221 Latino bilingual students in grades one and

1004 in grades two who were enrolled in bilingual programs in the Pacific Northwest and in Texas. The study revealed that, first, the Aprenda-3 criterion measure could accurately predict risk by utilizing the Spanish Letter Name Fluency (FNL) test administered in the fall of first grade. Second, on the Aprenda-3 and SAT10 criteria tests, neither phonemic segmentation in Spanish (IDEL FSF) nor phonemic segmentation in English (DIBELS 6 PSF), tested in grade one, was an accurate predictor of risk. Third, pupils may be correctly classified as at-risk, some risk, and meeting target on the Spanish and English criteria measures based on their performance on the Spanish nonsense word fluency (IDEL FPS) in the winter and spring of Grade 1. The English nonsense word fluency measure (DIBELS 6 NWF) was an accurate predictor when the criterion measure was in English, but not in Spanish Fourth, reading risk on both Spanish and English criteria assessments in Grades 1 and 2 was reliably predicted by Spanish oral reading fluency. With four exceptions—the spring of Grade 1 for the at-risk level, the winter of Grade 1 for the some-risk level, the spring of Grade 2 for the some-risk level, and the winter of Grade 2 for the target level—English oral reading fluency accurately predicted reading risk on the English criterion measure. The study established that it was crucial to measure the reading skills of students participating in bilingual programs in both languages and, at least, in the language in which they are taught in early grades.

Relatedly, Martins and Capellini (2021) conducted a study in which CBMs were used for identification of struggling readers in the Brazilian interior state of São Paulo in third to fifth grades from two different public schools and argued

that, students who met the required reading proficiency threshold were defined as those who could accurately read 86 words or more per minute in third grade,, 104 words or more per minute in fourth grade, or 117 words or more per minute in fifth grade. The researchers concluded that 1-minute CBM fluency measures can be used to categorize students' reading abilities. For students who were considered to be struggling or at-risk of struggling with reading, reference intervals of words read correctly per minute were used as a basis for classification. The present study adapted DIBELS for Ewe and used both the adapted measures as well as the original English measure to assess learners whose native language is Ewe on how four subsets of interest predict English and Ewe reading in these learners. The adapted instrument was able to help determine specific skill deficits in these learners (Shapiro, 2011).

Summary

Assessing children’s developing literacy skills is essential in identifying those who may require additional support and targeted instruction to prevent enduring literacy-related learning disabilities. There needs to be more studies in Ghana on the importance and relevance of assessing foundational literacy skills using formal assessment tools, as is generally the case for literacy assessment in African languages. DIBELS is a curriculum-based measure of early reading skills, validated as an effective predictor of developing reading ability. It can be used for various purposes, including identifying learners who need extra assistance, universal screening, benchmark assessment, progress monitoring, and evaluating the effectiveness of interventions, among others. Guided by relevant aspects of

Ehri's (1998) *"Phases of Learning to Read*" model, the present study adapted this measure to assess children whose first language is the Ghanaian language, Ewe, and who are also learning English as an additional language. Reading outcomes were evaluated in both Ewe and English.

Literacy Instruction

Literacy Instruction in Ghana

In Ghana, children enter school at the age of four at the Kindergarten level and are supposed to be instructed in one of eleven officially sanctioned indigenous Ghanaian languages. It is important to note that over 73 indigenous languages are spoken in Ghana (Amoako, 2020). The current language of education policy of Ghana stipulates that, learners in the lower grades (i.e., from Kindergarten through to grade three in primary schools in Ghana) be taught in one of the eleven official Ghanaian languages where possible (Owu-Ewie, 2006; USAID EGRA Report, 2018). The authors further stated that English, as a language, is a subject of study at this level. However, English is sanctioned from grade four as the language of instruction, while the Ghanaian language becomes a subject of study.

Despite the current policy on language in education, data from EGRA (2018) suggest that about half of young learners in Ghana are unable to read a single word by the end of grade 2, and only two percent can read grade-appropriate texts with fluency and comprehension -regardless of the official Ghanaian language. As literacy development starts long before children enter school (see Hodgins, 2014; Hodgins & Harrison, 2021), children are expected to

have acquired some oral language skills in their first language before they start formal education. Adequate literacy and reading readiness assessments are needed to enable teachers to determine and understand students' literacy skills first entering school.

Unlike English which has received extensive research on the importance and the role of assessment of early literacy and early foundational skills in reading, there needs to be more research on this association in Ghanaian languages. It was not until 2015 when Early Grade Reading Assessment (EGRA), a USAID project to "Support Basic Literacy Learning" in Africa (Hoffman, 2012), was introduced in Ghana and assessment tools were developed in the eleven official Ghanaian Languages, including Ewe.

Ewe: Language and Alphabetic system

Ewe (written as Eʋe, in the native orthography) refers to both the people (Eʋeawo - speakers) and the language (Eʋegbe). This section provides a brief background of the language and the orthography (i.e., the alphabetic system of the language). Ewe is a member of the Kwa branch of the Niger-Congo languages. Although there are speakers in each of Ghana's sixteen administrative regions, the Volta region is home to the majority of the country's speakers. Spoken in the coastal regions of adjacent West African nations, the language and its sister dialects span from southwest Nigeria through the Republic of Benin, Togo, and southeast Ghana. The Awudome, Anlo, Tongu, Ho, Ve, Kpando, and Peki dialects of Ewe are reported to be significant in Ghana. In communities where the language is primarily spoken as a mother tongue, the language is

being utilized as a medium of instruction in lower elementary schools. In addition, ewe is taught as a subject in elementary and secondary education. Additionally, it is one of the main languages taught in a few chosen Ghanaian language colleges and universities. In the Volta and Oti areas of Ghana, certain non-Ewe minority ethnic groups also speak Ewe as a second language, or more accurately, as lingua Franca (see Abdul, 2014; Korsi-Agodzo, 2015; Agbadah, 2018). It is noteworthy that the Germans were the first to work on the Ewe language's orthography in terms of a writing system (see Gavua, 1990). The African Reference Alphabets and Latin Alphabets are combined in the system. There are thirty (30) letters in total: twenty-three (23) consonants and seven (7) vowels. Table 1 shows the letters of the Ewe alphabet and their corresponding sounds based on the International Phonetic Alphabet (IPA) system.

Table 1: *The Ewe Alphabet*

A a	B b	D d	Đ ɖ	Dz dz	E e	Ɛ ɛ	F f	Ƒ ƒ	G g	Gb gb	Ɣ ɣ
/a/	/b/	/d/	/ɖ/	/ʣ/	/e/	/ɛ/	/f/	/ɸ/	/g/	/g͡b/	/ɣ/
H h	I i	K k	Kp kp	L l	M m	N n	Ny ny	Ŋ ŋ	O o	Ɔ ɔ	P p
/h/	/i/	/k/	/k͡p/	/l/	/m/	/n/	/ɲ/	/ŋ/	/o/	/ɔ/	/p/
R r	S s	T t	Ts ts	U u	V v	Ʊ ʊ	W w	X x	Y y	Z z	
/l/	/s/	/t/	/ʦ/	/u/	/v/	/β/	/w/	/x/	/j/	/z/	

Literacy Assessment and Intervention in Africa (Ghana)

It is not a common practice in Africa, including Ghana, to use standardized literacy assessments, such as DIBELS, or other measures widely used in Canada or the U.S.A to guide decision-making with regards to a learner’s reading ability

and/or for predicting general performance. As Hoffman (2012) notes, the closest approximation to formal assessment kits is the Early Grade Reading Assessment (EGRA), which was used (it is worth noting that EGRA is no longer actively being used in Ghanaian schools presently due to funding issues}in sub-Saharan Africa and has been described as “a clone of DIBELS.” According to Hoffman, EGRA has been prepared to become the main, if not the only, approach to improving literacy in Africa, having been modelled after DIBELS”. The big plan for EGRA was the development assessment instruments in local languages or English across the African countries. Apart from Ghana, EGRA is operational in several African countries, including Kenya, Senegal, Gambia, and Mali. The EGRA assessment instrument was developed in eleven official languages in Ghana. However, unlike the DIBELS, which is conducted from Kindergarten to grade eight, EGRA is conducted in only Kindergarten through to grade three, with Kindergarten to grade 2 being conducted in the Ghanaian languages while grade 3 is conducted in English. This is seemingly contrary to the rudiments of the country’s language in education policy, which, as earlier stated, requires that the Ghanaian language is used from Kindergarten to grade three and then English from grade four onwards.

Even though these assessment tools are less common in Africa and Ghana for matter, their role in education is very important. The current study seeks to determine (1) how well English early literacy measures from DIBELS predict Ewe and English reading outcomes in learners in Ewe-speaking communities in Cape Coast and (2) how well an adapted version of the early

literacy measures in Ewe designed to align with the English DIBELS correlate with the English measures and with English and Ewe outcomes.

Assessing Early Literacy Skills in Ewe and English

Substantial research exists to support the use of early literacy skills assessment for screening and progress monitoring in schools; however, nearly all this research focused on English (see Fuchs & Fuchs, 2006, Coleman, Buysse, & Neitzel, 2006). Very few studies have examined early literacy skills in other languages such as Spanish while limited early literacy skills exist for both English and Ghanaian languages in Ghana. The only assessment tool available is the one which has been developed for the EGRA and used in conducting an Annual School Evaluation Report (ASER). The tool is designed to be administered individually requiring 15 minutes per child on the tasks. The Ewe ASER tool consists of five components or subsets. The first subset (level 2 on the assessment card) is identification of letters/sound. The second is a reading of two and three letter words (level three). The third consist of reading four simple sentences (level 4). Level five requires the student to read one paragraph and answer questions on what was read. The final and sixth level requires students to read a two-paragraph story and answer questions on it. A sample Ewe ASER tool is included in Appendix D.

Administering the assessment begins with level four. If a student is unable to read two out of the four sentences correctly, they are asked to go to level 3. Level three consists of 10 two and three letter words and the student is required to read at least five out of the ten words correctly to progress to the next level.

When a student is unable to do so, they are asked to move to level two, which consists of 10 sounds. The student is required to pronounce at least five out of ten sounds correctly. If the student is unable to do so, they are considered to be a non-reader and thus at level one. Level five consists of seven lines, a one paragraph story. The student is required to read at least four lines correctly to progress to level six which is made up of a two-paragraph story.

There are no readily available data regarding the reliability and validity of this tool as well as how well it predicts reading outcomes in students. Meanwhile, available literature suggest that most pupils are unable to read. The current study focused on assessing the following aspects of foundational reading skills using DIBELS 8 assessment tool:

i. Letter Naming Fluency (LNF)
ii. Phonemic Segmentation Fluency (PSF)
iii. Nonsense Words Fluency (NWF)
iv. Word Reading Fluency (WRF)

A fifth measure, the Oral Reading Fluency (ORF) was used to measure the reading outcomes of the learners. These measures were adapted to Ewe and administered to students along with the English measures.

Section Summary

In Ghana, children enter school (Kindergarten) at the age of four and are supposed to be instructed in one of eleven officially sanctioned indigenous Ghanaian languages. However, available data suggest they must gain the requisite literacy skills for this requirement. Acquiring such skills calls for literacy

interventions, especially in Ghanaian languages at the early grade levels. Unfortunately, there is limited literature on Ghanaian languages in this regard. The present study focused on literacy in Ewe, one of the prescribed instructional languages.

Given that intervention planning calls for an assessment of learners which, in turn, requires using validated instruments, which are lacking in the Ghanaian context, this study adapted DIBLES for this purpose. The study enabled the researcher to determine the efficacy of the DIBELS measure adapted for Ewe in predicting Ewe reading outcomes compared to reading outcomes in English.

The Current Study

The Problem

Research has shown that the language of instruction in child education is as essential as the method used. Children learn better when they are instructed in a native or first language than when they are instructed in a foreign or second language (UNESCO, 2008). Such studies have informed Ghana's current language in education policy, which sanctions the use of a Ghanaian language as a medium of instruction from preschool (KG) to lower primary: Basic one to basic three (Atintono & Nsoh, 2018). Furthermore, since 2015, Ghana's Ministry of Education/Ghana Education Service in collaboration with the United States Agency for International Development (USAID), has rolled out the Early Grade Reading program, aimed at facilitating literacy of pupils from second year in KG to grade 3 in the Ghanaian language. The program outlines specific strategies for teaching reading in the Ghanaian language. The researcher is an experienced

lower primary school teacher. Despite this intervention, the researcher has observed that some children struggled to read in their mother tongue when the program was being operated. Mainly, it has been observed that (1) some pupils are unable to identify the name or sounds of letters correctly; (2) some pupils are unable to segment the individual sounds in a spoken word; and (3) most pupils are unable to correctly combine two or more sounds (i.e., blending) to produce a spoken word. Based upon these instructional and observational experiences, the researcher seeks to assess learners' reading skills and use the resulting data to predict the reading outcomes for both English and Ewe.

The primary purpose of this study was twofold. The first purpose was to adapt and create in Ewe measures that are parallel as much as possible to an already existing and well-used set of measures (i.e., DIBELS 8). The second purpose was to test the efficacy of the measures created with learners to determine how well they correlate to the English measures. The researcher used the DIBELS 8 benchmark test to assess participants' foundational reading skills in English and then adapted the same measure for the Ghanaian language, Ewe in order to assess the same skills in Ewe. The study provides a basis for evaluating current practice concerning teaching reading/literacy in the Ghanaian language to lower primary pupils by highlighting some inherent challenges with assessment or evaluation and consequently recommending appropriate intervention measures for improvement.

The study, conducted in two Ewe community primary schools in the Cape Coast metropolis of Ghana, targeted learners in first grade. Grade 1 children were

preferred as developmentally they will have reached mastery of foundational literacy skills, such as letter naming, phonemic segmentation, and other skills indicating reading readiness after having been taught rudiments of these skills in Kindergarten (Ehri, 1998). Grade one represents a pivotal time in children's literacy development for the rapid growth of reading skills (Mader, 2021). The researcher also found this grade convenient because, at this stage, they are still learning to read (Alexander & Salza, 2019). It is convenient to assess the students while they are still receiving training on these skills to aid their reading.

Using the correlational research design to examine early literacy skills between Ewe and English reading outcomes, this study will aid language teaching researchers, educators, and policymakers in Ghana by developing validated assessment tools for Ewe language learners and identifying reading difficulties. The findings will guide educational policy development, improve instruction, and support curriculum planning by the Ghana Education Service, Ministry of Education, and National Council for Curriculum Assessment (NaCCA), while also providing a foundation for future research and interventions to enhance reading abilities.

Research Questions

Given the study goals, the following questions were addressed:

1. What are the differences in the performances of children on English and Ewe early literacy measures?
2. What is the association between English and Ewe measures and with Ewe and English reading?

3. How does each measure in English predict English reading in Ewe native speaking children?
4. How does each measure in Ewe predict Ewe reading in the same children?

Method

Participants and Setting

This study consisted of forty-two (42) first grade children comprising fourteen (14) males and twenty- eight (28) females in two Ewe-speaking community schools in the Cape Coast metropolis of Ghana. Ethical clearance was obtained from University of Victoria, Canada to collect data involving the participants as well as informed consent from parents, participating schools, and verbal consent from the children. With regards to their age, eighteen (18) out of the forty-two (42) are less than eighty (80) months, twenty (20) are between eighty to ninety (80-90) months and the remaining four (4) respondents are more than ninety (90) months old. The two Ewe community schools are located along the coast of the Cape Coast metropolis of Ghana. People in these communities are migrant fisherfolk settlers, initially from the southern part of the Volta region of Ghana. Ewe is the primary language of communication in homes in these communities, although many speakers are also proficient in Fante (a local Akan dialect) which is the more comprehensive regional linguistic code in Cape Coast. Preliminary observations suggested that the people of these two communities do not speak English at home, and children typically do not have any literacy exposure in English before starting Kindergarten at age 4. Parents of these children generally have low income and educational levels are unable to engage

their children in early literacy activities (home literacy environments, as described above). It is worthy to note that children within this age range are essentially receptive second language (L2) bilinguals, as far as Fante is concerned. The children were assessed on their early reading foundational skills in their mother tongue/first language (Ewe) and second language (English) using four subsets of the DIBELS 8 measures to determine their reading outcomes and test the validity of the L1 measures, adapted for assessing participants in Ewe. The researcher had no known intellectual or learning difficulties and medical condition of children prior to their participation in this study. The study is intended to help identify the relationship between children's reading outcomes in the two languages.

Measures

A collection of English and Ewe adapted early reading measures were used from the DIBELS 8 ((UO, CTL, 2020) assessment kit to assess native Ewe-speaking children. In adapting measures to Ewe, the researcher translated each of the items across each of the measures from English to Ewe. Most of the Ewe adaptations are not direct, word for word translations of the English DIBELS since some of the words and concepts used in the English language cannot be found in Ewe. Rather the Ewe adaptations are closely designed to look like the English version in terms of the number of items (except for Ewe ORF which is made up of 50 words only), word classes, and the difficulty level of words. For example, the English Letter naming fluency task is made up of 100 lower- and upper-case English alphabets arranged in rows from left to right. Thus, the Ewe Letter naming fluency task also contains 100 lower- and upper-case Ewe alphabets/sounds

arranged in the same order. Word classes such as verbs, nouns, etc. were followed in the Ewe tasks. The major translation work of the Ewe adaptation was completed by the researcher with proofreading completed by a Master of Philosophy (M.Phil). in Ghanaian Language graduate student at the University of Cape Coast, Ghana, who is a friend to the researcher. The same administration procedures for the English tasks were followed with the Ewe tasks, except that instruction and tasks were all administered in Ewe. This adapted measure is a preliminary attempt to validate the instrument for future use. Unlike the English version, it has not been normed on any population. However, tests have been administered according to the standardized procedures described in the DIBELS test manuals.

English DIBELS

The following measures from the DIBELS 8 assessment tests were administered to students:

Letter-Naming Fluency. Children were instructed to name a total of 100 lower-case letters and upper-case letters as fast as possible. The letters were presented in rows in a random order. The total score was the sum of correct responses for both lower- and upper-case letters in one minute and at the overall time spent on the task.

Phonemic Segmentation Fluency. Children were instructed to segment orally presented words into phonemes, for example, when given the word “bat”, children were expected to respond with /b/ /a/ /t/. Total score was the number of correct responses given at one minute and at the overall time spent on the task.

Nonsense Word Fluency. Children read make-believe or pseudowords aloud (one to two syllables) from a list of words as quickly and as correctly as possible. The total score was the sum of correctly decoded words at one minute and at the overall time spent on the task.

Word Reading Fluency. Children were instructed to read a total of 105 words (one to three syllables) aloud as quickly and correctly as possible from a list of words. The total score was the sum of correctly recognized words from the lists of words at one minute and at the overall time spent on the task.

Oral Reading Fluency. Children were instructed to read a-173 words passage aloud. Total score was the number of words decoded correctly at one minute for accuracy and at the overall time spent reading the entire passage for fluency. The ORF was used as the Reading Outcome measure in this study.

EWE DIBELS Adaptation

The following measures from the DIBELS 8 were adapted for EWE assessment tests and administered to the children.

Letter Naming Fluency: This parallel Ewe task instructed children to name a total of 100 lower-case sounds/letters and upper-case sounds/letters. (Note that Ewe does not have separate sounds from letters. The letters are the same as the sounds). The letters/sounds were presented in rows in a random order. The total score was the sum of correct responses for both lower- and upper-case letters in one minute and at the overall time spent on the task.

Phonemic Segmentation Fluency: Children were instructed to segment orally presented age-appropriate words in the Ewe language into phonemes, for

example, when given the word “avu”, children were expected to respond with /a/ /v/ /u/. Total score was the number of correct responses given at one minute and at the overall time spent on the task.

Nonsense Word Fluency: Children read make-believe or pseudowords (one to two syllables) aloud from a list of words as quickly and as correctly as possible. The total score was the sum of correctly decoded words at one minute and at the overall time spent on the task.

Word Reading Fluency: Children were instructed to read a total of 105 age-appropriate everyday words (one to two syllables) aloud as quickly and correctly as possible from a list of words. The total score was the sum of correctly recognized words from the lists of words at one minute and at the overall time spent on the task.

Oral Reading Fluency: Children were instructed to read a 50-word passage (taken from a pupil’s book one Ewe reader) aloud. Total score was the number of words decoded correctly at one minute for accuracy and at the overall time spent reading the entire passage for fluency. The ORF was used as the Reading Outcome measure in this study.

Procedure

The assessments took place individually in a quiet classroom after the close of school. Each participant session was approximately one hour in length. Each child was assessed individually by the research team which included the researcher and the class teacher, whose main role was time keeping. The tasks were administered in counterbalanced order in two main blocks (English DIBELS

measures and Ewe Adapted DIBELS measures), with a fixed order of tasks within each block (i.e., Letter Naming Fluency, Phonemic Segmentation Fluency, Nonsense Words Fluency, Word Reading Fluency and Oral Reading Fluency measures). Children were timed during their performance on the tasks. Scores were given for children's performance on all measures at 1-minute of administration to align with DIBELS administration instructions and overall minutes (i.e., how long it took each child to complete the entire set of items) to provide evidence on the validity of all items. Specifically, the 1-minute assessment provides an indication of fluency (speed and accuracy) and the overall time taken to complete the tasks provided an indication of accuracy across all items. Data was collected during the second term of the 2022/2023 school years.

Results

Raw scores of children's performance on the early literacy skills measures were used in this analysis. All cases are included in all analyses as there are no missing data**.** Preliminary analyses revealed a normally distributed range of residuals across all variables. Tolerance indices and the Variance Inflation Factors (VIFs) showed no issues with multicollinearity, with all values exceeding .20, and the average value of the VIFs was a little above one. Additionally, the normality of the residuals and variance were assessed through Q-Q plots and scatter plots, respectively. It was revealed that the normality assumption and the constant variance assumption were not violated, and a statistical technique was used to confirm the statistical significance of the

observation. Unless stated otherwise, all tests of statistical significance are based on a significance level of $p < .05$.

First, descriptive results are presented, followed by the results on a paired sample t-test analysis. This analysis addresses the first research question which focused on the differences in the children's performances on the English and Ewe measures. To address research question two on the relationship between English and Ewe measures and with Ewe and English reading among Ewe-speaking children, a correlation matrix between the children's performance in both languages during the 1-minute and overall minutes spent on the task is also reported. Finally, three sets of regression analyses were run: The first examined the contribution of LNF, PSF, and WRF to ORF in English, and the second examined the contribution of the Ewe-adapted LNF, PSF, WRF to ORF in Ewe. This aimed to address the third and fourth research questions on how well the measures predict English and Ewe reading in Ewe Native Speaking Children. A third, but supplementary regression analysis was run to examine "cross-linguistic" transfer of Ewe early literacy to English (L2) outcome-English ORF. In other words, this analysis was conducted to see the influence of first language early literacy on second language reading.

The (descriptive results are presented in Table 2. The average performance of the children in the overall minutes on all early literacy skills tasks in both English and Ewe was higher than the average performance of the children in 1-minute for both languages. Ewe LNF reported the highest mean performance, and the Ewe Nonsense Words Fluency- Words Read Correct

(NWFWRC) reported the least mean performance at the 1-minute and overall minutes. At the overall minutes, the performance measures in the Ewe language are highly spread out compared to a 1-minute measure of performance.

Table 2*: Descriptive statistics of scores achieved by children across all measures in English and Ewe*

	Ewe					**English**				
Variable	**Range**	**Mean**	**SD**	**Min**	**Max**	**Range**	**Mean**	**SD**	**Min**	**Max**
Age	44	82.21	7.760	69	113	44	82.21	7.760	69	113
LNF at 1Min	36	27.52	8.312	3	39	32	32.83	8.060	12	44
LNF Overall	87	70.95	18.146	11	98	47	89.86	12.294	53	100
PSF at 1 Min	33	18.86	7.630	5	38	42	16.71	12.194	2	44
PSF Overall	80	53.48	19.327	18	98	84	49.76	26.246	12	96
NWFWRC at 1 Min	58	34.10	16.723	2	31	38	12.43	10.502	0	38
NWFWRC Overall	29	14.05	7.464	9	67	76	29.74	20.247	2	78
WRF at 1Min	60	40.02	14.946	4	38	35	13.45	10.865	3	38
WRF Overall	34	14.67	8.386	11	98	87	37.00	28.693	11	98
ORF Accuracy	60	58.71	18.483	30	90	85	31.45	27.980	5	90

Note: Scores represent mean performance across four early literacy skills in the two languages.

Dependent Sample T-Test Analysis on the English and Ewe Measures

Table 3 summarizes the dependent samples t-test analyses using the t-value and the p-values were conducted to examine the differences in performance between the English and Ewe languages under the various measures at both 1 Min and overall minutes.

Table 3: *Means of paired samples statistics at one-minutes of task.*

Variable		N	Mean	Std. Deviation
Pair 1	ENG. LNF 1 MIN	42	32.83	8.06
	EWE-LNF 1 MIN	42	27.52	8.31
Pair 2	ENG. PSF 1 MIN	42	16.71	12.19
	EWE-PSF 1 MIN	42	18.86	7.63
Pair 3	ENG. WRF 1 MIN	42	13.45	10.87
	EWE WRF 1 MIN	42	14.67	8.39

The results of the paired samples t-test revealed at one-minute of task, that the performance of children on English Letter Naming Fluency (LNF) was significantly higher than Ewe LNF, $t\ (41) = 3.75,\ p < .05$. With regards to Phonemic Segmentation Fluency (PSF), the analysis showed that there was no significant difference in children's performance in English PSF and Ewe PSF, $t\ (41) = -1.46,\ p > .05$. In terms of Word Reading Fluency (WRF), the children scored a little higher WRF compared to English WRF. Yet, the difference was not statistically significant with $t\ (41) = -0.87,\ p > .05$.

Comparatively, as shown in Table 4, the paired samples t-test also revealed that at overall minutes of task, Ewe native speaking children scored

significantly higher on English LNF compared to Ewe LNF, *t (41) = 5.82, p < .05.* Similarly, the analysis showed that there was no significant difference in children's performance in English PSF and Ewe PSF, *t (41) = -1.18, p > .05*. Regarding Word Reading Fluency (WRF), Ewe WRF had a higher mean score compared to English WRF. However, the difference in the mean scores was not statistically significant with *t (41) = -0.68, p > .05*. Finally, Oral Reading Accuracy for both languages were also tested, and the results revealed that there was a statistically significant difference in children's scores in both languages. The children achieved significantly higher Ewe ORF accuracy scores *t (41) = -5.68, p <.05)* than English ORF accuracy scores which is not surprising given Ewe is their L1. The difference was statistically significant. This is intuitively plausible because the Ewe is the language the children are exposed to and interact with in their immediate environment compared to the English language.

Table 4: *Means of paired samples statistics at overall minutes of task*

	Variable	N	Mean	Std. Deviation
Pair 1	ENG. LNF	42	89.86	12.29
	EWE LNF	42	70.95	18.15
Pair 2	ENG. PSF	42	49.76	26.25
	EWE PSF	42	53.48	19.33
Pair 3	ENG. WRF	42	37.00	28.69
	EWE WRF	42	40.02	14.95
Pair 4	ENG. ORF ACCURACY	42	31.45	27.98
	EWE ORF ACCURACY	42	58.71	18.48

Correlations analyses between LNF, PSF, WRF and ORF

Correlation analyses using Pearson product moment correlations were conducted to examine the relations between Letter Naming Fluency, Phonemic Segmentation Fluency, Word Reading Fluency and Oral Reading Fluency. As shown in Table 5, it was observed that English Letter Naming Fluency performance at one-minute was moderately significant and had weak positive correlations with

the performance on the other early literacy skills measures, with correlation coefficients ranging from *r* = .*35* to *r* = .*45* and $r = .1$ to $r = .3$ respectively. The Ewe Oral Reading Fluency performance had a non-significant weak correlation with both the English and Ewe measures at one-minute. Most of the Pearson's correlation coefficients are statistically significant. Pearson's correlation coefficients are reported on Table 5.

Table 1*: Correlation matrix on the English and Ewe tasks at one-minute*

Measure	1	2	3	4	5	6	7	8
1. Eng- LNF	1.00							
2.Eng- PSF	0.505**	1.00						
3.Eng-WRF	0.349*	0.520**	1.00					
4.Eng-ORF	0.405**	0.381*	0.664**	1.00				
5.Ewe-LNF	0.373*	0.294	0.305*	0.297	1.00			
6.Ewe-PSF	0.353*	0.623**	0.254	0.427**	0.423**	1.00		
7.Ewe-WRF	0.231	0.450**	0.583**	0.525**	0.291	0.33*	1.00	
8.Ewe-ORF	0.051	-0.008	0.173	0.153	0.210	-0.023	0.349*	1.00

**p < 0.05 **p < 0.01.*

Note: LNF = Letter-Name Fluency; PSF = Phonemic Segmentation Fluency; WRF = Word Reading Fluency; ORF = Oral Reading Fluency.

Next, the correlation matrix for the English and Ewe tasks at overall minutes was presented. Most of the correlation coefficients were statistically significant, weakly, or moderately positive except for the correlation between Ewe WRF and

English LNF that had a negative coefficient. However, such negative correlation was almost nil. From the correlation matrix, there was no correlation coefficient greater than 0.8. This is an indication that there might not be any issues with multicollinearity. The results of the correlation analysis are illustrated in Table 6.

Table 6*: Correlation matrix for English and Ewe task overall*

Measure	1	2	3	4	5	6
1.LNF- Eng	1.00					
2.PSF- Eng	0.508**	1.00				
3.WRF- Eng	0.315*	0.487**	1.00			
4.LNF- Ewe	0.082	0.247	0.142	1.00		
5.PSF- Ewe	0.416**	0.638**	0.215	0.490**	1.00	
6.WRF-Ewe	-0.005	0.128	0.260	0.464**	0.358*	1.00

**p < 0.05 **p < 0.01.*

Regression Analyses

Finally, analyses were conducted to determine which early literacy measures were most predictive of oral reading in English and in Ewe. Two Hierarchical regression analyses were run with PSF entered at Step 1, followed by LNF and WRF at Step 2 and 3, respectively for the English and Ewe measures. In the first step, English PSF explained approximately 15% of the variance in English Oral Reading Fluency *(R^2 change = .146*) with $\Delta \mathrm{F}(1,40) = 6.812, \mathrm{p} < 0.05$, which was statistically significant. LNF explained an additional 6% of the variance in English oral reading fluency (*R^2 change = .061)* after the variance explained by PSF. This change in R^2 was not statistically significant with

$\Delta F(1,39) = 2.989, p > 0.05$. When WRF was introduced in the model, it improved the model by accounting for an additional 27% of the variance in English Oral Reading Fluency (R^2 change = .270). This was statistically significant with $\Delta F(1,38) = 19.627, p < 0.05$. Also, the beta coefficients in Table 7 revealed the correlation between the predictors and the dependent variable. Thus, with all variables in the model, English WRF predicted English Oral Reading Fluency at one-minute. These analyses are summarized in Table 7.

Table 7: *Summary of the multiple regression analysis for the English early literacy skills measures at one-minute*

Step	**Predicators**	$\boldsymbol{\Delta R^2}$	$\boldsymbol{\Delta F}$	$\boldsymbol{\beta}$
1	English PSF at 1 Min	0.146**	6.812**	0.381*
2	English PSF at 1 Min			0.237
	English LNF at 1 Min	0.061**	2.989**	0.286
3	English PSF at 1 Min			-0.046
	English LNF at 1 Min			0.214
	English WRF at 1 Min	0.270**	19.627**	0.613**

**p < 0.05 **p < 0.01.*

An additional Hierarchical regression analysis examined predictors of oral reading fluency based on overall time to complete the tasks. As shown in Table 8 analysis for the overall time focused first on English PSF, which significantly explained about 18% of the variance in English Oral Reading Fluency with $(\Delta F(1,40) = 8.697, p < 0.05)$. Subsequently, LNF was examined, showing an additional 7% of explained variance in English oral reading fluency ($R^2\ change$

=.071) beyond PSF. Still, this increase was not statistically significant with $(\Delta \mathrm{F}(1,39) = 3.712, \mathrm{p} > 0.05)$. Following this, WRF accounted for a significant increase in the explained variance ($R^2\ change$ = *.319),* adding about 32% beyond PSF and LNF. The correlation values (β) in Table 8 indicate the relationship between predictors and the dependent variable. Specifically, English WRF exhibited a moderate correlation with English Oral Reading Fluency. Whereas the other early literacy skills measures demonstrated weak correlations with English oral reading fluency.

Table 8*: Summary of the multiple regression analysis for the English early literacy skills measures at overall minutes*

Step	**Predictors**	$\boldsymbol{\Delta R^2}$	$\boldsymbol{\Delta F}$	$\boldsymbol{\beta}$
1	English PSF at overall	0.179**	8.697**	0.423**
2	English PSF at overall			0.265
	English LNF at overall	0.071	3.712	0.310
3	English PSF at overall			-0.021
	English LNF at overall			0.251
	English WRF at overall	0.319**	28.169**	0.649**

***p < 0.01.*

As shown in Table 9, Ewe PSF was not statistically significant $(\Delta F(1,40) = 0.022, p > 0.05)$. It explained only 0.1% of the variance in Ewe Oral Reading Fluency which was entered first. Subsequently, Letter Naming Fluency was examined, showing an additional 5.9% of the explained variance in Ewe Oral Reading Fluency ($R^2\ change$ = 0.059) beyond PSF. Still, this increase was not

statistically significant with $\Delta F(1,39) = 2.434, p > 0.05$. Next, Word Reading Fluency (WRF) accounted for a significant increase ($\Delta F(1,38) = 5.404, p < 0.05$) in the explained variance ($R^2\ change$ = 0.117), adding about 12% beyond PSF and LNF. The regression coefficients (β) in Table 9 indicate the relationship between predictors and the dependent variable.

Table 9*: Summary of the multiple regression analysis on the Ewe early literacy skills measures at one-minute*

Step	**Predictors**	ΔR^2	ΔF	β
1	Ewe PSF at 1 Min	0.001	0.022	-0.023
2	Ewe PSF at 1 Min			-0.137
	Ewe LNF at 1 Min	0.059	2.434	0.267
3	Ewe PSF at 1 Min			-0.232
	Ewe LNF at 1 Min			0.200
	Ewe WRF at 1 Min	0.117*	5.404*	0.369*

**p < 0.05.*

As shown in Table 10 Ewe PSF accounted for 0.1% of the variance in Ewe Oral Reading Fluency, a statistically nonsignificant finding, ($\Delta F(1,40) = 0.054, p > 0.05$). The introduction of LNF resulted in an additional 3.9% of explained variance in the Ewe oral reading fluency ($R^2\ change$ = .039), which was also not statistically significant, ($\Delta F(1,39) = 1.592, p > 0.05$). However, the inclusion of WRF contributed significantly, explaining an additional 39% of the variance in the Ewe Oral Reading Fluency ($R^2\ change$ = .387), and leading to a significant improvement in the model. Furthermore, the regression coefficients (β) in Table

10 demonstrate that Ewe WRF predicted more of Ewe ORF at overall minutes of task.

Table 10*: Summary of the multiple regression analysis for the Ewe early literacy skills measures at overall minutes*

Step	**Predictors**	ΔR^2	ΔF	β
1	Ewe PSF at overall	0.001	0.054	-0.037
2	Ewe PSF at overall			-0.148
	Ewe LNF at overall	0.039	1.592	0.227
3	Ewe PSF at overall			-0.270
	Ewe LNF at overall			-0.044
	Ewe WRF at overall	0.387**	25.711**	0.713**

***p < .01.*

Predictors of Ewe Early Literacy Skills Measures on English ORF Accuracy

This is a supplementary analysis conducted to determine the influence of first language early literacy on second language reading. Specifically, the analysis was run to examine “cross-linguistic” transfer (Emerson et al., 2021; Durgunoğlu, A.Y., 2002) of Ewe early literacy to English (L2) outcome-English ORF at one-minute and at overall minutes of tasks. In this analysis, Ewe PSF, Ewe LNF, and Ewe WRF were respectively entered in the models to predict English ORF.

Table 11 presents the predictors of Ewe early literacy skills measures on English ORF to examine cross-linguistic transfer of Ewe early literacy to English at one-minute of task. In the first model, Ewe PSF accounted for approximately 18% of the variance in English Oral Reading Fluency, and this was statistically

significant, $(\Delta F(1,40) = 8.925, p < 0.01)$. With the introduction of LNF in the model, only 1.6% of the explained variance in the English oral reading fluency beyond Ewe PSF was accounted for ($R^2\ change$ = .0016). This was not statistically significant, $(\Delta F(1,39) = 0.798, p > 0.05)$. Subsequently, the inclusion of Ewe WRF contributed approximately 15% of the variance in the English Oral Reading Fluency after Ewe PSF and LNF ($R^2\ change$ = .151). This led to a significant improvement in the model from model 2. Moreover, the regression coefficients (β) in Table 11 demonstrate that Ewe PSF, and Ewe WRF were significant predictors of English ORF at one-minute of task.

Table 11*: Summary of the multiple regression analysis for the Ewe early literacy skills measures on English ORF at one-minute*

Step	**Predictors**	$\boldsymbol{\Delta R^2}$	$\boldsymbol{\Delta F}$	$\boldsymbol{\beta}$
1	Ewe PSF at 1 Min	0.182**	8.925**	0.427**
2	Ewe PSF at 1 Min			0.367*
	Ewe LNF at 1 Min	0.016	0.798	0.141
3	Ewe PSF at 1 Min			0.259
	Ewe LNF at 1 Min			0.065
	Ewe WRF at 1 Min	0.151**	8.830**	0.419**

**p < 0.05 **p < 0.01*

As shown in Table 12, Ewe PSF accounted for approximately 18% of the variance in English Oral Reading Fluency, and this was statistically significant, $(\Delta F(1,40) = 8.917, p < 0.01)$. Subsequently, the introduction of LNF in the model resulted in decrease of 1.7% of the explained variance in the English oral reading fluency

beyond Ewe PSF ($R^2\ change$ = .0017), which was also not statistically significant, ($\Delta F(1,39) = 0.824, p > 0.05$). Additionally, the inclusion of Ewe WRF contributed approximately 13% of the variance in the English Oral Reading Fluency after Ewe PSF and LNF ($R^2\ change$ = .129). This led to a significant improvement in the model from the second model. Moreover, the regression coefficients (β) in table 12 demonstrate that Ewe PSF, and Ewe WRF are significant predictors of English ORF at an overall- minute of task.

Table 12: *Summary of the multiple regression analysis for the Ewe early literacy skills measures on English ORF at overall minutes*

Step	**Predictors**	ΔR^2	ΔF	β
1	Ewe PSF at overall	0.182**	8.917**	0.427**
2	Ewe PSF at overall			0.354*
	Ewe LNF at overall	0.017	0.824	0.149
3	Ewe PSF at overall			0.283
	Ewe LNF at overall			-0.007
	Ewe WRF at overall	0.129*	7.285*	0.411*

**p < 0.05 **p < 0.01*

Discussion

The primary goal of the present study was to assess the reading outcomes of learners in both English and Ewe languages using an adapted version and the original well-used assessment tool, DIBELS. This study used Ehri's (1998) learning development phases to read as a theoretical framework. Four research questions (RQ) were investigated:

1. What are the differences in the performances of children in English and Ewe measures?
2. What is the correlation between English and Ewe measures and with Ewe and English reading?
3. How does each measure in English predict English reading in Ewe native speaking children?
4. How does each measure in Ewe predict Ewe reading in the same children?

RQ 1: Differences in the Performances of Children in English and Ewe Measures

At the 1-minute mark, it was observed that the children demonstrated significantly higher performance in English Letter Naming Fluency (LNF) compared to Ewe LNF, indicating a potential advantage or familiarity with English alphabets despite their native language being Ewe. It could also suggest that children may have certain advantages or preferences when it comes to early English literacy tasks, potentially influenced by their exposure to English through various contexts such as schooling or media. This aligns with previous research indicating that the cognitive skills developed in one language can positively transfer to another, particularly in related languages (Bialystok, 2001). However, this advantage was not observed in Phonemic Segmentation Fluency (PSF) or Word Reading Fluency (WRF), indicating no potential differences in the cognitive processes involved in these tasks or the linguistic features of the languages themselves. It may also suggest comparable abilities in phoneme segmentation

across both languages, or similar proficiency levels in reading words in both languages

Interestingly, when examining overall task completion times, the children's score was still higher in English LNF than in Ewe LNF, suggesting sustained proficiency or comfort with this particular skill over a longer duration. Additionally, the lack of significant differences in PSF and WRF between languages over the overall task duration highlights the complexity of bilingual literacy development and the need for nuanced analyses considering various factors such as language proficiency, literacy instruction, and socio-cultural influences (Grosjean, 2010).

Notably, when considering Oral Reading Fluency Accuracy (ORFA), the children demonstrated significantly higher accuracy in their native language compared to English. This suggests that while proficiency in certain aspects of English literacy may be comparable to Ewe, there are distinct advantages in oral reading accuracy for Ewe, possibly due to greater familiarity and immersion in the Ewe language environment. The results underscore the complex interplay between language proficiency, cultural context, and educational outcomes among bilingual learners (Cummins, 1979; Jang & Brutt-Griffler, 2019; Matthews & López, 2019).

RQ 2: Correlation between English and Ewe Measures and with Ewe and English Reading

The correlation analyses conducted in this study shed light on the interrelationships between various measures of fluency in both English and Ewe languages, providing valuable insights into language proficiency and its

assessment. The findings suggest that while there are some associations between different fluency measures, these relationships vary in strength and significance across languages and tasks. Firstly, the moderate significance observed in the correlation between English Letter Naming Fluency (LNF) performance at one-minute and other early literacy measures indicate a degree of shared variance between these constructs. This finding aligns with previous research highlighting the interconnectedness of different components of reading fluency (Savage & Frederickson, 2006).

Moreover, the non-significant weak correlation between Ewe Oral Reading Fluency (ORF) and both English and Ewe measures at one-minute suggests potential differences in the fluency demands and skills required across languages. This underscores the importance of considering language-specific factors when assessing reading fluency in bilingual contexts (Gottardo et al., 2019). The study observed that Ewe Oral Reading Fluency (EORF) performance did not show significant correlations with either English or Ewe measures at one-minute. This suggests that for this study, fluency in one language may not necessarily translate to fluency in another language even if they are related languages such as is the case of English and Ewe in this study. This result is consistent with previous studies that have shown limited transfer of fluency skills between languages, especially if the languages differ significantly in structure and phonology (García, 2016). Such findings highlight the importance of considering language diversity in literacy assessment and intervention strategies (Geva & Zadeh, 2006).

Furthermore, the correlation matrix for English and Ewe tasks at overall minutes revealed mostly statistically significant weak to moderate positive correlations, indicating consistent associations between fluency measures across languages. Overall, these results suggest that while there are some shared underlying skills across languages, there are also unique linguistic and contextual factors influencing fluency development in each language (Proctor et al., 2005). This finding underscores the importance of considering language-specific factors when assessing fluency in bilingual or multilingual populations (Bialystok, 2011).

RQ 3: English Measures as Predictors of English Reading in Ewe Native Children

The hierarchical regression analyses conducted in this study aimed to explore the predictive utility of various cognitive-linguistic skills on English Oral Reading Fluency (ORF) within a sample of participants, specifically examining the impact of Phonological Awareness (PSF), Letter Naming Fluency (LNF), and Word Reading Fluency (WRF) in both English and Ewe languages. The findings, as presented in Tables 5 and 6, provide valuable insights into the relative contributions of these predictors to the variance in English ORF scores.

Initially, when considering the 1-minute assessment of English ORF, the results revealed that English PSF accounted for a statistically significant proportion of the variance in ORF, explaining approximately 15% of the variance. This finding aligns with previous literature highlighting the foundational role of phonological awareness in early literacy development (Ehri, 2005; Cain & Oakhill, 2014). However, the subsequent addition of LNF at Step 2 did not yield a

statistically significant increase in explained variance, indicating a minimal incremental contribution of letter naming fluency beyond phonological awareness. This result may suggest that while letter naming fluency is important, its predictive power may be somewhat redundant when considered alongside phonological awareness in the context of early reading skills (Schatschneider et al., 2004). Interestingly, the introduction of WRF at Step 3 led to a substantial increase in explained variance, with WRF accounting for an additional 27% of the variance beyond PSF and LNF. This significant improvement in the model underscores the critical role of word reading fluency in predicting English ORF, emphasizing the importance of automatic and accurate word recognition in proficient reading (Fuchs et al., 2001). Stated differently, the present study revealed that word reading fluency contributed more to students' oral reading fluency accuracy than did letter naming and phonemic segmentation fluency. This supports previous findings that word-level reading skills are the strongest predictor of reading comprehension in the early elementary school years (Garcia & Cain, 2014). In a recent study, Padua (2018), found that word-level reading emerged as a significant predictor of reading comprehension among grade 3 students.

Moving to the analysis of overall minutes spent on the tasks, similar patterns emerged, with English PSF demonstrating a significant association with English ORF. Again, LNF showed a marginal increase in explained variance, which was not statistically significant, suggesting limited additional predictive power beyond phonological awareness. However, the introduction of WRF led to a substantial and statistically significant increase in explained variance, indicating

its pivotal role in predicting English ORF across extended task durations. These findings have important implications for literacy instruction, highlighting the need to prioritize the development of word reading fluency alongside phonological awareness and letter naming fluency to foster proficient reading skills in young learners (Fuchs et al., 2001).

RQ 4: Ewe Measures as Predictors of Ewe Reading in Ewe Native Children

The findings from the assessment of early literacy skills measures in the context of the Ewe language provide valuable insights into the factors influencing Ewe oral reading fluency. Table 8 delineates the stepwise analysis of early literacy skills measures at a one-minute interval, showcasing the incremental contribution of different predictors to the variance in Ewe oral reading fluency. Initially, Ewe Phonemic Segmentation Fluency (PSF) was found to be statistically nonsignificant, accounting for a negligible 0.1% of the variance in Ewe Oral Reading Fluency. This result suggests that phonemic segmentation fluency alone may not significantly predict oral reading fluency in the Ewe language, aligning with previous research highlighting the multifaceted nature of reading acquisition and fluency (Perfetti, 2007).

However, the subsequent inclusion of Letter Naming Fluency (LNF) revealed a slight, but non-significant increase in explained variance (5.9%), indicating a modest contribution beyond phonemic segmentation fluency (PSF). This finding underscores the importance of considering multiple factors, such as phonological awareness and letter recognition, in understanding reading fluency development (Share, 1995). While the increase in explained variance was not

statistically significant, it hints at the additive nature of various reading-related skills in shaping oral reading fluency.

The most notable result emerged with the introduction of Word Reading Fluency (WRF), which led to a significant increase in explained variance in Ewe Oral Reading Fluency. Word Reading Fluency (WRF) explained an additional 12% of the variance beyond PSF and LNF, signifying its crucial role in predicting oral reading fluency in Ewe language. This finding aligns with the theoretical framework of the Simple View of Reading (Gough & Tunmer, 1986), which posits that reading comprehension is the product of decoding and linguistic comprehension skills. In the context of Ewe oral reading fluency, proficient word reading appears to be a pivotal component contributing to overall reading proficiency.

Transitioning to Table 10, which presents early literacy skills measures at the overall minutes mark, a similar pattern of results emerges. Ewe PSF exhibited minimal predictive power, consistent with the findings in Table 9. The subsequent inclusion of LNF resulted in a slight increase in explained variance, albeit statistically nonsignificant, mirroring the earlier findings. This finding underscores the incremental nature of skill development in reading fluency, with each additional component contributing to the overall predictive capacity of the model (Francis et al., 2008).

However, the most striking finding in Table 10 pertains to the inclusion of WRF, which substantially enhanced the predictive utility of the model. Word Reading Fluency (WRF) explained an additional 39% of the variance in Ewe Oral

Reading Fluency, marking a significant improvement over the previous models. This result underscores the pivotal role of word-level reading skills in facilitating fluent oral reading in the Ewe language context. Moreover, it highlights the importance of assessing and fostering word-level reading proficiency as a foundational element in reading instruction (National Reading Panel, 2000).

Overall, these findings suggest that while Ewe PSF and LNF have limited predictive power for Ewe Oral Reading Fluency (ORF), word reading fluency (WRF) plays a crucial role in determining proficiency in oral reading. These results align with previous research emphasizing the significance of word-level skills in overall reading ability (Ehri, 2005; Padua, 2018). These findings have implications for literacy instruction, emphasizing the importance of targeting word-level reading skills to enhance oral reading fluency and overall reading proficiency in the Ewe language context. Further research, particularly of a longitudinal nature is needed to explore additional factors influencing reading fluency and to validate the predictive utility of the identified predictors.

Implications for Practice and Directions for Future Research

Children who experience reading difficulties during the foundational school years are at higher risk for poor academic achievement (Garcia & Cain, 2014, in Padua, 2018). As a result, early assessment is very crucial to identify risk and to help plan interventions to mitigate it (Paris, Paris & Carpenter, 2001). The current study assessed the reading outcomes of learners in both English and Ewe with an adapted version DIBELS and the original version of the well-used assessment tool using Ehri's (1998) model of Phases of Learning to Read as a theoretical

framework. The results of this study have implications pointing to the important role of word-level reading skills, such as word recognition and word decoding, to reading in the early school years (Garcia & Cain, 2014 in Padua, 2018). The findings inform further rigorous assessment of early literacy skills and planning of appropriate interventions to help children in their learning to read.

One long-term goal of this study is to use the assessment results to develop interventions that will aid Ghanaian learners to become proficient readers. Further research is needed to plan appropriate interventions or support for the current group of children who participated in this study, as well as any child or group of school children who have exhibited any form of deficit in the early literacy skills assessed in this study to help improve their reading. Further, research suggests that support in multiple interventions is more effective than just one intervention (Edwards et al., 2008). For example, Foorman, Chen, Carlson, Moats, Francis and Fletcher (2003) established that Kindergarten children receiving support in both the Alphabetic Principle and Phonological Awareness increased their reading skills more than those receiving only phonological or alphabetic knowledge. Thus, more rigorous research in multiple assessments and interventions is recommended.

Another goal of the researcher is that the adapted instrument, when validated, will serve as a tool for assessing at-risk learners in the Ewe language. In pursuance of this goal, further research is needed to confirm the validity and reliability of the adapted tool to be used for this purpose. This study also

contributes to the limited body of research involving the use of literacy screening tools in the Ghanaian context.

Finally, additional research focused on this topic will add to the extant literature on the relevance and importance of assessment using standardized instruments in the Ghanaian school system and identifying learners who are struggling and need support.

Limitations

A major limitation of this study is the sample size used (n=42). The small sample size of the study limits its statistical power to detect significance. A larger sample size would have allowed for increased power in the data analyses. Unfortunately, the time and resources available to the researcher prevented the use of a larger sample size. Further, there are only two Ewe-speaking community schools in Cape Coast, with a generally low population. This makes it challenging to obtain a larger sample size in this setting. As a tool being tested for validity and standardization, more participants should have been involved.

The schools that participated in the present study are located in a region where another Ghanaian Language (i.e., Fante) is the primary linguistic code of the people. The researcher believes conducting the study in the central Ewe-speaking region may have included more participants as well as resulted in a more robust performance.

The age of some of the children may have influenced their performance. The age for a learner in grade one in Ghana is six years. A closer look at the demographics of the participants indicates that many were older than six years.

As many as 14 out of 42 participants were seven years old, and one was nine at the time the data was collected. Implying that all those above six years are either repeating the class or have yet to start school early. This age differences could gravely affect the performance and, for that matter, the study's results.

Another area for concern is that the DIBELS tool was new to the children. Most of the items used in the English measure for example, especially on the ORF, are words and concepts that are new and foreign to the children. Most of the participants likely hesitated to pronounce the words because these words were outside the collection of their known sight words that have been built over a period of time and thus used more time to complete the tasks.

Conclusion

Learning to read is critical from Kindergarten to grade three. It underpins future academic success. Beyond grade three students shift from learning to read to reading to learn. In Ghana, literacy rates are low, with only 21% of children aged 7-14 able to read. Evaluating early literacy skills is crucial. Yet Ghana lacks standardized tools for assessing foundational reading skills in Ghanaian languages. This study adapted the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) to assess reading abilities in Ewe and English among young learners in Cape Coast, aiming to validate this tool for future educational interventions. A correlational research design was employed with 42 children from two Ewe speaking community schools completing early literacy measures in both English and Ewe. Paired samples t-tests indicated that the children performed better in English Letter Naming Fluency (LNF) than Ewe LNF at one-minute and

overall intervals, with no significant differences in Phoneme Segmentation Fluency (PSF) or Word Reading Fluency (WRF) for either language. Ewe Oral Reading Fluency (ORF) accuracy was higher than English ORF accuracy. Correlation matrices showed varied associations between fluency measures across languages and tasks. English PSF explained 15% of English ORF variance, while WRF added 27%. Ewe PSF and LNF did not significantly explain Ewe ORF variance. However, Ewe WRF explained 12% at one minute and 39% overall. A replication of this study is recommended to determine the validity of the adapted tool for use in educational settings in Ghana.

References

Abdul, R. E. (2014). *A synchronic sociolinguistic analysis of personal names among Ewes.* Master's thesis, University of Ghana, Legon. http://ugspace.ug.edu.gh

Agbadah, A. K. (2018). *Compounding in Ewe*. Master's thesis, University of Ghana, Legon. http://ugspace.ug.edu.gh.

Alexander, J. & Salza, L. (2019). *Great debate: What is the role of AT for Students with dyslexia?* International Dyslexia Association. Retrieved from: https://dyslexiaida.org/great-debate-what-is-the-role-of-at-for-students-with-dyslexia

Amoako, W. K. (2020). *Assessing phonological development among Akan-speaking children*. Master's thesis, University of British Columbia, Vancouver.

Atintono, S. A. &. E. A. Nsoh (2018). Inconsistent language policy and its implications for the quality of education in Ghana. In A. B. Veld & J. Janscn (Eds.), *Education in Africa* (pp. 82-99). Leiden African Studies Centre.

Bell, S. & McCallum, R. (2008). *Handbook of reading assessment.* Pearson Education Inc.

Bialystok, E. (2001). *Bilingualism in development: Language, literacy, and cognition*. Cambridge University Press.

Bialystok, E. (2011). Reshaping the mind: The benefits of bilingualism. *Canadian Journal of Experimental Psychology,* 65(4), 229-235.

Cain, K. & Oakhill, J. (2014). Reading comprehension development from 8 to 14 years: The contribution of component skills and processes. In D. Braze, C. J. Fergusson, & K. Rayner (Eds.), *The Science of Reading: A Handbook* (pp. 213-226). Wiley-Blackwell.

Coleman, M., Buysse, V., & Neitzel, J. (2006). Recognition and response: An early intervening system for young children at-risk for learning disabilities. Full report. Chapel Hill: The University of North Carolina at Chapel Hill, FPG Child Development Institute.

Cummins, J. (1979). Cognitive/academic language proficiency, linguistic interdependence, the optimum age question and some other matters. *Working Papers on Bilingualism*, (19), 197-205.Deno, S. L. (1985). Curriculum-based measurement: The emerging alternative. *Exceptional Children, 52*, 219–232.

Deno, S. L., Mirkin, P. K. & Chiang, B. (1982). Identifying valid measures of reading. *Exceptional Children, 49*(1), 36–45.

Doering, L. (2011). *An analysis of the dynamic indicators of basic early literacy skills (DIBELS) assessment*. Master's thesis, University of Northern Iowa.

Durgunoğlu, A.Y. (2002). Cross-linguistic transfer in literacy development and implications for language learners. Annals of Dyslexia 52, 189–204. https://doi.org/10.1007/s11881-002-0012-y

Edwards, P.A., Turner, J. D. & Mokhtari, K. (2008). Balancing the assessment of learning and for learning in support of student literacy achievement. *The Reading Teacher*,*61*(8), 682-684. DOI: 10.1598/RT.61.8.12.

Ehri, L. C. (2005). Development of sight word reading: Phases and findings. In M. J. Snowling & C. Hulme (Eds.), *The science of reading: A handbook* (pp. 135–154). Blackwell Publishing Ltd.

Ehri, L.C. (1998). Grapheme-phoneme knowledge is essential for learning to read words in English. In J. Metsala & L. Ehri (Eds.), *Word Recognition in beginning literacy* (pp. 3-40). Lawrence Erlbaum Associates Publishers.

Emerson, Limia, and Özçalışkan (2021). Cross-linguistic transfer in Turkish–English bilinguals' descriptions of motion events. *Lingua, 264*, 0024-3841. https://doi.org/10.1016/j.lingua.2021.103153

Fletcher, J. K. & Vaughn, S. (2009). Response to intervention: Preventing and remediating academic difficulties. *Child Development Perspectives, 3*, 30-37.

Foorman, B. R., Chen, D., Carlson, C., Moats, L., Francis, D. J. & Fletcher, J. M. (2003). The necessity of the alphabetic principle to phonemic instruction. *Reading and Writing: An Interdisciplinary Journal, 16* (4) 289-324.

Francis, D. J., Shaywitz, S. E., Stuebing, K. K., Shaywitz, B. A. & Fletcher, J. M. (2008). Developmental lag versus deficit models of reading disability: A longitudinal, individual growth curves analysis. *Journal of Educational Psychology*, 100(2), 104–112.

Fuchs, L. S., Fuchs, D., Hosp, M. K. & Jenkins, J. R. (2001). Oral reading fluency as an indicator of reading competence: A theoretical, empirical, and historical analysis. *Scientific Studies of Reading*, 5(3), 239–256.

Gall, M. D., Gall, J. P. & Borg, W. R. (2015). *Applying educational research: How to read, do, and use research to solve problems of practice.* Pearson.

García, O. (2016). Multilingualism and fluency transfer in bilinguals. *Bilingualism: Language and Cognition*, 19(2), 251-252.

Gavua, K. (Ed.) (1990). *A handbook of Eweland. Vol. III. The northern Ewes*. Woeli Publishing Services.

Geva, E. & Zadeh, Z. Y. (2006). Reading efficiency in native English-speaking and English-as-a-second-language children: The role of oral proficiency and underlying cognitive-linguistic processes. *Scientific Studies of Reading*, 10(1), 31-57.

Glover, T. & Albers, A. (2007). Considerations for evaluating universal screening assessments. *Journal of School Psychology, 45,* 117-1 35.

Good, R. H. & Kaminski, R. A. (2002). *Dynamic indicators of basic early literacy skills* (6th ed.). Institute for the Development of Educational Achievement.

Gottardo, A., Yan, B., Siegel, L. S. & Wade-Woolley, L. (2019). Bilingualism and reading. In *The Oxford Handbook of Reading* (pp. 407-424). Oxford University Press.

Gough, P. B. & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education*, 7(1), 6–10.

Grosjean, F. (2010). *Bilingual: Life and reality*. Harvard University Press.

Hamilton, S. (2017, September,26). Theories and models of reading. *The classroom*. Retrieved from https://www.theclassroom.com/theories-models-reading-16845.html.

Helman, L. A. (2005). Using literacy assessment results to improve teaching for English-language learners. *The Reading Teacher, 58*(7), 668-677. DOI: 10.1598/ RT.58.7.7

Hodgins, H. & Harrison, G. L. (2021). Improving phonological awareness with Talking Tables in at-risk Kindergarten readers. *Research in Developmental Disability, 115*,103996. DOI: 10.1016/j.ridd.2021.103996.

Hodgins, H. (2014). *The efficacy of the talking tables program in the development of phonological awareness in Kindergarten children at risk for reading difficulties*. Master's thesis, University of Victoria.

Hoffman, A. Jenkins, J. & Dunlap, S. (2009). Using DIBELS: A survey of purposes and practices. *Reading Psychology, 30*(1)*,* 1-16.

Hoffman, J. V. (2012). Why EGRA-a clone of DIBELS will fail to improve literacy in Africa. *Research in the Teaching of English, 46*(4), 340-357.

Hosp, M. K., Hosp, J. L., & Howell, K. W. (2007). The ABCs of CBM: A practical guide to curriculum-based measurement. (pp. 1–172).

Hulme, C. (2002). Phonemes, rimes, and the mechanisms of early reading development. *Journal of Experimental Child Psychology, 82*(1), 58-64.

Jang, E. & Brutt-Griffler, J. (2019). Language as a bridge to higher education: A large-scale empirical study of heritage language proficiency on language minority students' academic success. *Journal of Multilingual and Multicultural Development*, *40*(4), 322-337.

Keller-Margulis, M.A., Payan, A. & Booth, C. (2012). Reading curriculum-based measures in Spanish: An examination of validity and diagnostic accuracy. *Hammill Institute on Disabilities, 3*7(4) 212-223. DOI: 10.1177/1534508411435721.

Korsi-Agodzo, C. A. S. (2015). *An acoustic analysis of Ewe nasal consonant sounds*. Master's thesis, University of Education, Winneba. http://ir.uew.edu.gh.

Kuhn, M., Schwanenflugel, P. &Meisinger, E. (2010). Aligning theory and assessment of reading fluency: Automaticity, prosody, and definitions of fluency. *Reading Research Quarterly, 45* (2), 230-252.

Li, X. & Zhang, M. (2008). Reconciling DIBELS and OSELA: What every childhood educator should know. *Journal of Research in Childhood Education, 23* (1), 41-52.

Mader, J. (2021). *Early education: The Hechinger report.* Covering Innovation & Inequality in Education. https://hechingerreport.org

Martins, M. A. & Capellini, S. A. (2021). Identification of struggling readers or at risk of reading difficulties with one-minute fluency measures. *Psicologia: Reflexãoe Crítica, 34*(10) 1-9

Mascolo, J. T., Alfonso, V. C. & Flanagan, D. P. (2014). *Essentials of planning, selecting, and tailoring interventions for unique learners*. John Wiley & Sons.

Matthews, J. S. & López, F. (2019). Speaking their language: The role of cultural content integration and heritage language for academic achievement among Latino children. *Contemporary Educational Psychology*, *57*, 72-86.

McKenna, M. C. & Stahl, S. A. (2003). *Assessment for reading instruction*. New York: Guilford Press.

Menn, L. & Dronkers, N. F. (2017). *Psycholinguistics: Introduction and applications* (2nd ed.). Plural Publishing Inc.

Naafan, K. J. (2018). *Developing reading strategies to improve upon reading culture among upper primary pupils of Malshegu Kidz Active Foundation School in Tamale, Northern Region, Ghana* (Doctoral dissertation), University for Development Studies.

National Institute of Child Health and Human Development (NICHD). (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the sub-groups (NIH publication No. 00-4754)*. U.S. Government Printing Office.

National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups*. National Institute of Child Health and Human Development.

Nel, C. (2015). 'Catch them before they fall: A focus on a school-wide reading assessment and support model', *LSSA/SAALA/SAALT joint annual conference*, Potchefstroom.

Neuman, S. B., Copple, C. & Bredekamp, S. (2000). *Learning to read and write: Developmentally appropriate practices for young children.* National Association for the Education of Young Children.

Owu-Ewie, C. (2006). The language policy of education in Ghana: A critical look at the English-only language policy of education. In *Selected proceedings of the 35th annual conference on African linguistics* (pp. 76-85). Cascarilla Proceedings Project.

Paris, S. G., Paris, A. H. & Carpenter, R. D. (2001). *Effective practices for assessing young readers*. Center for the Improvement of Early Reading Achievement.

Perfetti, C. A. (2007). Reading ability: Lexical quality to comprehension. *Scientific Studies of Reading*, 11(4), 357–383.

Pool, J. & Johnson, E. (n.d.). Screening for reading problems in preschool and Kindergarten: An overview of select measures. http://www.rtinetwork.org/essential/assessment/ screening/screening-for-readingproblems-in-preschool-and-kindergarten

Proctor, C. P., Carlo, M., August, D. & Snow, C. (2005). Native Spanish-speaking children reading in English: Toward a model of comprehension. *Journal of Educational Psychology*, 97(2), 246–256.

Rakhlin, N. V., Mourgues, C., Cardoso-Martins, C., Kornev, A. N. & Grigorenko, E. L. (2019). Orthographic processing is a key predictor of reading fluency in good and poor readers in a transparent orthography. *Contemporary Educational Psychology*, *56*, 250–261. https://doi.org/10.1016/j.cedpsych.2018.12.002

Rouse, H. & Fantuzzo, J. (2006). Validity of the dynamic indicators for basic early literacy skills as an indicator of early literacy for urban Kindergarten children. *School Psychology Review, 35*(3), 341-355.

Samuels, S. (2007). The DIBELS tests: Is speed of barking at print what we mean by reading fluency? *Reading Research Quarterly, 42(4),* 563-566.

Savage, R. & Frederickson, N. (2006). Beyond phonological skills: broader language skills contribute to the development of reading. *Journal of Research in Reading*, 29(4), 425-437.

Schatschneider, C., Fletcher, J. M., Francis, D. J., Carlson, C. D. & Foorman, B. R. (2004). Kindergarten prediction of reading skills: A longitudinal comparative analysis. *Journal of Educational Psychology*, 96(2), 265–282.

Seddoh, P. A. (2013). *Factors affecting the academic performance of students of Dzolo Senior High School in the Volta Region of Ghana*. Master's thesis, University of Cape Coast.

Shapiro, E. S. (2011). *Academic skills problems: Direct assessment and intervention* (4th ed.). Guilford.

Share, D. L. (1995). Phonological recoding and self-teaching: Sine qua non of reading acquisition. *Cognition*, 55(2), 151–218.

Texas Education Agency. (2010). TAKS resources. Retrieved from Texas Education Agency: http://www.tea.state.tx.us/student.assessment/taks/

UNESCO (2008). *Mother Tongue matters. Local language as a key to effective learning*. UNESCO.

University of Oregon (2018-2020). 8th Edition of dynamic indicators of basic early literacy skills (DIBELS): Technical manual. University of Oregon. https://dibels.uoregon.edu

University of Oregon Center on Teaching and Learning (n.d.) Frequently asked questions. https://dibels.uoregon.edu/

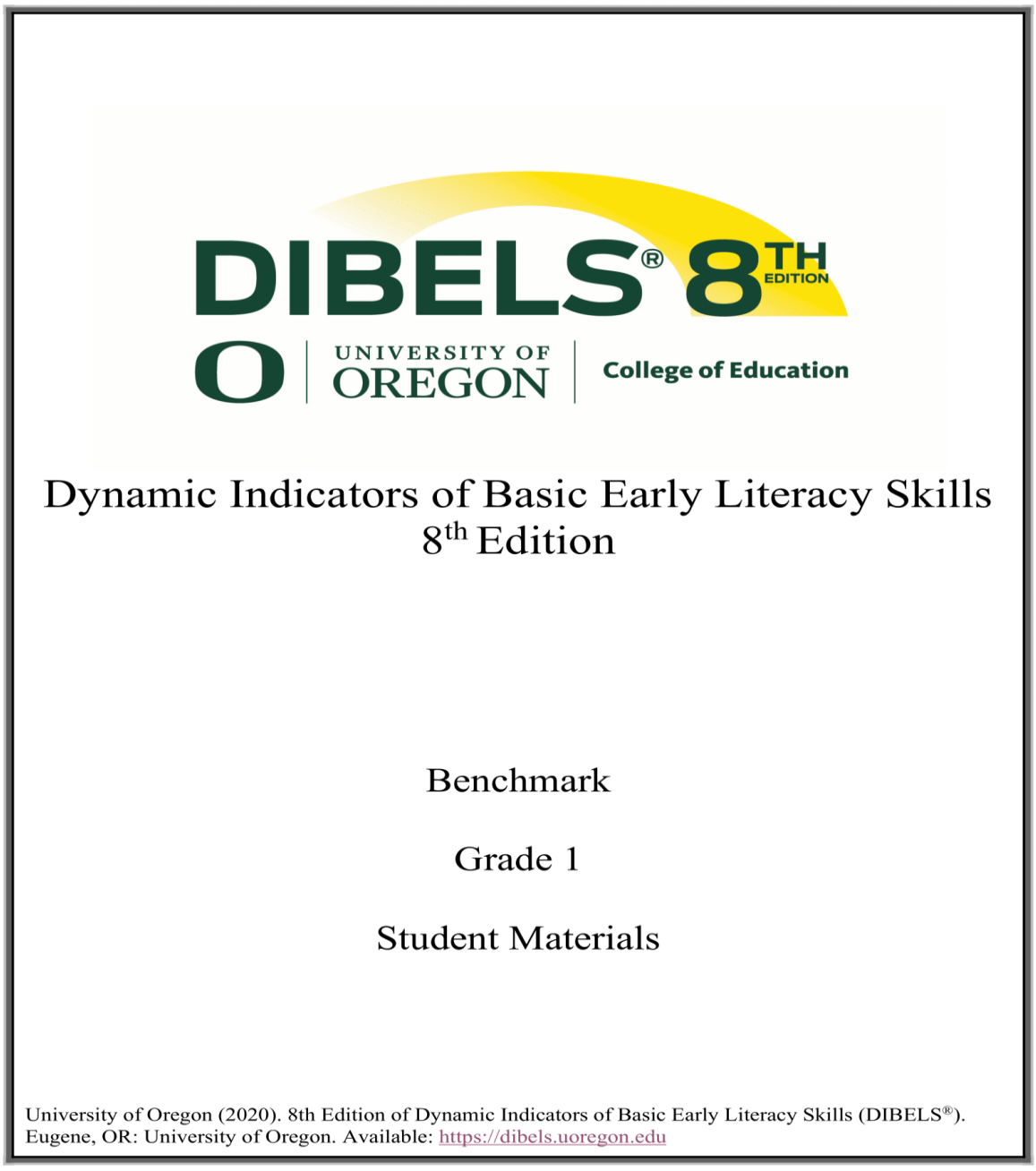
University of Oregon Center on Teaching and Learning. (n.d.) DIBELS data system: Using data to make decisions for students. https://dibels.uoregon.edu/

University of Oregon. (2019). 8th Edition of dynamic indicators of basic early literacy skills (DIBELS) dyslexia white paper. University of Oregon. https://dibels.amplify.com/docs/techreports/DIBELS-8th-Edition-Dyslexia-White-Paper.pdf

Valencia, S., Smith, T., Reece, A., Li, M., Wixson, K. & Newman, H. (2010). Oral reading fluency assessment: issues of construct, criterion, and consequential validity. *Reading Research Quarterly, 45* (3), 270-292.

Appendices

Appendix A: Student materials (English)



t	n	f	y	I	R	D	G	Y	V
r	b	P	L	Z	i	c	A	O	J
p	T	x	K	a	v	M	U	Q	h
g	N	j	X	s	C	H	q	o	m
S	B	z	e	u	E	F	V	d	k
R	U	X	h	y	O	q	t	m	S
x	K	e	c	T	G	Z	r	g	P
L	Q	s	k	N	J	i	p	A	D
Y	a	f	I	H	V	n	v	E	F
V	d	b	M	j	o	u	C	B	z

hap lum

tib	rep	hab	com	tep
tut	nup	sep	dat	nen
hon	yan	nop	sug	ut
teg	nug	sim	tet	sab
hig	lut	nim	neg	rop
hode	tur	wat	pide	tage
pom	yate	seb	mur	sote
von	rud	lum	sorm	fab
hade	nud	op	mame	wom
reb	vate	ib	lish	ven
hurk	gron	lurt	hish	fub
flin	whot	lale	bab	nirk
fibe	vort	chish	knent	pish
seck	thamp	plig	pife	hilk
warb	phad	frent	fobe	frant

no	they	is	we	it
if	one	but	not	has
for	there	a	you	be
wall	help	father	call	black
alive	sports	meeting	above	island
came	stop	show	open	sky
further	front	story	always	feed
station	deep	across	paper	driver
powerful	double	still	often	top
first	note	count	none	against
shown	head	room	same	sure
off	nice	speak	distance	right
line	stay	allow	come	she
turn	peace	well	bank	hard
news	engine	race	heat	other
never	east	team	rose	when
party	share	complete	sea	high
switch	spent	job	listen	sick
getting	film	think	break	eat
huge	while	fear	wave	bit
morning	hole	safe	enter	picture

Lucky Day

Bobby was on his way home from school one day. On his walk, he saw something green in the snow. He stopped and stared. He thought he was seeing things. Green in the snow? It couldn't be what it seemed to be, could it?

He bent down in the snow and quickly dug it out. It was a five-dollar bill. He carefully smoothed it flat.

He wondered if it was real money or just play money. It looked real. That made him feel good. This was his lucky day.

But then he felt bad. He knew that if he ever lost five dollars he would cry and cry. Once, he had dropped a dime on the floor, and it had rolled into the heating vent. He never saw that dime again.

What was it like to lose fifty dimes at one time? Whoever lost the money was having an unlucky day. But this was Bobby's lucky day. He had no way to find the owner, so the money was his to keep.

Appendix B: Scoring materials (English)

DIBELS® 8TH EDITION

UNIVERSITY OF OREGON | College of Education

Benchmark - Grade 1
Scoring Booklet

Student Name:_____ ID:_____

District:_____ School Year:_____

School:_____ Class:_____

	Assessment Date	Forms Given	LNF	PSF	NWF		WRF	ORF	
					CLS	WRC		Words Correct	Errors
Benchmark 1 Beginning		☐ Standard							
		☐ Other *Specify Form ID*							
Benchmark 2 Middle		☐ Standard							
		☐ Other *Specify Form ID*							
Benchmark 3 End		☐ Standard							
		☐ Other *Specify Form ID*							

Forms Given: DIBELS 8th Edition goals use equating so it is important to know the forms given. If you use the forms in this benchmark booklet at the designated time period, check off the *Standard* box. If you use alternate forms, check *Other* and write the form identifier in the space under the corresponding scores. For example - 1.1, 1.2, 1.3

Calculated Scores: If not using a Data System, calculated scores can be computed manually and recorded below.
ORF Accuracy = ORF Words Correct/(ORF Words Correct + ORF Errors) x 100
Composite score calculations can be found at dibels.uoregon.edu

	ORF Accuracy	Composite Score
Benchmark 1 Beginning		
Benchmark 2 Middle		
Benchmark 3 End		

University of Oregon (2021). 8th Edition of Dynamic Indicators of Basic Early Literacy Skills (DIBELS®). Eugene, OR: University of Oregon. Available: https://dibels.uoregon.edu

DIBELS 8th Edition *Letter Naming Fluency* Benchmark LNF 1.Beginning

Examiner script	Reminders	
Here are some letters (point to the student form). **Tell me the names of as many letters as you can.** **When I say 'Begin,' start here** (point to the first letter), **and go across the page** (point). **Point to each letter and tell me the name of that letter. If you come to a letter you don't know, I'll tell it to you. Put your finger on the first letter. Ready? Begin.**	Start timer	After you say **Begin.**
	Prompts	Student hesitates: wait 3 seconds; name the letter; point to the next letter, and say **Keep going**; mark the missed letter as incorrect. Student says letter sounds: say **Remember, tell me the letter's *name*, not its sound.** Score letter sounds as incorrect.
	Discontinue	Student does not produce any correct letter names in the first line (10 letters): discontinue LNF.

t	n	f	y	I	R	D	G	Y	V	(10)
r	b	P	L	Z	i	c	A	O	J	(20)
p	T	x	K	a	v	M	U	Q	h	(30)
g	N	j	X	s	C	H	q	o	m	(40)
S	B	z	e	u	E	F	V	d	k	(50)
R	U	X	h	y	O	q	t	m	S	(60)
x	K	e	c	T	G	Z	r	g	P	(70)
L	Q	s	k	N	J	i	p	A	D	(80)
Y	a	f	I	H	V	n	v	E	F	(90)
V	d	b	M	j	o	u	C	B	z	(100)

Total Correct _____

DIBELS 8th Edition *Phonemic Segmentation Fluency* Benchmark PSF 1.Beginning

Examiner script		Reminders	
I am going to say a word. After I say it, you tell me all the sounds in the word. So, if I say 'am,' you would say /a/ /m/.		Start timer	After you give the first word.
Let's try one (1 second pause).		Prompts	Student hesitates: wait 3 seconds; give the next word; score the missed word as incorrect.
Tell me the sounds in 'it'.			
CORRECT Student says /i/ /t/	**Very good. The sounds in 'it' are /i/ /t/.**		
INCORRECT Student gives any other response	**The sounds in 'it' are /i/ /t/. Your turn. Tell me the sounds in 'it.'**	Discontinue	Student does not get any sounds correct in the first 5 words: discontinue PSF.
OK. Here is your first word.			

for /f/ /or/	here /h/ /ear/	who /h/ /oo/	/6
on /o/ /n/	wave /w/ /A/ /v/	both /b/ /O/ /th/	/8
ball /b/ /o/ /l/	food /f/ /oo/ /d/	then /TH/ /e/ /n/	/9
tell /t/ /e/ /l/	bit /b/ /i/ /t/	ask /a/ /s/ /k/	/9
first /f/ /er/ /s/ /t/	bring /b/ /r/ /i/ /ng/	soft /s/ /o/ /f/ /t/	/12
circle /s/ /er/ /k/ /l/	middle /m/ /i/ /d/ /l/	once /w/ /u/ /n/ /s/	/12
drop /d/ /r/ /o/ /p/	nature /n/ /A/ /ch/ /er/	stand /s/ /t/ /a/ /n/ /d/	/13
waiting /w/ /A/ /t/ /i/ /ng/	without /w/ /i/ /th/ /ow/ /t/	coming /k/ /u/ /m/ /i/ /ng/	/15
useful /y/ /oo/ /s/ /f/ /l/	somewhere /s/ /u/ /m/ /w/ /air/	afraid /u/ /f/ /r/ /A/ /d/	/15
outside /ow/ /t/ /s/ /I/ /d/	western /w/ /e/ /s/ /t/ /er/ /n/	building /b/ /i/ /l/ /d/ /i/ /ng/	/17

Total Correct _____

DIBELS 8th Edition *Nonsense Word Fluency* Benchmark NWF 1.Beginning

Examiner script

Look at this word (Point to the first word on the practice form).

It's a make-believe word. Watch me read the word: /h/ /a/ /p/ 'hap.' (Point to each letter then run your finger fast beneath the whole word).

I can say the sounds of the letters, /h/ /a/ /p/ (point to each letter)**, or I can read the whole word 'hap.'** (Run your finger fast beneath the whole word).

Your turn to read a make-believe word. Read this word the best you can. (Point to the word "lum").

Make sure you say any sounds you know.

CORRECT Student responds "lum" or with all of the sounds	**That's right. The sounds are /l/ /u/ /m/ or 'lum.'**
INCORRECT Student does not respond within 3 seconds or responds incorrectly	**Remember, you can say the sounds, or you can say the whole word. Watch me: the sounds are /l/ /u/ /m/** (point to each letter) **or 'lum.'** (Run your finger fast through the whole word). **Let's try again. Read this word the best you can.** (Point to the word "lum").

(Place the student copy of the form in front of the student.)

Here are some more make-believe words (point to the student form). **Start here** (point to the first word) **and go across the page** (point across the page).

When I say 'Begin', read the words the best you can. Point to each letter and tell me the sound or read the whole word. Put your finger on the first word. Ready? Begin.

Reminders

Start timer	After you say **Begin.**
Prompts	Student hesitates: wait 3 seconds; point to the next letter/word, and say "**Keep going**"; mark the missed sound/word as incorrect.
Discontinue	Student does not get any sounds correct in the first 5 words: discontinue NWF.

Benchmark NWF 1.Beginning
continued

					CLS	WRC
tib /t//i//b/	rep /r//e//p/	hab /h//a//b/	com /k//o//m/	tep /t//e//p/	/15	/5
tut /t//u//t/	nup /n//u//p/	sep /s//e//p/	dat /d//a//t/	nen /n//e//n/	/15	/5
hon /h//o//n/	yan /y//a//n/	nop /n//o//p/	sug /s//u//g/	ut /u//t/	/14	/5
teg /t//e//g/	nug /n//u//g/	sim /s//i//m/	tet /t//e//t/	sab /s//a//b/	/15	/5
hig /h//i//g/	lut /l//u//t/	nim /n//i//m/	neg /n//e//g/	rop /r//o//p/	/15	/5
hode /h//O//d/	tur /t//er/	wat /w//a//t/	pide /p//I//d/	tage /t//A//j/	/14	/5
pom /p//o//m/	yate /y//A//t/	seb /s//e//b/	mur /m//er/	sote /s//O//t/	/14	/5
von /v//o//n/	rud /r//u//d/	lum /l//u//m/	sorm /s//or//m/	fab /f//a//b/	/15	/5
hade /h//A//d/	nud /n//u//d/	op /o//p/	mame /m//A//m/	wom /w//o//m/	/14	/5
reb /r//e//b/	vate /v//A//t/	ib /i//b/	lish /l//i//sh/	ven /v//e//n/	/14	/5
hurk /h//er//k/	gron /g//r//o//n/	lurt /l//er//t/	hish /h//i//sh/	fub /f//u//b/	/16	/5
flin /f//l//i//n/	whot /w//o//t/	lale /l//A//l/	bab /b//a//b/	nirk /n//er//k/	/16	/5
fibe /f//I//b/	vort /v//or//t/	chish /ch//i//sh/	knent /n//e//n//t/	pish /p//i//sh/	/16	/5
seck /s//e//k/	thamp /th//a//m//p/	plig /p//l//i//g/	pife /p//I//f/	hilk /h//i//l//k/	/18	/5
warb /w//ar//b/	phad /f//a//d/	frent /f//r//e//n//t/	fobe /f//O//b/	frant /f//r//a//n//t/	/19	/5
					Total Correct ____	____

DIBELS 8th Edition *Word Reading Fluency* Benchmark WRF 1.Beginning

Examiner script	Reminders	
Please read from this list of words (Point to the student form). **Start here** (point to the first word) **and go across the page** (point across the page). **When I say 'Begin', point to each word and read it the best you can. If you get stuck, I will tell you the word, so you can keep reading. Put your finger on the first word. Ready? Begin.**	Start timer Prompts Discontinue	When student says the first word. Student hesitates: wait 3 seconds; give correct word; point to the next word, and say "**Keep going**"; mark the missed word as incorrect. Student does not get any words correct within the first line (5 words): discontinue WRF; do not administer ORF.

no	they	is	we	it	(5)
if	one	but	not	has	(10)
for	there	a	you	be	(15)
wall	help	father	call	black	(20)
alive	sports	meeting	above	island	(25)
came	stop	show	open	sky	(30)
further	front	story	always	feed	(35)
station	deep	across	paper	driver	(40)
powerful	double	still	often	top	(45)
first	note	count	none	against	(50)
shown	head	room	same	sure	(55)
off	nice	speak	distance	right	(60)
line	stay	allow	come	she	(65)
turn	peace	well	bank	hard	(70)
news	engine	race	heat	other	(75)
never	east	team	rose	when	(80)
party	share	complete	sea	high	(85)
switch	spent	job	listen	sick	(90)
getting	film	think	break	eat	(95)
huge	while	fear	wave	bit	(100)
morning	hole	safe	enter	picture	(105)

Total Correct _____

DIBELS 8th Edition *Oral Reading Fluency* Benchmark ORF 1.Beginning

Examiner script	Reminders	
Please read this (point to passage) **out loud**.	Start timer	When student says first word.
If you get stuck, I will tell you the word, so you can keep reading. When I say 'Stop' I may ask you to tell me about what you read, so do your best reading.	Prompts	Student hesitates: wait 3 seconds; give correct word; mark the missed word as incorrect.
Start here (point to first word of first paragraph of passage). **Ready? Begin.**	Discontinue	Student does not get any words correct within the first line: discontinue ORF.

Lucky Day

Bobby was on his way home from school one (9)
day. On his walk, he saw something green in the (19)
snow. He stopped and stared. He thought he was (28)
seeing things. Green in the snow? It couldn't be what (38)
it seemed to be, could it? (44)
He bent down in the snow and quickly dug it out. (55)
It was a five - dollar bill. He carefully smoothed it flat. (66)
He wondered if it was real money or just play (76)
money. It looked real. That made him feel good. This (86)
was his lucky day. (90)
But then he felt bad. He knew that if he ever lost (102)
five dollars he would cry and cry. Once, he had (112)
dropped a dime on the floor, and it had rolled into the (124)
heating vent. He never saw that dime again. (132)
What was it like to lose fifty dimes at one time? (143)
Whoever lost the money was having an unlucky day. (152)
But this was Bobby's lucky day. He had no way to (163)
find the owner, so the money was his to keep. (173)

Total words read _____ Total errors _____ Total words correct _____

Appendix C: Sample Student Material (Ewe)

Dynamic Indicators of Basic Early Literacy Skills

Dzidzenu

Nusrɔ̃ƒe Gbãtɔ (1)

Sukuvi ƒe Dɔwɔgbalẽ

F	L	ʃ	G	V	ɣ	U	ɛ	z	Y
t	B	Ð	S	E	p	U	A	r	Y
F	e	D	W	x	Ɛ	ɖ	ŋ	Ɔ	h
a	I	H	N	K	m	ʊ	G	w	Ɣ
o	Z	m	X	i	b	R	I	K	Ƒ
D	ɔ	P	S	O	n	T	v	U	d
Ƒ	E	W	ʊ	X	ŋ	ɣ	D	Ɛ	y
O	ɖ	K	Y	U	B	ɔ	V	R	Ɔ
u	m	N	Ð	A	g	Z	b	I	o
ɖ	K	I	H	H	s	T	t	ʃ	r

ɲɔŋ Kik

pom	kim	fim	zom	rep
tat	top	zam	men	mom
nan	kon	ŋɔŋ	zeg	iro
vra	kro	zre	pop	kik
fig	tit	mit	veg	rad
loe	mur	vat	pode	dzat
drn	tera	dzm	mar	fso
nen	reg	tum	sorm	fab
mez	tad	ri	rara	kri
beb	fite	wa	ras	den
tomu	tede	lunt	xix	buf
klik	trot	gbln	dad	nssi
plat	vkor	kus	kwele	kiɔ
sran	dzone	tsin	fene	xile
lou	flad	trim	fame	pome

ao	wo	le	mĩ	to
ŋlɔ	ɖeka	gake	nye	kpɔ
na	papa	ŋdɔɔ	wõ	nɔ
gli	aseike	adre	dzi	anyigba
va	tɔ	fia	uu	etɔ
wuiɖeke	ŋgɔ	blave	katã	Suku
uuɖofe	fiẽ	abɔta	pspa	uukula
akɔta	eve	ŋlɔ	gede	dzi
gbã	nu	xlẽ	fetsu	dada
fia	ta	xɔme	ɖeka	ɖa
tsi	nyo	fonu	dɔme	afɔbids
ŋdii	kplɔ	ɖe	va	Sobo
trɔ	agbɔgbɔ	abɔ	klo	sesẽ
nya	mɔ	ali	dzo	bubu
ŋgo	alafa	ŋptis	sefofo	gbe
ŋku	ma	ɖe	atsiaƒu	kɔkɔ
si	zã	alɔnu	woezɔ	dɔ
xɔxɔm	ame	bu	gba	ɖu
gã	megbɛ	vɔ	da	Sue
ŋdi	do	akple	eme	nutata

DzataDzeAfɔku

Dzataaɖenɔave me. Edzi vi eve.

Dzataviɖekadzedɔ. Dzata la yiatikedi*ƒe*.

Adela aɖekpɔdzata la. Edae, kemeku o.

Edzodzeadela la dzi. Wodeasikameteteme. Adela bubu da dzata la. Dzata la ku.

Adela la kpɔdzidzɔ. Ebe, “Dɔnɔdɔnɔnawò”.

Appendix D: Sample Scoring Material (Ewe)

Dzidzenu-Nusrɔ̃fe Gbatɔ (1)

Dzesina Gbalɛ

Sukuvi Ŋkɔ: _____ Dzesi:_____

Nutome: _____ Suku Ƒe: _____

Suku: _____ Nusrɔfe:_____

	Assessment Date	Forms Given	LNF	PSF	CLS	WRC	WRF	WORDS CORRECT	ERRORS
Benchmark Beginning		standard							
		other Specify form ID							
Benchmark Beginning		standard							
		other Specify form ID							
Benchmark Beginning		standard							
		other Specify form ID							

Nuŋlɔdi

Ðodokpɔdzikpɔla ƒe ɑewo	ŋkuɖodzinyɑwo
ŋunlɔdi ɑɖewoe nye ɛɕiɑwo (fiɑ ɑɕi ɕukuvilɑ ƒe dɔdwɔ ɑgbɑlẽ ɕue lɑ)	**Dze gɑme dzidzenuɑ gɔme:** le ɣeyiyi ɕi ne gblɔ nɑ ɕukuviɖɑ be "dze egɔme"
Yɔ ŋɔŋlɔdzeɕi ɖeɕiɑɖe ƒe ŋkɔ neyɑ	**Fe kɑkɑ:** yɔ ŋɔŋlɔdzeɕi lɑ ƒe ŋkɔ ne ɕukuviɑ meteŋu yɔe le ɑɖebɑƒofo etɔ me o. Tɔ ɑɕi ŋɔnlɔdzeɕi Eveliɑ dzi eye nɑgblɔ be "yi edzi"
Tɔ ɑɕi ŋɔŋlɔdzeɕiɑwo dzi ɖekɑ ɖekɑ eye nɑyɔ ɖeɕiɑɖe wo ƒe ŋkɔ(wo). Ne menyɑ ŋɔŋlɔ dzeɕi ɑɖe ƒe ŋkɔ o lɑ, mɑ yɔe nɑ wõ.	**Dzudzɔ:** Ne ɕukuvilɑ meteŋu yɔ ŋɔŋlɔ dzeɕi ɑɖeke ƒe ŋnkɔ le fli gbɑntɔ me o lɑ
Dɑ wo ɑɕibide ɖe ŋɔŋlɔdzeɕi gbãtɔ dzi. Ele klɑlo? dze egɔme	

F	L	ƒ	G	V	ɣ	U	ɛ	z	Y	10
t	B	Ð	S	E	p	U	A	r	Y	20
F	e	D	W	X	Ɛ	ɖ	Ŋ	Ɔ	h	30
a	I	H	N	K	m	ʋ	G	w	Ɣ	40
o	Z	m	X	I	b	R	I	K	Ƒ	50
D	ɔ	P	S	O	n	T	v	U	d	60
Ƒ	E	W	ʋ	X	Ŋ	ɣ	D	Ɛ	y	70
O	ɖ	K	Y	U	B	ɔ	V	R	Ɔ	80
u	m	N	Ð	A	g	Z	b	I	o	90
ɖ	K	I	H	H	s	T	t	ƒ	r	100

Dodokpɔdzikpɔlą ƒe ɜewo	Ŋkudodzinyąwo
Mąyɔ nyą ądę wo. Ne meyɔe vɔ lą, gblɔ gbeɖiɖi ɜiwo neɜe le nyą ɜią me lą nąm. Le kpɔɖe ŋu me. Nyą lą: vą. Gbeɖiɖiwo: /v/ ɪ /ą/ **Ną miąwɔ ɖeką ąkpɔ** Ógbɔ vie ąɖąbą o o ɖeką koɛ̃ Yɔ gbeɖiɖiwo le nyą 'ɖu' lą me DEDIETƆ: Ƨukuvią nągblɔ be /ɖ/ /u/ — Enyo ŋutɔ gbeɖiɖi ɜiwo le nyą ɖu me woe nye /ɖ/ ɪ /u/ MADEMADIA / GBEGBLETƆ: Ƨukuvią ną ŋuɖoɖo bubu tɜo dedietɔ gbɔ — Gbeɖiɖi ɜiwo le nyą ɖu me lą woe nye /ɖ / ɪ /u/. Eɖo dziwo yɔ gbeɖiɖi ɜiwo le ɖu me	**Dze ɣeɣiyi dzidzenu lą gɔme:** Le ɣeɣiyi ɜime neyɔ nyą gbątɔ. **Fekąką:** yɔ nyą lą e ŋkɔ ne ɜukuvią me te ŋu yɔe le ąɖąbą o o etɔ̃ me o. De dzeɜi nyą ɖeɜiąɖe ɜi ɜukuvią meteŋu yɔ o lą be egblẽ. **Dzudzɔ.** Ne ɜukuvią meteŋu ɖe dziɜi gbeɖiɖi ąɖeke le nyą gbă ątɔąwo me o
Wo nyą gb tɔ ląe nye eɜią.	

Na /n/ /a/	afi /a/ /f/ /i/	Ameka /a/ /m/ /e/ /k/ /a/	/10
Dzi /dz/ /i/	fli /f/ /l/ /i/	kątă /k/ /a/ /t/ /ă/	/8
Bulu /b/ /u/ /l/ /u/	nuɖuɖu /n/ /u/ /ɖ/ /u/ /ɖ/ /u/	Ke /k/ /e/	/12
gblɔ /g/ /b/ /l/ /u/	vi /v/ /i/	Bią /b/ /i/ /a/	/9
gbă /g/ /b/ /ă/	tɜɔ /t/ /ɜ/ /ɔ/	bɔbɔ /b/ /ɔ/ /b/ /ɔ/	/10
Kpe /k/ /p/ /e/	Dome /d/ /o/ /m/ /e/	ɖeka /d/ /e/ /k/ /a/	/11
Ge /g/ /e/	dzɔdzɔme /dz/ /ɔ/ /dz/ /ɔ/ /m/ /e/	Tɜo /t/ /ɜ/ /o/	/11
dzɔ /dz/ /ɔ/	Eme /e/ /m/ /e/	gbɔna /gb/ /ɔ/ /n/ /a/	/9
Nyo /n/ /y/ /o/	afiąɖe /a/ /f/ /i/ /a/ /ɖ/ /e/	vɔ̃ /v/ /ɔ̃/	/11
Good /g/ /o/ /d/ /o/	ɣetofe /ɣ/ /e/ /t/ /o/ /f/ /e/	xɔ /x/ /ɔ/	/12

DODOKPƆDZIKPƆLA ƑƐ SEWO

Le nku ɖe nya siaɳu (tɔ asi nya gbɑ tɔ si le sukuvia ƒe dɔwɔ gbɑle siaɳ lɑ dzi.)
Enye nya susu mɑnɔmee Ɖɑ ŋku ɖe dzi nye le nya siaɳ xexlẽ me: /p/ɑ/m/ 'pɑm' (tɔ ɑsi ŋɔŋlɔdzesi ɖe siaɳde dzi. Nɑ wo ɑsibide lɑ nɑ fu du to nya blibo lɑ te).
Mɑte ŋu ayɔ gbeɖiɖi siwo le ŋɔŋlɔdzi siaɳwo me. /p/ /ɑ/ /m/ (tɔ ɑsi ŋɔŋlɔdzesi ɖesiaɳde dzi) ɑloo ɱa te ŋu ɑxlẽ nya blibo lɑ zi ɖekɑ (nɑ wo ɑsibide nɑfu du to nya blibo lɑ te)
Edo dziwo be nɑxlẽ nya siɑ. Dze ɑgbɑbɑ nɑxlẽ nya siɑ ɖe wo ŋutete nu. (tɔ ɑsi nya "lum" dzi)
Kpɔ egbɔ be neyɔ gbeɖiɖi ɖesiaɳde si ne nya.

ĐEDIETƆ Ne sukuviɑ yɔ nyɑ "lum" ɑlo efe gbeɖiɖiɑwo kɑtɑ	Enyo ŋutɔ. Gbeɖiɖiwoe nye /l/ /u/ /m/ ɑloo "lum"
MADEMADIA Ne sukuviɑ me nɑ ŋuɖoɖo ɑɖeke le ɑɖɑbɑ ƒofo etɔ me o ɑlo ne ŋuɖoɖoɑ me de o lɑ, efiɑ be esiɑ gblẽ.	Ɖo ŋku edzi be ɑteɖu ɑyɔ gbeɖiɖiɑwo ɑlo ɑyɔ nyɑ blibo lɑ. Dɑ ŋku ɖe dzinye gbeɖiɖiɑwoe nye /l/ /u/ /m/ (tɔ ɑsi ŋɔŋlɔ dzesi ɖesiaɳde dzi) ɑloo "lum" (nɑ wo ɑsibide nɑfu du to nyɑ blibo lɑ te). Nɑ mia ga wɔe ɑke. Xlẽ nyɑ siɑ le mɔ nyuie tɔ kekeɑke nu (tɔ ɑsi "lum" dzi).

(Tɔɔ sukuviɑ ƒe dɔwɔ gbɑlẽ ɖɑ ɖe efe ŋkume)
Nyɑ mɑnɔ evegbe me ɑɖewoe nye esiɑwo (tɔ asi nya gbɑtɔ dzi) eye nɑxlẽ tɔo miɑme yi ɖusi me. (tɔ ɑsi nyɑ gbɑtɔ dzi) eye nɑxlẽe tɔo miɑme yi ɖusi me. (Fiɑ ɑsi miɑme yi ɖusi me)

Ne me gbɔ be dze ɑgɔme lɑ, xlẽ nyɑ siɑwo le mɔ nyuie tɔ si dzi n ɑte ŋui lɑ. Tɔ ɑsi ŋɔŋlɔdzesi ɖesiaɳde dzi eye nɑ yɔ gbeɖiɖiɑ wo nɑm ɑlo nɑlxẽ nyɑ blibo lɑ. Dɑ wo ɑsibidɛ ɖe nyɑ gbɑ tɔ dzi. Ele klɑloɑ? Dze egɔme.

ŋkuɖodzinyɑwo

Dze gɑme dzidzenuɑ gɔme: ne egblɔ be **dze egɔme**.

Fe kɑkɑ: ne sukuviɑ meyɔ nyɑ ɑɖe le ɑɖɑbɑfofo etɔ me o lɑ, tɔ ɑsi nyɑ Evelia dzi eye nɑgblɔ be **yi edzi**. De ɖzesi gbedidi ɑlo nyɑ si sukuviɑ meteŋu yɔ o lɑ be egblẽ.

Dzudzɔ: ne sukuviɑ meyɔ gbeɖiɖi ɑɖe ke dedie le nyɑ gbɑtɔ ɑtɔɑwo me o lɑ, ekemɑ dzudzɔ.

pom /p//o//m/	kim /k//i//m/	fim /f//i//m/	zom /z//o//m/	rep /r//e//p/	/15	/5
tat /t//a//t/	top /t//o//p/	zam /z//a//m/	men /m//e//n/	mom /m//o//m/	/15	/5
nan /n//a//n/	kon /k//o//n/	ŋɔŋ /ŋ//ɔ//ŋ/	zeg /z//e//g/	iro /i//r//o/	/15	/5
vra /v//r//a/	kro /k//r//o/	zre /z//r//e/	pop /p//o//p/	kik /k//i//k/	/15	/5
fig /f//i//g/	tit /t//i//t/	mit /m//i//t/	veg /v//e//g/	rad /r//a//d/	/15	/5
loe /l//o//e/	mur /m//u//r/	vat /v//a//t/	pode /p//o//d/e/	Dzat /dz//a//t/	/16	/5
drn /d//r//n/	tera /t//e//r//a/	dzm /dz//m/	mar /m//a//r/	Fso /f//s//o/	/15	/5
nen /n//e//n/	reg /r//e//g/	tum /t//u//m/	sorm /s//o//r//m/	fab /f//a//b/	/16	/5
mez /m//e//z/	tad /t//a//d/	ri /r//i/	rara /r//a//r//a/	kri /k//r//i/	/15	/5
beb /b//e//b/	fite /f//i//t//e/	wa /w//a/	ras /r//a//s/	den /d//e//n/	/16	/5
tomu /t//o//m//u/	tede /t//e//d//e/	lunt /l//u//n//t/	xix /x//i//x/	buf /b//u//f/	/18	/5
klik /k//l//i//k/	trot /t//r//o//t/	gbln /g//b//l//n/	dad /d//a//d/	nɛsi /n//ɛ//s//i/	/18	/5
plat /p//l//a//t/	vkor /v//k//o//r/	kus /k//u//s/	kwele /k//w//e//l//e/	kiɔ /k//i//ɔ/	/19	/5
sran /s//r//a//n/	dzone /dz//o//n//e/	Tsin /t//s//i//n/	fene /f//e//n//e/	xile /x//i//l//e/	/20	/5
lov /l//o//v/	flad /f//l//a//d/	tzim /t//z//i//m/	mfam /m//f//a//m/	pɔme /p//ɔ//m//e/	/19	/5

Dodokpɔdzikpɔlɑ fɛ sewo	Ŋkudɔdzi nyɑ wo
Tɑflɑtɛ xlɛ̀ nuŋlɔdi siɑwo (tɔ ɑsi sukuviɑ fe dɔwɔgbɑ̀lɛ̀ dzi) Dze egɔme tso ɑfii. (Fiɑ ɑsi nyɑ gbɑ̀tɔ) eye nɑxlɛ̀ tso miɑme yi dusime (fiɑ ɑsi nyɑwo tso miɑme yi dusime) Ne megblɔ be "dze egɔme" lɑ, tɔ ɑsi nyɑ wo dzi dɛkɑ dɛkɑ eye nɑ xlɛ̃wo dedie ɑle si nu ɑte ŋuie. Ne menyɑ nyɑ ɑdɛ oo lɑ, mɑyɔe nɑ wo be nɑteŋu ɑyi nuxlexlɛ̀lɑ dzi. Dɑ wo ɑsibidɔ dɛ nyɑ gbɑ̀tɔ dzi. Ele klɑlo? Dze egɔme.	Dze gɑme dzidzenuz gɔme: le ɣeɣiɣi sime sukuviɑ yɔ nyɑ gbɑ̀tɔ. Fekɑkɑ: Yɔ nyɑ lɑ fe ŋkɔ ne sukuviɑ me te ŋu yɔe le ɑdɑbɑfofo etɔme o. Fiɑ ɑsi nyɑ si kplɔ ekɑmɑ dɔ eye nɑ gblɔ be "yi edzi". De dzesi nyɑ dɛsiɑdɛ si sukuviɑ me te ŋu yɔ oo lɑ be egblɛ̀. Dzudzɔ: Ne sukuviɑ me te ŋu yɔ nyɑ ɑdɛke dedie le fli gbɑ̀tɔ me o. (nya atɔ̃) dzudzɔ NXN.

ɑo	wo	Le	mĭ	to	5
ŋlɔ	dɛkɑ	Gɑke	nye	kpɔ	10
nɑ	pɑpɑ	ŋdɔɔ	wɔ̃	nɔ	15
gli	ɑseike	Adre	dzi	ɑnyigbɑ	20
vɑ	tɔ	Fiɑ	ʋu	etɔ	25
wuiɖeke	ŋgɔ	Blɑve	kɑtɑ	Suku	30
ʋuɖofe	fiɛ̀	ɑbɔtɑ	pɛpɑ	ʋukulɑ	35
ɑkɔtɑ	eve	ŋlɔ	gede	dzi	40
gbɑ	nu	xlɛ̀	fetsu	dɑdɑ	45
fiɑ	tɑ	xɔme	dɛkɑ	dɑ	50
tsi	nyo	fonu	dɔme	ɑfɔbidɔ	55
ŋdii	kplɔ	dɛ	vɑ	Sobo	60
trɔ	ɑgbɔgbɔ	ɑbɔ	klo	sesɛ̀	65
nyɑ	mɔ	Ali	dzo	bubu	70

ŋgo	ɑlafɑ	ɲɔtiɛ	ɛefofo	gbe	75
ŋku	mɑ	ɖe	ɑtsiɑfu	kɔkɔ	80
si	zɑ̃	ɑlɔnu	woezɔ	dɔ	85
xɔxɔm	ɑme	Bu	gbɑ	ɖu	90
gɑ̃	megbɛ	vɔ	dɑ	Sue	95
ŋdi	do	Akple	eme	nutɑtɑ	100

Dodokpɔdzikpɔla ƒɛ sewo	Ŋkuɖoɖzi nya wo
Taflatse xlẽ nu sia. (fia asi nuŋlɔdia dzi) sesie Ne mateŋu ayɔ nya ɖe o la, mayɔe na wo be nateŋu eyi nuxlexlẽa dzi. Ne megblɔ be "dzudzɔ" la, ma bia biabia aɖewo wo tso nusi nexlẽ la ŋuti. Eyata dze agbagba na xlẽ nyuie. Dze egɔme tso afii (tɔ asi nya gbãtɔ dzi le nuŋlɔdia me) Ele klalo? Dze egɔme	Dze game dzidzenuz gɔme: le ɣeɣiɣi sime sukuvia yɔ nya gbãtɔ. Fekaka: yɔ nya la ƒe ŋkɔ ne sukuvia me te ŋu yɔe le aɖaba o o etɔ̃ me o. De dzesi nya ɖesiaɖe si sukuvia meteŋu yɔ o la be egblẽ. Dzudzɔ: Ne sukuvia me te ŋu de dzesi nya aɖeke le fli gbãtɔ me o.

Dzata Dze Afɔku

Dzata aɖe nɔ ave me. Edzi vi eve. (8)

Dzatavi ɖeka dze dɔ. Dzata la yi atikedifɛ. (16)

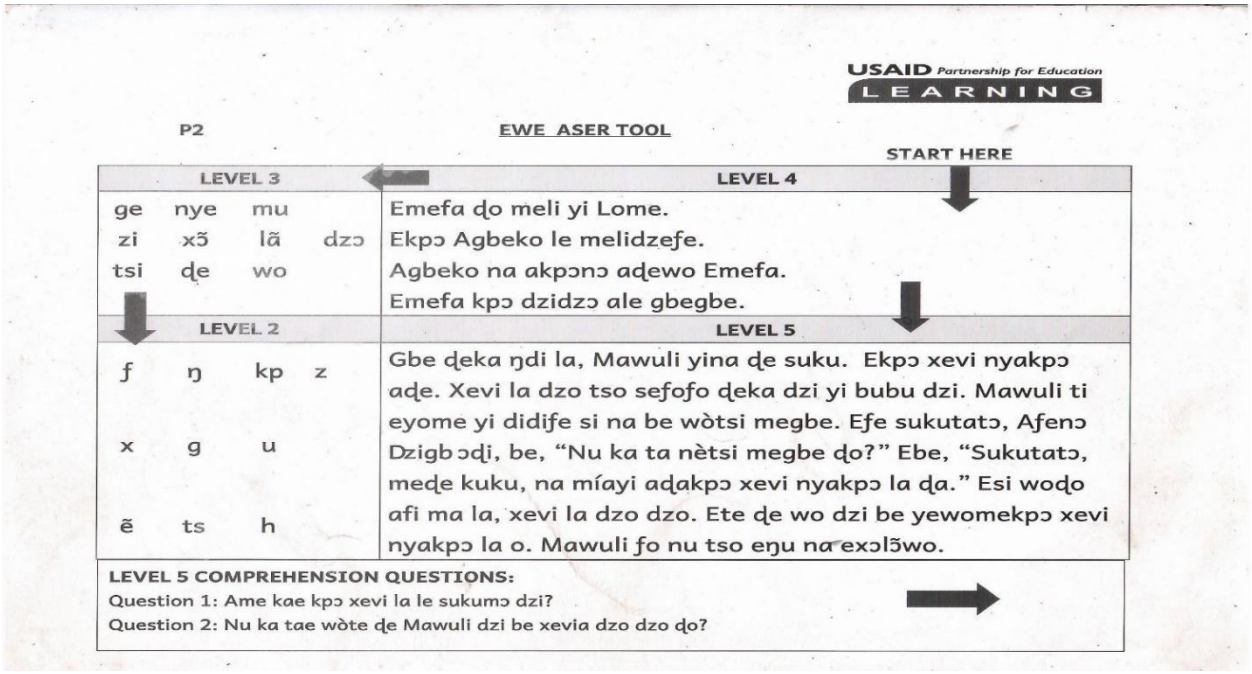
Adela aɖe kpɔ dzata la. Edae, ke meku o. (25)

Edzo dze adela la dzi. Wode asi kametete me. (34)

Adela bubu da dzata la. Dzata la ku. (42)

Adela la kpɔ dzidzɔ. Ebe, "Dɔnɔdɔnɔ na wò". (50)

Appendix E: Ewe ASER



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P2

EWE ASER TOOL

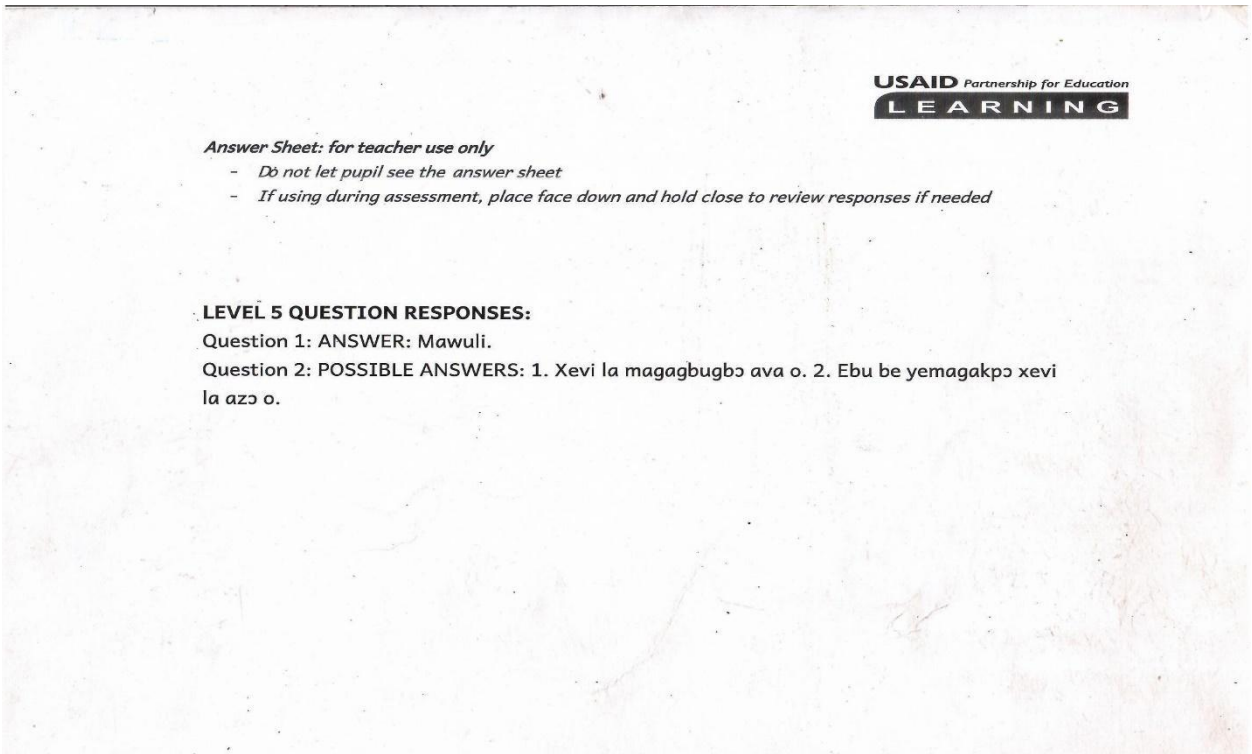
START HERE

LEVEL 3	LEVEL 4
ge nye mu zi xɔ̃ lã dzɔ tsi ɖe wo	Emefa ɖo meli yi Lome. Ekpɔ Agbeko le melidzefe. Agbeko na akpɔnɔ aɖewo Emefa. Emefa kpɔ dzidzɔ ale gbegbe.
LEVEL 2	**LEVEL 5**
ʃ ŋ kp z x g u ẽ ts h	Gbe ɖeka ŋdi la, Mawuli yina ɖe suku. Ekpɔ xevi nyakpɔ aɖe. Xevi la dzo tso sefofo ɖeka dzi yi bubu dzi. Mawuli ti eyome yi didife si na be wòtsi megbe. Efe sukutatɔ, Afenɔ Dzigbɔɖi, be, "Nu ka ta nètsi megbe ɖo?" Ebe, "Sukutatɔ, meɖe kuku, na míayi aɖakpɔ xevi nyakpɔ la ɖa." Esi woɖo afi ma la, xevi la dzo dzo. Ete ɖe wo dzi be yewomekpɔ xevi nyakpɔ la o. Mawuli ʃo nu tso eŋu nɑ̃ exɔlɔ̃wo.

LEVEL 5 COMPREHENSION QUESTIONS:

Question 1: Ame kae kpɔ xevi la le sukumɔ dzi?

Question 2: Nu ka tae wòte ɖe Mawuli dzi be xevia dzo dzo ɖo?



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Answer Sheet: for teacher use only

- *Do not let pupil see the answer sheet*
- *If using during assessment, place face down and hold close to review responses if needed*

LEVEL 5 QUESTION RESPONSES:

Question 1: ANSWER: Mawuli.

Question 2: POSSIBLE ANSWERS: 1. Xevi la magagbugbɔ ava o. 2. Ebu be yemagakpɔ xevi la azɔ o.

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P2 EWE LEVEL 6

Emefa xɔ ʃe ade le ʃe si va yi la me. Fofoa na avuvi ŋɔŋɔe nyakpɔ adee. Emefa na ŋkɔe be Pusivi. Efena kplii. Gbe ɖeka, Emefa klãe be, "Meyi suku mava." Pusivi ʊuʊu asike. Esi wofo ga eye Emefa kple exɔlɔ̃wo do nɔ fefe fem la, nyɔnuvi ɖeka do ɣli be, "Ei! Avuvi nyakpɔ kae nye esi?" Emefa trɔ, kasia, Pusivi dzo kpla nɛ. Emefa be, "O! Pusivi, aleke nèwɔ va afi sia?" Pusivi ʊuʊu asike. Nu sia wɔ nuku na sukuviawo.

Sukuvi bubuwo hã ʃu du va be yewoakpɔ Pusivi ɖa. Emefa dzi Pusivi ʃe ha nɛ be, "Pusivi trɔ trɔ trɔ, Pusivi trɔ ne makpɔ wò!" Avuvi la nɔ kpo tim tso dzi va anyi. Sukuviawo nɔ akpe sim nɛ kplokplokplo. Esi ga ʃo be sukuviawo nayi sukuxɔ me la, Emefa gblɔ be, "Pusivi yi afe me." Eʊuʊu asike eye wòdzo.

LEVEL 6 COMPREHENSION QUESTIONS:
Question 1: Nu ka ta wona avuvi la Emefa ɖo?
Question 2: Nu ka ta Pusivi va sukua me ɖo?