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Relationship Between English Proficiency and Academic Achievement of Nigerian Secondary School Students

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Abstract

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MS, Stockholm University, 2014

MEd, Imo State University, 2005

Dissertation Submitted in Partial Fulfillment

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Abstract

Nigerian stakeholders are concerned with the continuous low scores of final-year senior secondary school students (FYSSS) in the West African Senior School Certificate Examination (WASSCE). Studies have shown that limited proficiency in English among FYSSS is the cause of low scores on the WASSCE. The purpose of this quantitative correlational study was to investigate the relationship between English proficiency and academic achievement among FYSSS as measured by the WASSCE. The theoretical framework for the study was Cummins's theory of second language acquisition to address the distinction between conversational language and academic language. Archival data from 225 FYSSS were collected from 2 secondary schools in Nigeria. Results of linear regression analyses showed a strong positive relationship between FYSSS English proficiency and 4 WASSCE subjects (English, biology, government, and mathematics). Findings may be used to develop strategies to improve English proficiency of FYSSS which will allow them to succeed in all subject areas and to amend the school language policy in the Nigerian education sector.

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Dedication

For my children, Allen and Bryan.

Acknowledgments

I acknowledge the dedication of the chair of the supervisory committee, Dr. Markus Berndt. I also acknowledge the support of the second committee member, Dr. Nicolae Nistor. I would like to thank Dr. Beate Baltes (university research reviewer) and Dr. Joe Gredler (form and style) for their contribution. Finally, I thank Dr. Mel Griffin (program director), my lecturers, faculty members, and all who contributed to this journey.

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Chapter 1: Introduction to the Study

Only 9% of the global population are native English speakers, but today about one third of it speaks English (Crystal, 2006). The English language has become not just a medium for global communication, but it is used worldwide in a variety of fields (Jeraltin & Ramganesh, 2013). Many non-English speaking countries view English as a necessary working language and have adopted it as a second language. In sub-Saharan Africa, 26 nations have adopted English as an official language Although countries like Nigeria have adopted English as an official language, other countries have adopted English alongside another African language (Plonski, Teferra, & Brady, 2013). This means that the English language has official status in several non-English speaking nations, making English the most widely spoken official language (Plonski et al., 2013). To many Nigerians, to be educated means to know how to write, read, and speak English fluently.

As the need to communicate in English increases, teaching English as a second language and testing of English has become more important. Different forms of assessment are used to get reliable information on English language learners' (ELLs) abilities and/or competence in using English language when they intend to study abroad (Brindley, 2006). Two good examples of international standardized tests are the Test of English as a Foreign Language (TOEFL) and the International English Language Testing System (IELTS). In 2014, 2.5 million IELTS tests were taken in more than 140 countries (British Council, 2015). Each year, approximately 38,000 students enroll in intensive English language programs in colleges and universities in the United States. According to Shamim (2011), over 1 billion people learn English as a foreign language while over 750

million people learn English as a second language. Daller and Phelan (2013) posited that English language proficiency for nonnative speakers is a key factor in academic success. Determinants of student performance have been a focus of academic research for the last 20 years. Haydar and Uyar (2011) stated that of all the variables that affect student performance, language is the most essential. This study addressed the relationship between English proficiency and academic achievement of final-year senior secondary school students (FYSSS) in the West African Senior School Certificate Examination (WASSCE).

Background

Nigeria is in West Africa and shares land borders with the Republic of Benin in the west, Chad and Cameroon in the east, and Niger in the north. Nigeria's coast in the south lies on the Gulf of Guinea on the Atlantic Ocean. Nigeria's population is currently estimated at 175 million. Over 350 local languages and dialects are spoken in Nigeria. Due to the multilingual environment, Nigeria adopted English language as a lingua franca to facilitate cultural and linguistic unity in 1960 (Shaibu, 2013). According to Orisawayi (2007), English will continue to perform the utilitarian function assigned to it not only by official adoption but also by the necessities of the linguistic situation in Nigeria. Today, Nigeria is one of the largest English as a second language (ESL) nations in the world (Jowitt, 2009).

Since 1960, English has dominated all other languages in all sectors (Ogunmodimu, 2015), especially the education sector. The Nigerian education system is divided into primary, secondary, and tertiary education. There is also provision for

technical/vocational education at the secondary and tertiary level. Technical/vocational education is managed by the National Board for Technical Education. No matter the level or choice of education, the medium of communication remains English. The Ministry of Education at the federal, state, and local government level takes responsibility for implementing government policy on education. The role of English in the Nigerian education sector is outlined in the National Language Policy on Education (2004), which states that English is the only medium of instruction at all levels of education. The National Policy on Education gave English language the highest priority because it views English as the backbone of all other subjects taught in secondary schools. The English language curriculum at the primary and secondary level in Nigeria consists of the four language skills: reading, writing, listening, and oral English. At the senior school level, the National Curriculum for Senior Secondary Schools (2004) stated the following objectives:

1. to prepare students for higher education and for the world of work after graduation, and
2. to achieve a high level of English language proficiency for all students.

Both academic and extracurricular activities are conducted in English. Many students make a conscious effort to speak English without a Nigerian accent. In some private and federal schools, it is a punishable offense to speak another language within the school premises during school hours. Despite all of these requirements, the West African Examination Council (WAEC) has not recorded at least 50% passing scores in over a decade in the WASSCE. Student performance in the WASSCE has ranged

between 20% and 48% passing every year (Olayide, 2012). Stakeholders in education have attributed this trend to students' limited proficiency in English (Aina & Olanipekun, 2013; Fakeye, 2014; Ojo, 2010).

Problem Statement

The WASSCE is a standardized test administered by the WAEC in all English-speaking West African countries each year. The WASSCE assesses content skills in senior secondary school subjects. FYSSS are required to register and sit for eight subjects or a maximum of nine subjects. A minimum passing mark for each subject is 50%. A passing score in at least five subjects is required for admission into the university. These five subjects must include English language (for arts students) and English and mathematics for science students because they are compulsory subjects (WAEC, 2014). Table 1 shows the WAEC grading system.

Table 1

WAEC Grading System

Grades	Definition	Interpretation
A1	Excellent	80-100%
B2	Very good	70-79%
B3	Good	65-69%
C4	Credit	60-64%
C5	Credit	55-59%
C6	Credit	50-54%

Note. Source WAEC (2016).

The unsatisfactory performance of FYSSS in WASSCE subjects has been a source of concern to stakeholders (Adenipekun, 2016; Aina & Olanipekun, 2013; Eguridu, 2014). Researchers have tied this trend to students' limited proficiency in

English language (Aina & Olanipekun, 2013 and Fakeye, 2014). Analysis of WASSCE results between 2009 and 2016 confirmed that more than half of FYSSS fail the WASSCE every year (Adenipekun, 2016; Egede, 2014). The government, policymakers, school administrators, and parents are concerned about this lingering challenge in the Nigerian education sector. The Nigerian Union of Teachers and the Parent Teacher Association have called on the government to tackle the crisis. Table 2 presents WASSCE results between 2009 and 2016.

Table 2

WASSCE Results From 2009 to 2016

Year	Number of candidates	Candidates passed	Percentage passed
2009	1,373,009	356,981	25.99%
2010	1,351,557	337,071	24.94%
2011	1,540,250	465,123	29.53%
2012	1,102,608	355,266	32.22%
2013	1,034,263	639,760	38.30%
2014	1,552,758	529,425	31.28%
2015	1,593,442	616,370	38.68%
2016	1,605,248	621,554	38%

Note. Source WAEC, 2016.

In 2016, 758,849 candidates passed the WASSCE out of 1,605,248 candidates. This number represents 47% of all candidates who sat for the examination, but 9% of these candidates had their results withheld due to alleged examination malpractice (Adenipekun, 2016), which reduced the percentage passed to 38%. Fear of failure has caused some students to indulge in examination malpractice. According to Orgunsiji (2009), how Nigerian students would fare in their studies depends largely on their level

of proficiency in English. This is consistent with Komba and Bosco's (2015) assertion that the academic performance of students is influenced by their level of proficiency in the language of instruction (LOI). Not being proficient in the LOI is an impediment to learning because the teacher and the learner may not be communicating effectively (Komba and Bosco, 2015).

Fakeye (2014) investigated students' performance in content areas and language proficiency. Research findings showed a positive correlation between the two variables. Ojo (2010) and Tata (2014) found that the unsatisfactory performance of FYSSS is connected to limited comprehension and reading ability. However, Oribabor (2014) and Usman and Umar (2014) attributed the mass failure to inefficient English writing skills. In 2012, an appraisal by Bello and Oke of candidates' achievement in WASSCE among member states showed unsatisfactory performance of FYSSS in Nigeria. In the United States, a wide achievement gap exists the between ELLs and native English speakers (San, 2013). With the rapid growth of the ELL population in recent years, bridging the achievement gap between these two groups has become an issue of national concern among contemporary educational leaders (San, 2013; Wright, 2010).

Purpose of the Study

The purpose of this quantitative study was to investigate the relationship between English language proficiency (as measured by the IELTS grades) and academic achievement among FYSSS in four WASSCE subjects: English language, biology, government, and mathematics.

Research Questions and Hypotheses

The following research questions (RQs) and hypotheses were used to guide the study:

RQ1: What is the relationship between the English language proficiency grades of FYSSS as measured by IELTS and their English language test scores in WASSCE?

$H_0$1: There is no significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their English language test scores in WASSCE.

H_a1: There is a significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their English language test scores in WASSCE**.**

RQ2: What is the relationship between the English language proficiency grades of FYSSS as measured by IELTS and their biology test scores in WASSCE?

$H_0$2: There is no significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their biology test scores in WASSCE.

H_a2: There is a significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their biology test scores in WASSCE.

RQ3: What is the relationship between the English language proficiency grades of FYSSS as measured by IELTS and their government test scores in WASSCE?

$H_0$3: There is no significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their government test scores in WASSCE.

H_a3: There is a significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their government test scores in WASSCE.

RQ4: What is the relationship between the English language proficiency grades of FYSSS as measured by IELTS and their mathematics test scores in WASSCE?

$H_0$4: There is no significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their mathematics test scores in WASSCE.

H_a4: There is a significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their mathematics test scores in WASSCE.

Theoretical Foundation

In the theory of second language acquisition, Cummins (1979) posited that there is a connection between learners' language proficiency and academic performance. Cummins coined the terms basic interpersonal communicative skills (BICS) and cognitive academic language proficiency (CALP). BICS refers to language required to communicate in social situations and is cognitively undemanding because it is used in informal settings. Cummins (1981) showed that it takes approximately 1 to 3 years for learners to develop BICS when they have enough exposure to the second language. CALP is the ability to manipulate language with the use of abstractions in an advanced manner, which is needed in an academic setting because it is the ability the learner

possesses to think and use a language within the learning environment. Cummins's 1981 research indicated that K-12 students require about 5 to 7 years to acquire CALP in the second language on the condition that the learner has native language literacy. Learners without a strong native language literacy will require 7 to 10 years. Cummins's theory provided the foundation for the current study, in which I assumed that a certain CALP ability is needed to excel in content areas that Nigerian students might not all possess.

Nature of the Study

A correlational design was used for this study because the purpose was to examine the relationship between two variables: IELTS grades and WASSCE scores. More specifically, the purpose was to examine the relationship between English language proficiency as measured by the IELTS grades and academic achievement of FYSSS in four WASSCE subjects: English language, biology, government, and mathematics.

A correlational design is a nonexperimental design used to determine whether a relationship between variables exists. The correlational design provides empirical evidence suggesting there is a connection between variables (McMillian & Schumacher, 2006). Archival data of FYSSS were collected from two government secondary schools located in one of the six major cities in South East Nigeria. For ethical reasons, I referred to the city as Green Town. For the same reason, I renamed the two selected schools as South East Secondary School (SESS) and North East Secondary School (NESS). Data included demographic information of FYSSS, their IELTS grades, and their test scores in four WASSCE subjects: English language, biology, government,

and mathematics. A regression analysis was used to analyze the variance of scores of FYSSS.

Definitions

English language learners (ELLs): Students who speak a language other than English and who must acquire English proficiency to succeed in school (National Center for Education Statistics, 2010).

Language proficiency: The ability of an individual to speak or perform in an acquired language (American Council on the Teaching of Foreign Languages, 2008).

International English Language Testing System (IELTS): An international standardized test of English language proficiency established in 1989 for nonnative English language speakers; the IELTS is one of the most recognized and valid English proficiency tests in the world (British Council, 2015).

West African Senior School Certificate Examination (WASSCE): A standardized test administered in all anglophone West African secondary schools. It is administered by the West African Examinations Council (WAEC). The school-leaving qualification obtained after the examination is called the West African Senior School Certificate (WASSC). A passing mark in at least five subjects out of nine qualifies candidates to enter the university. These subjects must include English language for arts students and English language and mathematics for science students. A test report certificate is issued to all candidates after 6 months irrespective of their performance (WAEC, 2016).

Assumptions

I assumed that all FYSSS who participated in the test were emotionally and psychologically ready to take part in the test and that the data provided by the school administrators were correct.

Scope and Delimitations

I focused on the relationship between English language proficiency and academic achievement of FYSSS. The research was delimited to two secondary schools in Green Town. The study was also limited to the collection of participants WASSCE scores, IELTS grades, and demographic data (gender, age, ethnicity, and name of school) from SESS and NESS. Collection of demographic data was for purposes of defining and describing the research participants. The results of the study are not generalizable to primary schools and junior secondary schools.

Limitations

One limitation was incomplete data. Out of the 285 participants who were supposed to participate in the research, 60 FYSSS had incomplete results. Some of them had missed the IELTS tests, and others had missed some of the WASSCE subjects. Complete data sets of 225 FYSSS were available.

Significance

This study addressed a problem in the Nigerian education sector. Results informed stakeholders and policymakers in the education sector about the root causes of limited proficiency in English among FYSSS in Nigeria. Findings could also provide a basis for strategies to improve English language proficiency of FYSSS. Possible positive

measures are reviewing the current school language policy and eliminating unstructured bilingual language practices in the classrooms. Olagbaju (2014) stated that the vague nature of the present language policy makes implementation difficult. Olagbaju called for clarity of policy as a first step toward improving English language proficiency of students.

Summary

Many nations have adopted English as an official language. Having just a BICS is not enough to comprehend and perform well in academic content areas. Several empirical studies have shown that being proficient in English is a necessity for students to understand other school subjects (Abedi & Herman, 2010; Mcleman, Fernandes, & NcNulty, 2012; Starcher & Proffitt, 2011). In Nigeria, scholars have identified weak comprehension, reading, and writing skills as the major cause of limited proficiency in content areas (Ojo, 2010; Olagbaju, 2014; Usman & Umar, 2014). I investigated the relationship between FYSSS English language proficiency and their academic achievement as measured by scores in WASSCE and IELTS grades.

Chapter 2: Literature Review

The Nigerian education sector has faced several challenges that have affected students' performance. One of these challenges has been the continual weak performance of FYSSS in WASSCE. Unsatisfactory WASSCE results have been a source of great concern to stakeholders in the education sector for over a decade (Olayide, 2012). For this study, I investigated the relationship between FYSSS proficiency in English language and academic achievement in the WASSCE. The review of literature includes discussion of research studies on English language proficiency; the role of first language in acquiring second language; oral, reading, and writing skills; and empirical evidence on the connection between language proficiency and academic achievement. The literature review is organized under the following headings: theoretical foundation; importance of understanding the language of instruction for ELLs; reading, writing, oral skills, and academic achievement; the effect of first language on learning second language; and empirical evidence on the relationship between English language proficiency and academic achievement.

Literature Search Strategy

I reviewed the literature available in books, published doctoral dissertations, peer reviewed/academic journals, archival information from relevant authorities, and conference proceedings published from 2000 until the time of the study. The Walden University library, and other online digital libraries such as Education Resources Information were used for the review. Key words included *English language proficiency*, *academic achievement*, *relationship*, and *senior secondary school students*.

Theoretical Foundation

Cummins's (1979) theory of second language acquisition highlights the different lengths of time for people to acquire conversational fluency compared to academic proficiency. BICS can be acquired within 1 to 3 years of initial exposure to the second language, whereas CALP can be acquired between 5 and 7 years if the learner has a strong native language literacy. Learners without strong native language literacy may require up to 10 years. According to Cummins (1981), proficiencies for cognitively demanding tasks such as content learning, problem-solving, abstract thinking, and literacy are present in every language. With the developmental interdependence hypothesis, Cummins (1979) posited that competence in a second language is a function of the type of competence an individual developed in the first language regardless of whether the languages are distant or similar typologically and orthographically. Cummins explained that distant language pairs such as Japanese and English or Vietnamese and English have also shown high interlanguage correlations. Cummins (2000) argued that about 150 empirical studies in the past 30 years have shown the positive effects of linguistic, cognitive, or academic growth of ELLs when they acquire initial literacy in their home language, citing Skutnabb-Kangas, Tove, and Toukomaa's (1976) research to strengthen this theory. Skutnabb-Kangas et al.'s study on Finnish immigrant children in Sweden indicated that Finnish immigrant children often appeared to be fluent in both Finnish and Swedish but showed levels of verbal academic performance in both languages considerably below grade or age expectations. Cummins (2000) referred to this as the common underlying proficiency (CUP). Figure 1 shows elements of CUP.

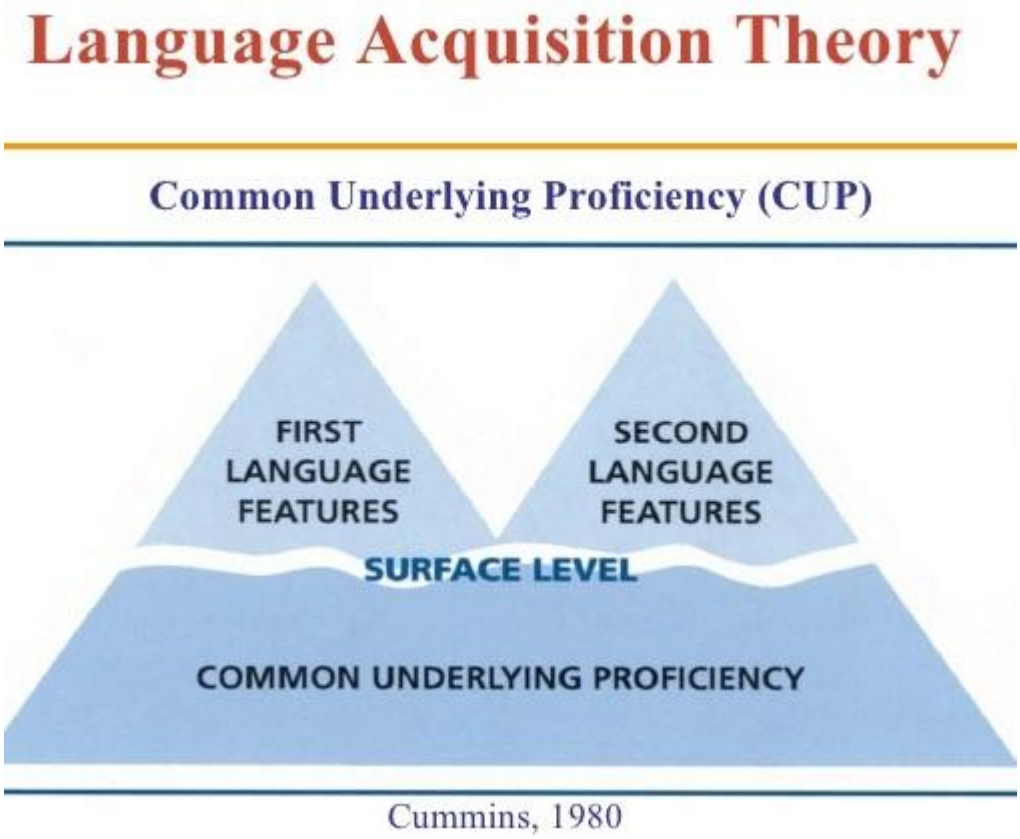

Figure 1. Common underlying proficiency. From Cummins (1980), the Construct of Language Proficiency in Bilingual Education. Reprinted with permission.

Cummins (2000) referred to Biber's (1986) and Corson's (1995) research to further strengthen the BIC and CALP theories. Corson made a distinction between lexical differences in typical conversational interactions in English compared to academic or literacy-related uses of English. Collier's (1989) research also gave credence to Cummins's (1979, 1981) BICS and CALP theories. Collier opined that a learner may appear to be fully proficient and fluent in a second language, but in the academic setting the learner may still be struggling with a significant language gap.

Vincent's (1996) ethnographic study on Salvadorean students supported Cummins's theory. Vincent's study revealed that learners' language attainments were largely

deceptive. Learners were less proficient than they appeared because they had no difficulties "to converse on a few every day, frequently discussed subjects," (p. 69) but they lacked the required proficiency in academic language. Riches and Genesee (2006), and Robelle and Ronald (2016) also supported Cummins's (1979) theory. Reese, Garnier, Gallimore and Goldenberg (2000), discovered that a combination of native language literacy and oral English ability when the student entered schools predicted better English literacy 6 to 8 years later. Although the terms BICS and CALP are still widely used, Cummins (2000) coined the terms *conversational language* and *academic language* to represent BICS and CALP respectively.

In Nigeria, students learn English as a second language. This means that the level of students' literacy in the first language will influence their BICS and CALP abilities. Students who are literate in the first language are likely to have a higher proficiency in English and perform better in other content areas. Failure to recognize the BICS/CALP (conversational/academic) distinction may result in wrong assessments of ELLs. According to Baker (2011), "the more developed the first language, the easier it will be to develop the second language" (p. 169). The research questions for the current study were based on Cummins's theory and guided the investigation of the relationship between the two variables.

Importance of Understanding the Language of Instruction for ELLs

Banga (2016), Oribabor (2014), and Wilkinson and Silliman (2008) argued that students' success in school depends largely on their proficiency in the language of instruction (LOI). If students' language proficiency is low, they are likely not to perform

well in other school subjects (Orgunsiji, 2009). Avary and Carola (2008) asserted that low levels of academic English language proficiency can be an obstacle to academic success and full participation in academic content. Schouten (2009) maintained that ELLs require a certain level of proficiency in the LOI along with cognitive skills to perform well in academics. This was consistent with Maleki and Zangani's (2007) argument that the major challenge ELLs have is grasping the contents and concepts of other subjects taught in the LOI. Research findings have shown that ELLs have performed below their English-proficient peers in all content areas, especially in the subjects that are high in English language demand (Aberdi, 2010). In 2010, the Ghana Education Service stated that the English proficiency of primary and secondary school students in Ghana was very low and that this explained their continuous unsatisfactory performance in national examinations. Similarly, Theresa and Irvine (2015) stated that weak literacy achievement among ELLs has contributed to their high dropout rates, poor job prospects, and high poverty rates.

In the United States, the No Child Left Behind Act (NCLB, 2001) required states to conduct annual statewide English language proficiency assessments for ELLs in Grades K through 12 in the language domains of listening, speaking, reading, and writing to determine their level of proficiency. However, the continual unsatisfactory performance of K-12 students in the National Assessment of Educational Progress test and the American College Test led to some states to take extra measures (Dylan, 2010). In a bid to improve the academic achievement of students at state and national levels, the Mississippi Board of Education adopted the Common Core State Standards (CCSS) in

2010. In that same year, the Working Group (2010) on ELL policy recommended that students' English language proficiency be taken into account when holding schools accountable for students' academic achievement. The National Center for Educational Statistics (2011) stated that mathematics assessments in the United States required English proficiency because learners with weak English skills performed below students who were proficient in English. The National Center for Educational Statistics (2014) confirmed that about 51% of ELLs who spoke English with difficulty failed to complete high school compared to 31% of students who came from language-minority homes but had no difficulty speaking English, and only 10% of monolingual English-speaking students. Inadequately developed English language skills is the reason for lower GPAs, repeating grades, and low graduation rates (Suárez-Orozco, Suárez-Orozco, & Todorova, 2008). According to Abedi and Herman (2010), students with weak English language proficiency cannot perform well in assessments administered in English. This is in line with August and Shanahan's (2006) assertion that less developed academic English proficiency is related to lower performance on standardized tests of academic content area knowledge.

Fredua-Kwarteng and Ahia (2015) revealed that language plays a central role in mathematics teaching and learning in Ghana. This was consistent with Parker, Louie, and O'Dwyer's (2009) assertion that proficiency in English is essential for mathematics. Improving English language proficiency of nonnative English-speaking students improves their mathematics performance when English is their language of instruction and assessment (Essien & Setati, 2007). Solórzano (2008) observed that limited

vocabulary, reading, and grammar skills contributed to weak performance in mathematics. In the same vein, Prescott and Hellstén (2005) noted that language-related difficulties impose time pressures in the sense that study and assignment preparation takes longer for ELLs. Mcleman et al. (2012) stated that learning school mathematics cannot be separated from language. This confirmed Barwell's (2010) assertion that sorting out the mathematics involves sorting out the language of the question for ELLs. Gran (2007) lamented the limited English language proficiency of secondary school students in Tanzania. Gran observed that about one third of secondary school students in Tanzania were still at the picture book level because only 10% of students could read nonsimplified text with ease. Trice (2007) also reported that weak English language skills were perceived as one of the reasons why international students were isolated from local students and faculty members. The reports of scholars and stakeholders in the educational sectors suggested that ELLs in Nigeria are faced with similar challenges. Results of the current study indicated a connection between the English language proficiency of FYSSS and their academic achievement.

Writing, Reading, Oral Skills, and Academic Achievement

Oral and writing proficiency in English is very important to literacy development. The performance gap between ELL and non-ELL students is lower in mathematics than in reading. This is because language proficiency plays a significant role in this gap. Minor changes in the wording of content-based assessments will raise ELLs' performance (Abedi, 2008). Starcher and Proffitt (2011) added that reading and processing texts read is a struggle for many ELLs. During oral and reading

comprehension, fluency and decoding skills interact in different ways. Being able to decode words easily is necessary for fluency and comprehension. This explains why English learners are not achieving parity with their English-speaking peers in reading comprehension proficiency (Becker & Kim, 2014). Orisawayi (2009) and Bodunde & Akeredolu-Ale (2010) stated that although the mastery of all components of language is very essential, vocabulary is most important for ELLs because it is multifaceted. ELLs encounter problems in their learning because they generally see unknown words as the first problem to overcome (Saengpakdeejit, 2014). Arsad, Bauniyamin, and Manan (2014) opined that ELLs who have limited English language proficiency will have difficulty understanding the lessons or doing assignments in English. Language factors have a significant impact on ELLs' assessment outcomes (Solano-Flores and Li, 2008).

Chou (2011) study which focused on the effects of vocabulary knowledge and background knowledge in an English as a second language (ESL) reading comprehension test revealed that ELLs who received a list of vocabulary to study performed better in the reading comprehension test than those who relied on background knowledge. Abedi (2010) analyzed the performance of ELLs and non-ELLs in several content areas. Results indicated that the higher the level of language demand of the test items, the higher the performance gap between the two groups. O'Connor's (2010) study on the connection between reading fluently and reading comprehension, revealed that very often struggling readers disengage from reading, which compounds the existing problem of weak reading ability. Cain and Oakhill (2011) supported this view when they stated that reading influences vocabulary development and this is marred by ELLs failure to read regularly.

Good, Simmons, and Kame'enui's (2001) study indicated a strong positive correlation between reading comprehension on standardized tests and oral reading fluency. They explained that failure to understand the context of a text among ELLs could compromise their fluency even if their decoding skills are automatic. Francis and Rivera (2006) gave credence to Good et al. (2001) assertion, as they argued that English learners may show proficiency in reading rate but may still lack the lexical, syntactic, and semantic knowledge for comprehending texts. Naroth's (2010) study revealed that mathematics teachers in South Africa limited their discussion during lessons because of language proficiency level of their students. Students had difficulty understanding mathematics lessons with high language demand.

In 2013, the U.S. Department of Education published a report from the National Association of Adult Literacy (NAAL) which stated that over 30 million adults from age 16 and above needed help to complete a job application. The report continued to explain that weak literacy skills can impact peoples' perception of job opportunities. According to NAAL, 57% of ELLs adults with disabilities believe that job opportunities are limited due to their lack in reading ability. Furthermore, a 2010 report from the U.S. Department of Education stated that without strong literacy skills, post-secondary college and employment options will be limited. The report added that lack of reading skills has been an obstacle for ELLs with and without disabilities as 43% live in poverty, 50% have higher hospitalization rates due to an inability to understand health information, and 1 in 5 is unable to access or use the Internet. This strongly underscores the role of English language proficiency in ELLs academic achievement.

These empirical evidences on the role of writing, reading, oral skills and its link to academic achievement has given credence to results of this research study. Results show that weak comprehension, writing and oral skills of FYSSS in Nigeria affects their academic achievement.

Effect of First Language on Learning English as a Second Language

The developmental interdependence hypothesis of Cummins (1979) posited that competence in a second language is a function of the type of competence already developed in the first language. Cummins (2000) maintained that first language should not be neglected for second language learners to reach sufficient levels of proficiency. Dawn (2007) supported this assertion when he stated that mastering of complex and abstract concepts in an inadequately known second language is a serious problem but once mastered in the first language, they transfer readily and are available for use in intellectually demanding contexts. The first language is positively correlated to the development of literacy in the second language. Several research studies have continued to demonstrate the importance of building on children's first language as a resource for developing English proficiency (August & Shanahan, 2006; Collier & Thomas, 2004). This is because for ELLs, skills obtained in the first language are a bridge to learning the English language (Orisawayi, 2009). The National Early Literacy Panel Report (2008) stated that tapping into first-language literacy is a good foundation for ELLs as first-language oral proficiency influences developmental patterns in second language speech discrimination and production.

There is strong evidence that first-language literacy is connected to reading strategies, comprehension, spelling, and writing (Riches & Genesee, 2006). August and Shanahan (2006) agreed with Riches and Genesee's assertion that students who develop literacy skills in their first language, transfer those skills to the English language. A combination of native language literacy and oral English ability when the student entered school predicted better English literacy 6-8 years later (Dixon, Zhao, Shin, Wu, Su, Burgess-Brigham, Gezer, and Snow, 2012).

Jiang (2011) maintained that even though differences exist in first and second language reading, an ELL who has good educational background in first language can apply reading skills and strategies developed in first language to the second language. Contributing to this, Nemati and Taghizade (2013) added that ELLs have access to their first language and often use it as a reading strategy. ELLs use their first language strategies in writing in second language because of the similarities. If an ELLs knowledge in English language is not enough to express a given idea, the ELL will rely on the first language (Karim and Nassaji 2013).

Time invested in developing first language literacy, works to the advantage of second language literacy achievement (Klein, 2003; Makalela, 2005; Prinsloo, 2007). The fact that Nigeria is both multi-ethnic and multi-lingual makes literacy in first language a challenge. Most Nigerians speak Pidgin English (a mixture of English and Creole language) outside the school and office environments. Pidgin English dominates because it is the easiest way to communicate with people from other ethnic groups, irrespective of their academic background. Ladi (2015) concluded that the emergence and interference

of Pidgin English on other languages will have adverse effects on the educational sector. Very little research has been done on the link between English language proficiency and academic achievement of ELL in Nigeria. This explains why this present research became imperative.

Empirical Evidence of the Relationship Between English Proficiency and Students' Academic Achievement

Several research studies have revealed that English language proficiency is a strong predictor for academic success (Arsad et al. 2014; Adbirahman, 2013). Fakeye and Ogunsiji's (2009) research on English language proficiency as a predictor of academic achievement among the ELL students, examined the extent to which senior secondary school students' English language proficiency affects their overall academic achievement in Oyo and Osun states of Nigeria. The results of their study showed a significant positive relationship between students' academic performance and their English language proficiency. Aina and Ogundele (2013) study examined the relationship between students' English language proficiency and their academic performance in science and technical education in Nigeria. Results of research showed that the higher the proficiency of students in English language, the higher their scores in other content areas. In their study on learning mathematics in English at Basic Schools in Ghana, Fredua-Kwarteng and Ahia (2015) research results indicated that learners with limited English background did not perform well in mathematics. Banga (2016) study of Tanzanian students on their mastery of LOI and its influence on their academic achievement also revealed that limited proficiency of Tanzanian students in English language is connected to their

extreme weak performance in other content areas. Similarly, Garrouste (2011) research study, which focused on the role of language proficiency on mathematics achievement among Namibian sixth grade language learners, concluded that ELLs performed better in mathematics when taught in their native language than when taught in English. This confirmed Solórzano (2008) study, which suggested that low language skills affect mathematics scores. Anthony and Setati (2007) earlier study, which focused on the relationship between mathematics and English language, revealed that English language proficiency is a vehicle to learn mathematics. Kinyanduka and Kiwara (2013) survey observed that 69.5% of Tanzanian secondary school students do not follow lessons taught in English and that 71.4% of students believed it was better for teachers to use both Swahili and English during lessons. Kinyanduka. and Kiwara (2013) research results gave credence to Brock-Utne (2005) comparative study on the languages of instruction (English and Swahili) in two secondary schools in Tanzania.

Modada and Masha's (2015) study which investigated the impact of English language proficiency on learners' academic achievement in mathematics, economic and management science and natural science in South Africa, showed a weak but positive relationship. This confirmed result of research conducted by Wilson and Komba (2012) on the link between English language proficiency and academic performance of Morogoro Urban District students in Tanzania, where the results indicated a positive but weak relationship.

Robelle and Roland's (2015) study on the relationship between the English language proficiency and academic performance in science, mathematics and English

language among Grade 8 students of Philippine Science High School showed a significant positive relationship between the two variables. Findings of Arsad et al. (2014) study, which investigated students' English language proficiency and its impact on the over-all performance of a bachelor level engineering programme at a university in Malaysia, also concluded that there was a significant positive relationship between the two variables. A study in Iran by Sadeghi, Kashanian, and Maleki's (2013) on English language proficiency as a predictor of academic achievement among medical students in their national comprehensive basic science examination, indicated that English language proficiency significantly influenced academic achievement of medical students.

O'Connor and Lussier (2011) study suggested that ELLs performed lower than their peers because their limited English proficiency was a barrier to understanding mathematics word problems. Adding to this, Kempert (2011) explained that ELLs ability to solve mathematics word problems provided an accurate predictor for measuring individual learners' achievement progress in mathematics. Analyses of 2011 study by Han showed that weak language proficiency among ELLs was the major challenge to their success in their high school subject-area courses and in the Ontario Secondary School Literacy Test. A study by Kong and Williams (2012) indicated that English language proficiency scores are significantly predictive of academic reading test scores for K–12 ELL students. According to Oakeley and Urrabazo (2001), ELLs' level of English proficiency on the Woodcock-Muñoz language survey in Texas significantly correlated with their scores on statewide assessments on writing, reading, and mathematics. A 2006 Colorado study also reported similar results (Mahon, 2006). The

study covered 200 ELLs in 4th and 5th grade in 4 elementary schools. In 2008, Aberdi analyzed post NCLB data and results of analyses showed a similar trend present in the pre-NCLB data. The results proved that ELLs performed lower in other content areas than non-ELLs.

The relationship between English language proficiency and mathematics achievement of ELLs has been thoroughly researched in the United States (Adams, Beal & Cohen, 2010; Brown, Cady, & Lubinski, 2011). Baltes, Henry and Nistor (2014) study examined the relationship between mathematics score and English language proficiency among ELLs at a south Florida elementary school. The results from the study indicated that there is a positive relationship between the investigated variables. This strengthens results of earlier research in this area.

There are lots of evidences from empirical studies that English proficiency plays a crucial role in academic achievement (Berry, 2011; Chen & Li, 2010). Empirical evidences from Ghana, Nigeria, South Africa, Tanzania, Namibia, Iran, Philippines, Canada among others have revealed that ELLs academic performance depended largely on their level of proficiency in English language. This research study has contributed to the growing body of research on the relationship between English language proficiency and academic achievement of ELLs.

Summary and Conclusions

In this chapter, I explained Cummins (1979, 1981) theory on second language acquisition and its link to FYSSS English language proficiency and academic achievement. This clarified my decision to use Cummins theory as the theoretical

foundation for this study. Studies on the importance of understanding LOI for ELLs; the effect of first language on learning English as a second language; and the effect of weak writing, reading, and oral skills on academic achievement were part of the literature review. Empirical evidences on the relationship between English language proficiency and academic achievement of ELLs from different countries in Africa, Asia and North and South America were also discussed. This present research study has addressed the gap in literature, as this topic has not been extensively researched in Nigeria. The next chapter discussed the research design, rationale for design and the research methodology.

Chapter 3: Research Method

The purpose of this quantitative study was to investigate the relationship between English language proficiency as measured by the IELTS grades and academic achievement of FYSSS in four WASSCE subjects: English language, biology, government, and mathematics. In this chapter, I describe the research design and rationale, the methodology, threats to validity, and ethical procedures.

Research Design and Rationale

According to Creswell (2009), a variable is an attribute of an individual that can be measured and varies among people being studied. In this study, FYSSS grades in IELTS was the independent variable while their test scores in WASSCE subjects (English language, biology, government, and mathematics) were the dependent variables.
A correlational (nonexperimental) design was used to examine the relationship between variables. The correlational design provides empirical evidence suggesting how strongly two or more variables are related (McMillian, 2006).

Methodology

In this section, I discuss the population, the selection of the sample, the procedure for recruitment, participation, and data collection. Information on archival data, instrumentation, and operationalization of constructs is presented. A quantitative research study requires distinctive, numerical data to enable the researcher to analyze occurrences and numerical associations (Boeije, Wesel, & Slagt, 2014). The setting of this research was South East Nigeria. I chose two secondary schools in one of the six major cities in South East Nigeria. For ethical reasons, I referred to the city as Green Town. There are

eight government secondary schools in Green Town, but only the two most populated schools were chosen because of the need to have a sample that was representative of the entire population. I renamed the two schools SESS and NESS.

Population Selection

The population of the two selected schools in Green Town was 1,850 students. SESS and NESS have a population of 900 and 950 respectively. Girls make up 52% of the total population. The age of the students ranged between 11 and 19 years. Ten ethnic groups were represented in this population from the six geopolitical zones of Nigeria: South-East, South-South, South-West, North-Central, North-East, and North-West. The entire South-East Zone is made up of only one ethnic group known as the Igbos. Students from the Igbo group made up 80% of the population, 10% of the population were from South-South Nigeria with diverse ethnic groups (Ijaws, Efiks, Ibibios, Orobos, and Bokis), and the remaining 10% were students from other parts of Nigeria. Ethnic groups represented were Yoruba, Hausa, Fulani, and Benin.

Sampling and Sampling Procedures

According to Patton (2002), determining the sample size requires reflection on the purpose of the study and the time and resources available to the researcher. The sample was limited to only FYSSS. This group of students were between the ages of 17 and 19 years. The minimum number of participants required was determined by an a priori power analysis (Faul, Erdfelder, Buchner, & Lang, 2009). The standard inputs (Cohen, 2013) of a 0.30 effect size, 0.05 alpha, and 0.80 power were selected. Because there was reason to assume a positive correlation, the level of significance was designated as two-

tailed rather than one-tailed. Based on these inputs, G*Power indicated an a priori minimum sample size of 84 participants for a linear regression based on correlation. The sample size for this study was 225.

Archival Data

One of the data sets used for this study was the 2017 WASSCE results. WAEC administers the test, and the results are released to schools after several weeks. WASSCE is a confidential document, and one can gain access to it only through written approval from the school principal. De-identified archival IELTS grades as well as WASSCE results in the four subjects (English, biology, government, and mathematics) were retrieved for the 105 (SESS) and 120 (NESS) FYSSS. Both data sets were matched with participants' numbers.

Instrumentation and Operationalization of Constructs

IELTS was administered internally by SESS and NESS. IELTS was taken by FYSSS after their WASSCE examination in June 2017.Although WASSCE is a standardized national examination taken in Nigeria (and in all anglophone West Africa), IELTS is an international standardized test of English language proficiency established in 1989 for nonnative English speakers.

IELTS is one of the internationally most recognized and valid English proficiency tests (British Council, 2015). It was created to test the reading, listening, writing, and speaking ability of ELLs. It is made up of various question types, which include short answer, multiple choice diagram labeling, matching, and classification. The grades range from 1 (lowest) to 9 (highest) and are reported in whole and half bands for each of the

tests and then the overall grade (see Table 3). The validity and reliability of IELTS has been established over time since its inception in 1989 through rigorous research, development, and periodic reevaluation (Uysal, 2010). Since 1995, IELTS has been involved in an extensive revision project, which has produced some valuable research insights into its predictive validity (IELTS: Information for candidates, 2011).

Table 3

IELTS Abilities Based on Band Scores

Type	Score
Expert	9
Very good user	8
Good user	7
Competent user	6
Modest user	5
Limited user	4
Extremely limited user	3
Intermittent user	2
Nonuser	1

Note. Source IELTS, 2015

New materials are pretested on representative groups of test takers from around the world who are preparing to take an IELTS test. The validation and data services team at Cambridge English Language Assessment collates and analyzes data to determine how difficult the items are and how well they distinguish between stronger and weaker test takers. The team can then make informed decisions on whether materials can be accepted for use in IELTS tests (IELTS Guide, 2015). IELTS is a task-based test that reflects current thinking and theory about communicative language ability and English for specific purposes (IELTS Guide, 2012). Over 3,000 educational institutions accept the

IELTS in the United States. In 2014, over 2.5 million IELTS tests were taken in more than 140 countries. Internationally, IELTS is administered by the Cambridge Local Examinations Syndicate. The IELTS is used to test English language proficiency all over the world. Educational institutions, immigration authorities, employers, and professional bodies are part of the 7,000 institutions that make use of the IELTS. Before now, the IELTS was only accepted by universities in Australia, Canada, New Zealand, and the United Kingdom. In the current study, the proficiency level of FYSSS was measured using the IELTS grades to compare their performance in four WASSCE subjects: English language, biology, government, and mathematics.

Data Analysis Plan

Hatch (2008) described data analysis as a "systematic search for meaning through organizing and interrogating data in ways that allow researchers to see patterns, identify themes, discover relationships, develop explanations, make interpretations, mount critiques, or generate theories" (p. 148). I used the Statistical Package for the Social Sciences (SPSS) Version 24 to analyze my data. The research questions and hypotheses that were tested were the following:

RQ1: What is the relationship between the English language proficiency grades of FYSSS as measured by IELTS and their English language test scores in WASSCE?

$H_0$1: There is no significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their English language test scores in WASSCE.

H_a1: There is a significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their English language test scores in WASSCE**.**

RQ2: What is the relationship between the English language proficiency grades of FYSSS as measured by IELTS and their biology test scores in WASSCE?

H_02: There is no significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their biology test scores in WASSCE.

H_a2: There is a significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their biology test scores in WASSCE.

RQ3: What is the relationship between the English language proficiency grades of FYSSS as measured by IELTS and their government test scores in WASSCE?

H_03: There is no significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their government test scores in WASSCE.

H_a3: There is a significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their government test scores in WASSCE.

RQ4: What is the relationship between the English language proficiency grades of FYSSS as measured by IELTS and their mathematics test scores in WASSCE?

H_04: There is no significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their mathematics test scores in WASSCE.

H_a4: There is a significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their mathematics test scores in WASSCE.

A regression analysis was conducted to determine the variance in academic achievement of FYSSS. A regression analysis is a statistical tool used for the investigation of relationships between variables.

Threats to Validity

Mills (2002) explained that validity "ensures that the data collected accurately gauges with what the researcher is trying to measure" (p. 175). Internal validity is the extent to which variables being studied influenced the result without interference of other variables not being studied. Internal validity is essential because the conclusions should **accurately reflect** what the researcher studied. External validity refers to the degree to which the results of an empirical investigation can be generalized to and across individuals, settings, and times. Generalizing across populations occurs when a research finding works across lots of people, even those not represented in the sample (Fraenkel & Wallen, 2006).

Standardizing conditions under which the research study will be carried out is intended to control threats to validity. The fact that IELTS is a standardized instrument mitigated threats to instrumentation. In addition, the test was administered in participants' schools (a very familiar environment) by their teachers. The location where the test was administered also eliminated threats. IELTS was taken in two days, which minimized boredom and tiredness. All FYSSS in the two schools were allowed to participate in the test, and their data were retrieved.

Ethical Procedures

For a research study to be valid, the researcher must observe ethical standards while conducting the research (Elliot, 2005). A researcher conducting a study that involves human subjects has an inherent responsibility to protect and inform participants (Bloomberg & Volpe, 2012). I took the following steps to ensure that participants rights are protected throughout the research period.

1. I adhered to the moral and ethical guidelines outlined by U.S. Federal regulations and the Institutional Review Board (IRB). I completed all necessary paperwork from the Institutional Review Board.
2. I submitted a letter of purpose/permission to the school principals of SESS and NESS in person and obtained a written approval from them.
3. I held a meeting with the vice principal (academic), vice principal (administration) and the dean of studies of NESS and SESS within their separate school premises. The essence was to ensure that they understood my intentions clearly.
4. A researcher's methodology and procedures to gather data can inflict risk or harm on the participants (Thomson, 2013). Participants for this study are young and should be protected. To protect participants, I did not collect data from them directly. IELTS test was given to FYSSS as part of their regular schooling and I received the test scores as de-identified archival data from the vice principals.

5. Data was treated with utmost confidentiality. Even though participants were de-identified, I ensured that data collected was not be passed unto another person.
6. Data collected was not used for any other purpose except for reason for which it was collected.
7. All materials have been kept safe and will be destroyed after 5 years from date of collection.

Summary

Creswell (2012) defined research as a process of steps used to collect and analyze information to increase our understanding of a topic or issue. In this correlational study, I collected two separate archival data sets from NESS and SESS for 225 FYSSS. IELT grades, WASSCE scores in four subjects and background information of FYSSS made up the data. In chapter four, I will report the results for each WASSCE subject. According to Creswell (2012), research suggests improvements for practice. Armed with research results, teachers and other educators can become more effective professionals. This effectiveness translates into better learning for the students.

Chapter 4: Results

The purpose of this quantitative study was to investigate the relationship between English language proficiency as measured by the IELTS grades and academic achievement of FYSSS in four WASSCE subjects: English language, biology, government, and mathematics. In this chapter, I discuss the data collection process, data analysis, and results. The results of regression analyses are presented in four separate sections. Each section represents one of the four research questions.

RQ1: What is the relationship between the English language proficiency grades of FYSSS as measured by IELTS and their English language test scores in WASSCE?

$H_0$1: There is no significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their English language test scores in WASSCE.

H_a1: There is a significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their English language test scores in WASSCE**.**

RQ2: What is the relationship between the English language proficiency grades of FYSSS as measured by IELTS and their biology test scores in WASSCE?

$H_0$2: There is no significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their biology test scores in WASSCE.

H_a2: There is a significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their biology test scores in WASSCE.

RQ3: What is the relationship between the English language proficiency grades of FYSSS as measured by IELTS and their government test scores in WASSCE?

$H_0$3: There is no significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their government test scores in WASSCE.

H_a3: There is a significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their government test scores in WASSCE.

RQ4: What is the relationship between the English language proficiency grades of FYSSS as measured by IELTS and their mathematics test scores in WASSCE?

$H_0$4: There is no significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their mathematics test scores in WASSCE.

H_a4: There is a significant relationship between the English language proficiency grades of FYSSS as measured by IELTS and their mathematics test scores in WASSCE.

Data Collection

I received institutional review board (IRB) approval from Walden University on October 18, 2017 (IRB approval number 10-18-17-0354752). I also obtained written approval from principals of SESS and NESS to use their schools in my study. By October 27, 2018, I had received test scores from both schools. To protect the confidentiality of the participants, I had no personal contact with them. I signed an agreement with both schools that data collected would be used only for research purposes as stated in my application letter.

The initial plan was to collect IELTS scores and WASSCE scores of 285 FYSSS. SESS was to provide data for 150 FYSSS, while NESS was to provide data for 135 FYSSS. At the time of data collection, only 120 FYSSS from NESS had complete results. Reports from the school authority indicated that 10 FYSSS had missed the IELTS test, which was administered after the WASSCE examination. Another 20 FYSSS had missed one of the following WASSCE subjects: English language, biology, government, and mathematics. At the SESS, only 105 data sets from 135 FYSS were complete because 12 FYSSS missed the IELTS test and another 18 FYSSS missed at least one of the WASSCE subjects. The final sample from both schools was 225, which was more than the minimum required sample size of 84 for the regression analysis with four independent variables (see Cohen, 2013). The data I received were de-identified. Each student's score in IELTS, WASSCE, and demographic information was matched with numbers. There are eight government secondary schools in Green Town, and the total population of all FYSSS was 1008. The sample used for the present study was representative because it was 2 times larger than the recommended sample size for a regression analysis.

Results

Using SPSS Version 24, I conducted analysis of the demographic information received from NESS and SESS. In both schools, girls outnumbered boys (see Table 4). Students from both schools were within the same age range (see Table 5). South East made up 80% of the FYSSS population, 10% of the population were from South-South, and the remaining 10% of FYSS were from South-West, North-West, and North-Central.

Table 4

Population and Gender of Participants

Gender	Frequency	Percent	Valid percent
Female	127	56.4	56.4
Male	98	43.6	43.6
Total	225	100	100

Table 5

Age of Participants

Age	Frequency	Percent	Valid percent
17	104	46.2	46.2
18	102	45.3	45.3
19	19	8.4	8.4
Total	225	100	100

I also analyzed the following assumptions in linear regression using SPSS: linear relationship, multivariate normality, multicollinearity, no auto-correlation, and homoscedasticity.

Linear Relationship

Linear relationship is a relationship of direct proportionality. Any given change in the independent variable also results in a corresponding change in the dependent variable. According to Salkind and Green (2011), if X and Y are normally distributed, then the relationship is linear. Linearity assumes the relationship of two variables in a linear fashion. If plotted in a scatterplot graph, the data fall in a straight line or in a cluster that is reasonably straight. A scatterplot graph allows visualization of the relationship between the predictor variables and the criterion variable. Figure 2 shows a scatterplot of the standardized residual.

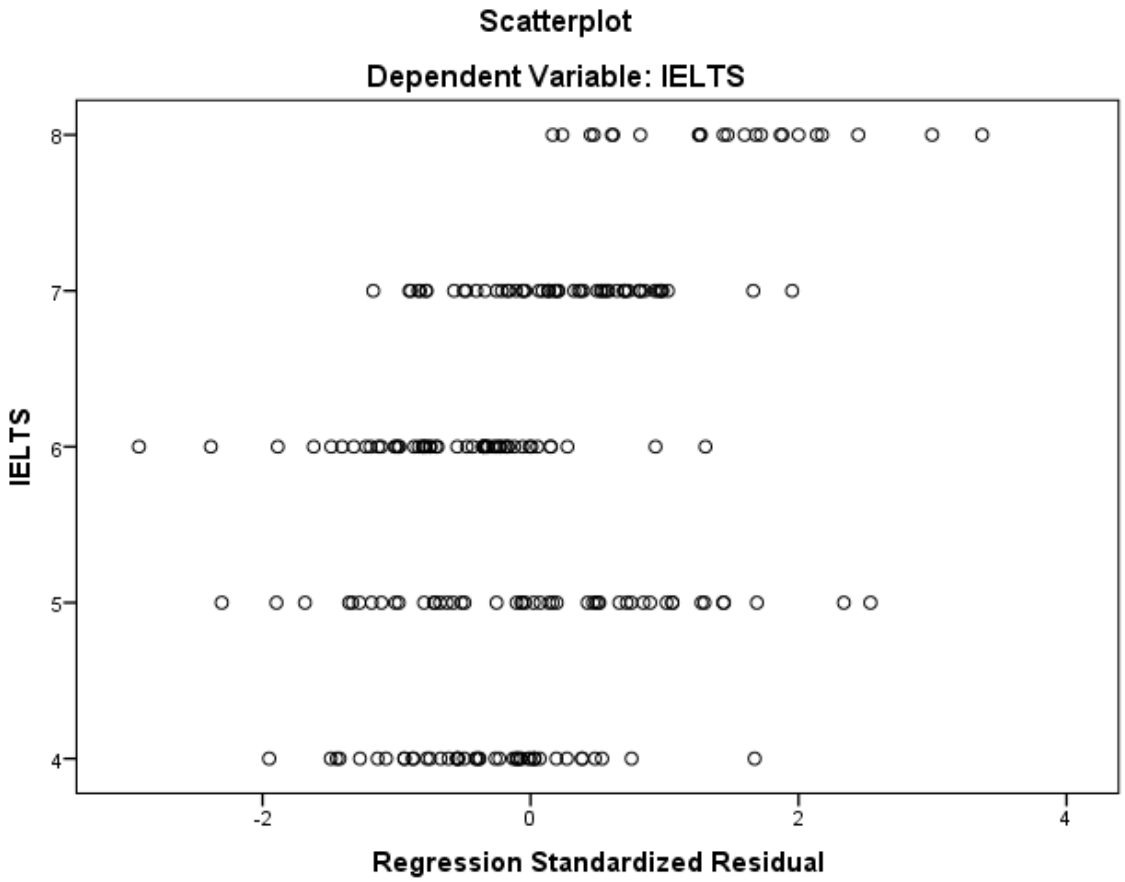

Figure 2. Scatterplot of the standardized residual and predictive value showing linearity.

Multivariate Normality

To determine whether data are multivariate normally distributed is usually done by examining graphs. Morgan (2004) stated that the errors of prediction have an approximately normal distribution. According to Green and Salkind (2011), this assumption test validates both linearity and normal distribution of the variables. Plotting standardized residuals against the unstandardized predicted value validated both linearity and normal distribution, as shown in Figures 3 and 4.

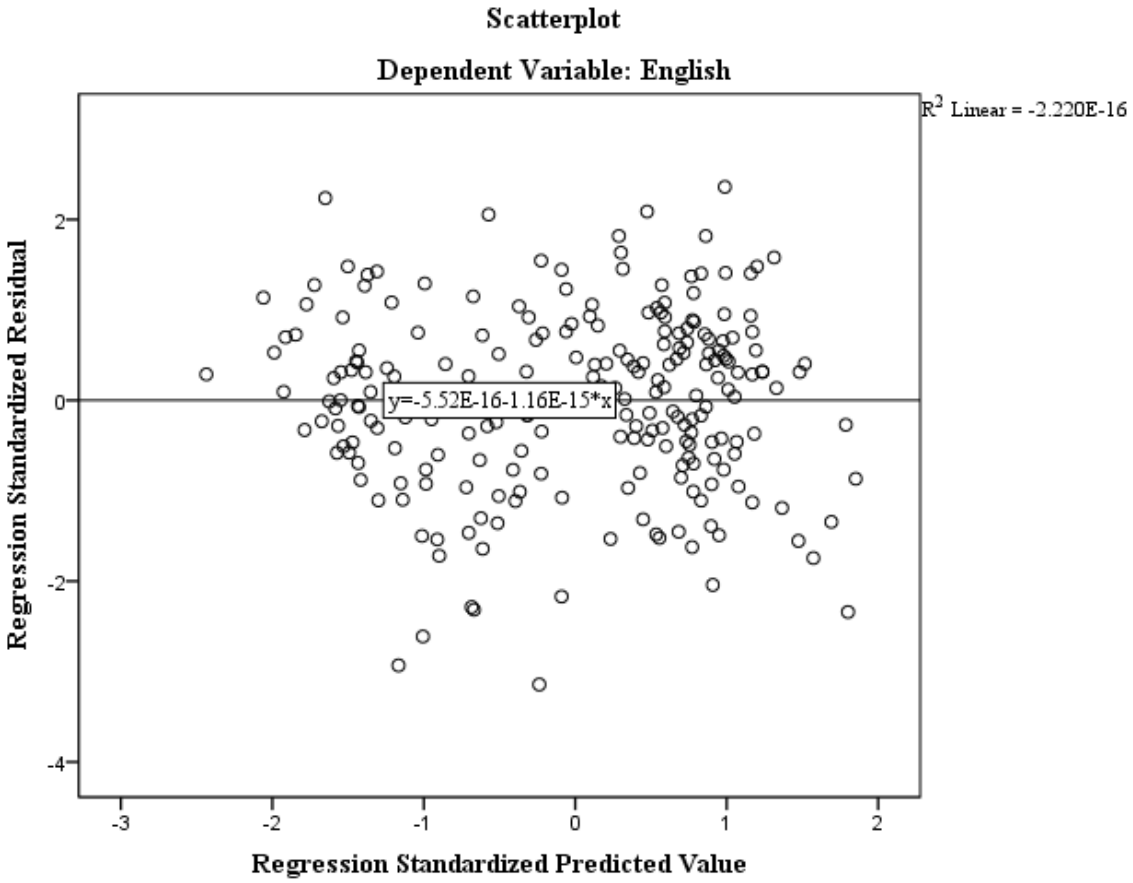

Figure 3. Scatterplot of standardized residual and predictive value showing normality.

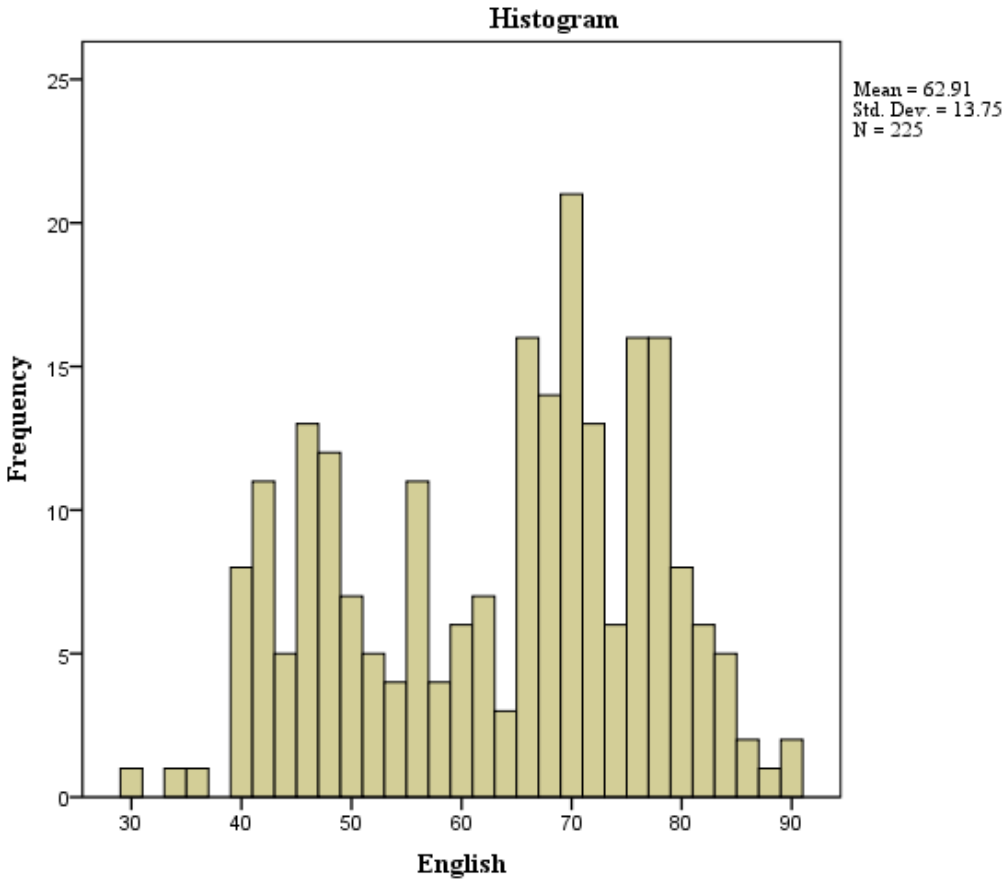

Figure 4. Histogram showing normality.

Multicollinearity

Multicollinearity occurs when two or more predictor variables are highly correlated with each other. Multicollinearity increases the standard errors of the coefficients. Increased standard errors suggest that the coefficients for some predictor variables may show significance greater than zero, thereby distorting interpretation of results for rejecting the null hypothesis (Morgan, 2004; Muijs, 2004). Examining correlation coefficients allowed validation of the assumption of multicollinearity. Multicollinearity does not reduce the predictive power or reliability of the model as a

whole, at least within the sample data set; it only affects calculations regarding individual predictors. I conducted a regression analysis to validate the assumption of multicollinearity. Table 6 shows no two predictor variables having correlation values greater than 1.

Table 6

Correlations

		English	Mathematics	Government	Biology	IELTS
English	Pearson Correlation	1	.801**	.831**	.853**	.888**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	225	225	225	225	225
Mathematics	Pearson Correlation	.801**	1	.745**	.831**	.829**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	225	225	225	225	225
Government	Pearson Correlation	.831**	.745**	1	.845**	.822**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	225	225	225	225	225
Biology	Pearson Correlation	.853**	.831**	.845**	1	.866**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	225	225	225	225	225
IELTS	Pearson Correlation	.888**	.829**	.822**	.866**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	225	225	225	225	225

Note. Correlation was significant at the 0.01 level (2-tailed).

Auto-Correlation

Linear regression analysis requires that there is little or no autocorrelation in the data. Autocorrelation occurs when the residuals are not independent from each other. In other words when the value of y(x+1) is not independent from the value of y(x), as shown in Figure 5.

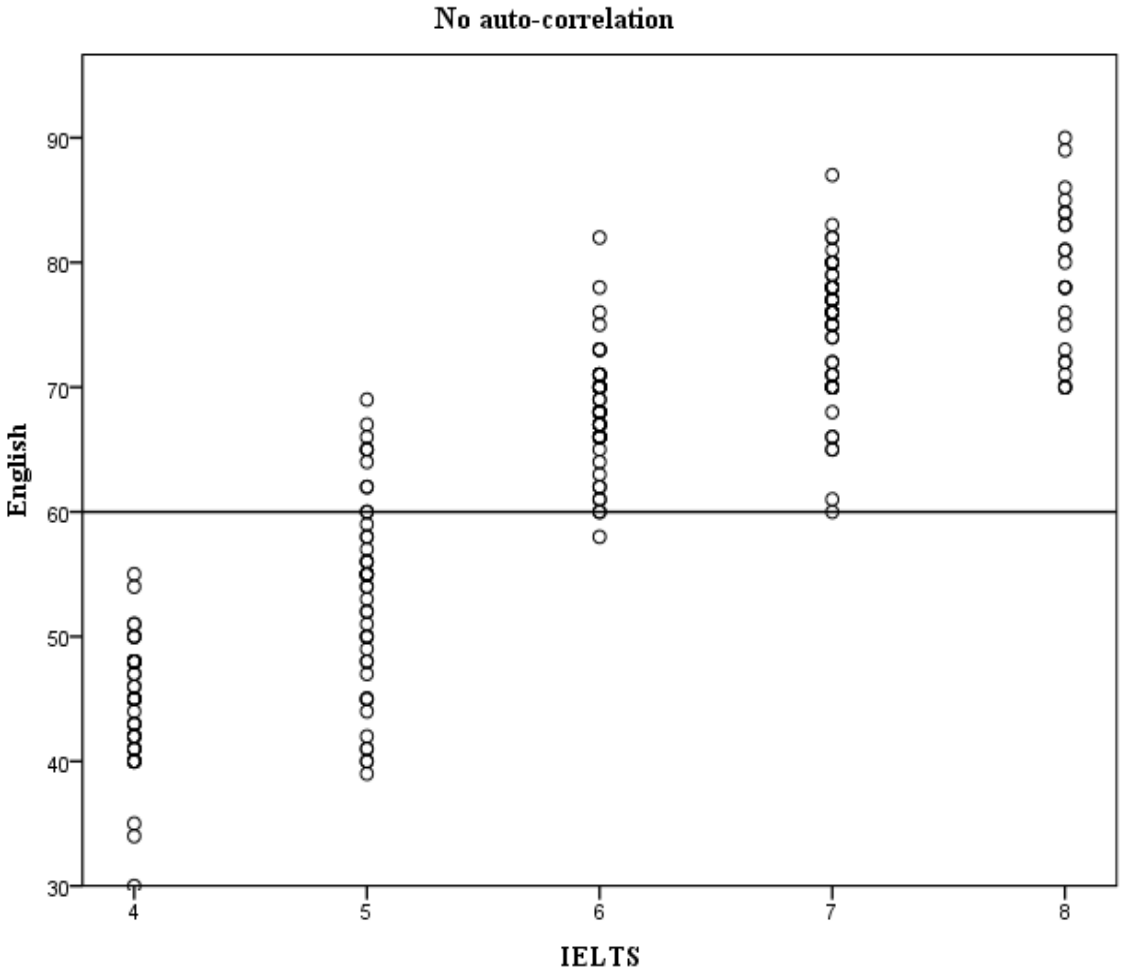

Figure 5. Scatterplot of standardized residual and predictive value showing correlations.

Homoscedasticity

The assumption of homoscedasticity (same variance) is important in linear regression models. It describes a situation in which the error term is the same across all values of the independent variable. Homoscedasticity simplifies mathematical and computational treatment. The scatter plot is good way to check whether homoscedasticity occurred (Green and Salkind 2011). See Figure 6.

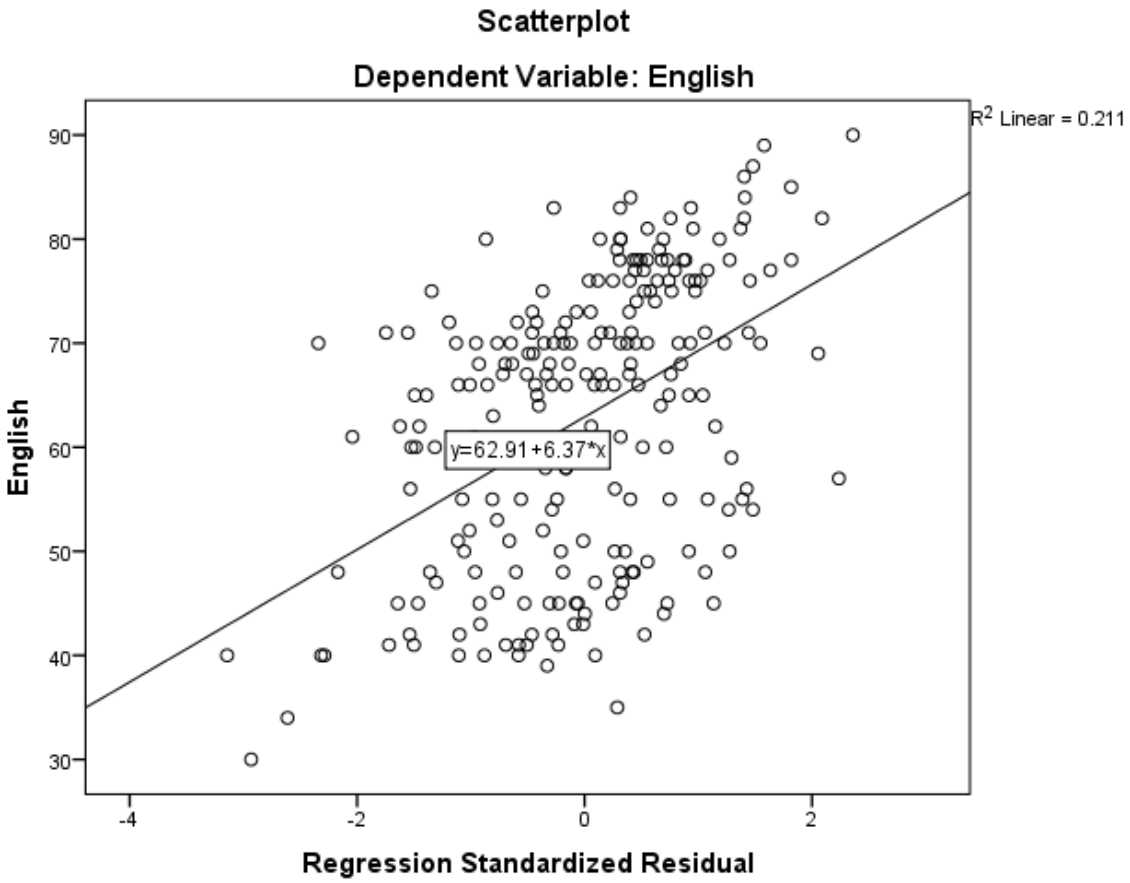

Figure 6. Scatterplot of standardized residual and predictive value showing homoscedasticity.

Results for Research Question 1

A simple linear regression was calculated with FYSSS' level of proficiency in English language using IELTS grades as independent variable and their performance in WASSCE English language as dependent variable. A significant regression equation was observed; $R^2 = .79$, $F(1, 223) = 832.55$, $p < .001$. English language scores were predicted by IELTS Grades, $\beta = .888$, $t\ (223) = 3.97$, $p < .001$. About 79% of the total changes in FYSSS academic performance in English language is determined by the level of their

proficiency in English language. IELTS grades ranged between 1-9. In the data collected for his study, no FYSSS had grades 1-3 and grade 9 as seen in Figure 7.

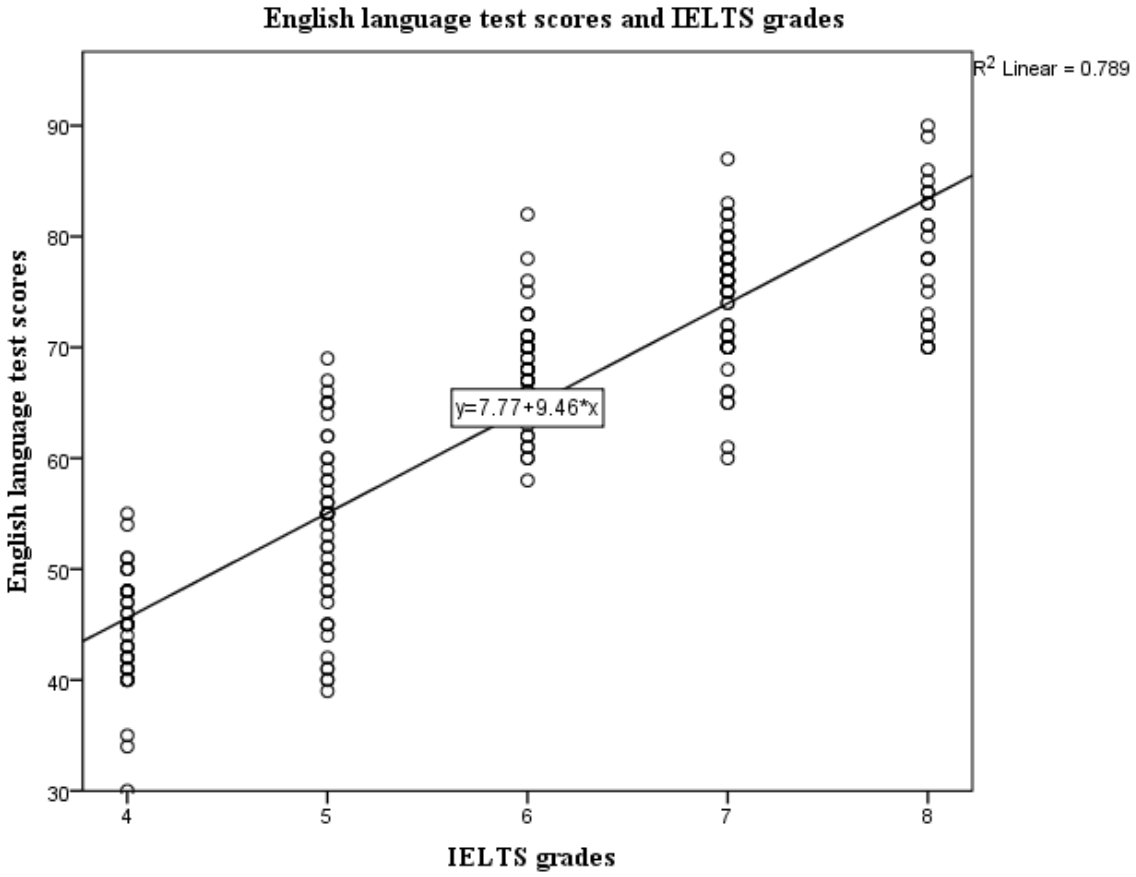

Figure 7: Scatterplot showing a linear relationship between FYSSS English language test scores in WASSCE and IELTS grades.

Results for Research Question 2

A simple linear regression was calculated with FYSSS level of proficiency in English language using IELTS grades as independent variable and their performance in WASSCE biology as dependent variable A significant regression equation was observed; $R^2 = .75$, $F(1,223) = 667.51$, $p < .001$. Biology scores were predicted by IELTS Grades,

β = .866, t (223) = 6.39, p < .001. About 75% of the total changes in FYSSS academic performance in biology is determined by the level of their proficiency in English language as seen in Figure 8.

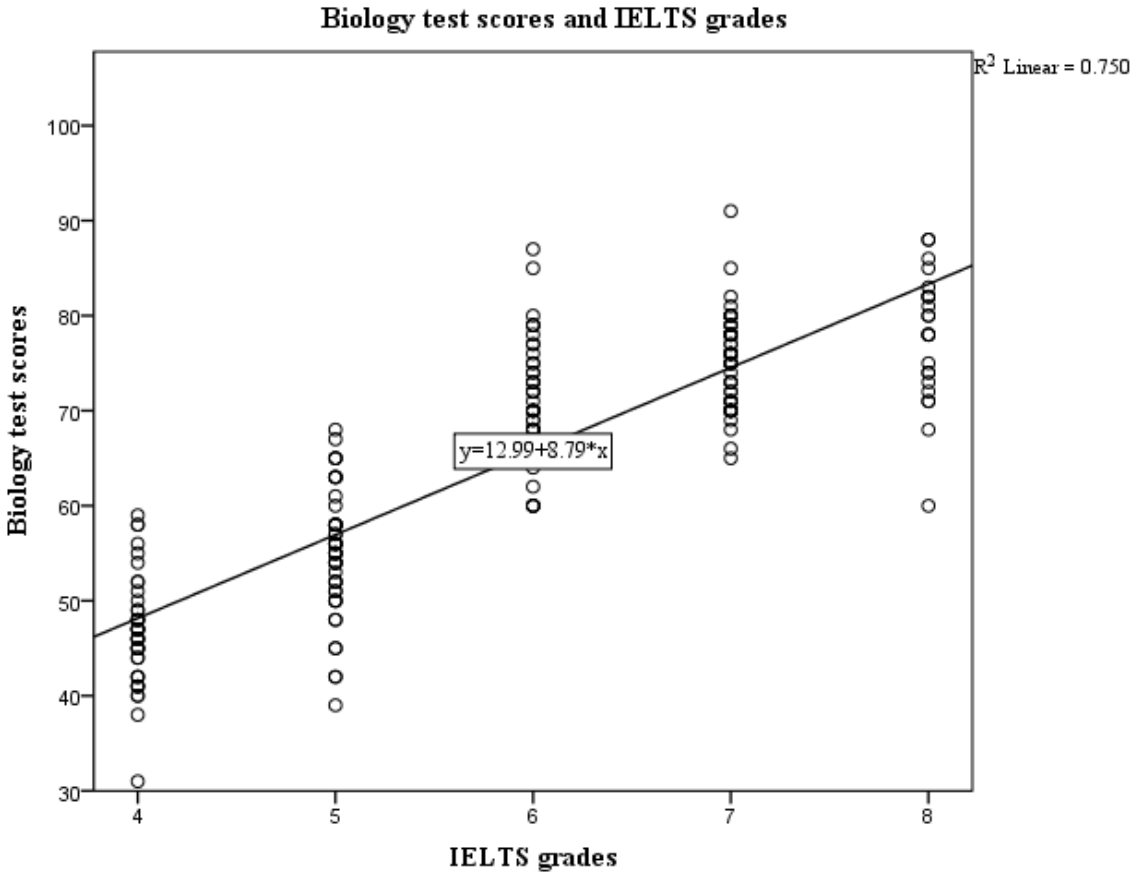

Figure 8: Scatterplot showing a linear relationship between FYSSS biology test scores in WASSCE and IELTS grades

Results for Research Question 3

A simple linear regression was calculated with FYSSS level of proficiency in English language using IELTS grades as independent variable and their performance in WASSCE Government as dependent variable. A significant regression equation was

observed; R^2 = .67, F(1,223) = 465.72, p < .001). Government scores were predicted by IELTS Grades β = .822, t (223) = 13.96, p < .001. About 67% of the total changes in FYSSS academic performance in Government is determined by the level of their proficiency in English language. See Figure 9.

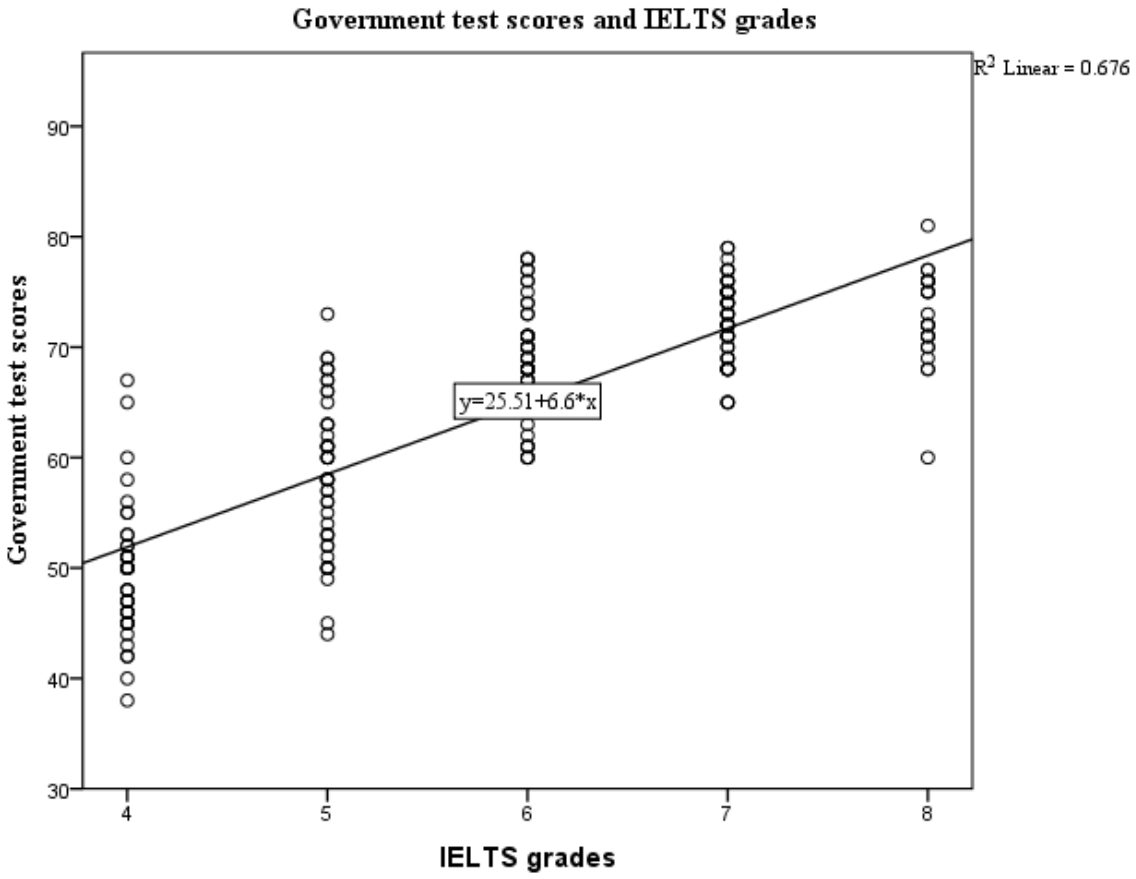

Figure 9: Scatterplot showing a linear relationship between FYSSS government test scores in WASSCE and IELTS grades

Results for Research Question 4

A simple linear regression was calculated with FYSSS level of proficiency in English language using IELTS grades as independent variable and their performance in

WASSCE Mathematics as dependent variable. A significant regression equation was observed; $R^2 = .69$, $F(1,223) = 489.04$, $p < .001$. Mathematics scores were predicted by IELTS Grades, $\beta = .829$, $t\ (223) = 1.78$, $p < .001$. About 69% of the total changes in FYSSS academic performance in Mathematics is determined by the level of their proficiency in English language. See Figure 10.

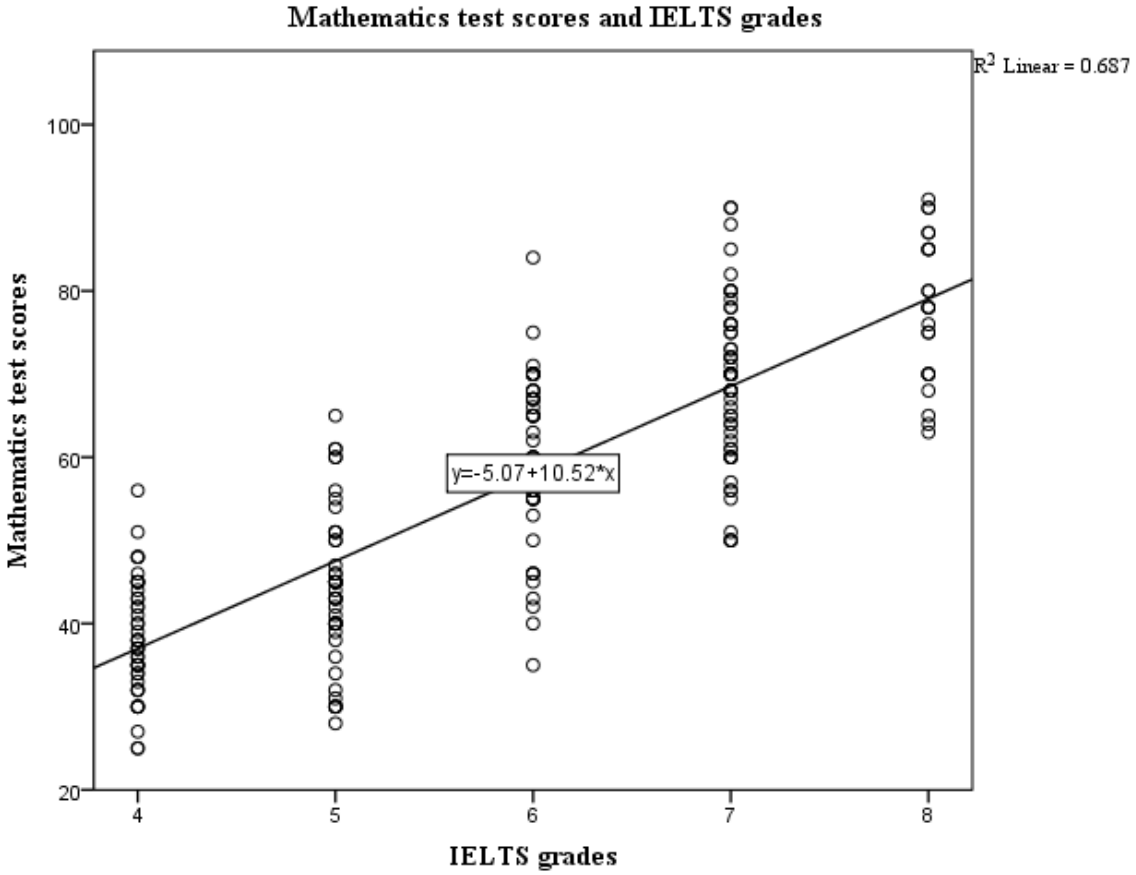

Figure 10: Satterplot showing a linear relationship between FYSSS mathematics test scores in WASSCE and IELTS grades

Summary

Conducting regression analyses evaluated how well IELTS predicted FYSSS WASCCE scores in English language, biology, government, and mathematics. The result of research question 1 showed a strong positive relationship between FYSSS academic performance in English language (WASSCE) and their proficiency in English language. 79% of the total changes in FYSSS academic performance in English language is determined by the level of their proficiency in English language**.** Results of research question 2, 3, and 4 also indicated that there is a strong positive relationship between FYSSS academic performance in biology, government, and mathematics. The higher the students' scores in IELTS, the higher their scores in biology, government and mathematics. Students grades in IELTS ranged from 4 – 8, while students' scores in WASSCE subjects ranged between 30 – 85. In the next chapter, I will discuss results in the context of the theoretical framework used for this study.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this quantitative study was to investigate the relationship between English language proficiency as measured by the IELTS grades and academic achievement of FYSSS in four WASSCE subjects: English language, biology, government, and mathematics. A simple regression analysis was used to examine the relationship between the dependent variables and the independent variable in this correlational study. Results of the analysis showed a significant linear relationship between English language proficiency and academic achievement of FYSSS in English language, biology, government, and mathematics.

Interpretation of Findings

Robson (2011) posited that the process and products of analysis provide the bases for interpretation. In this study, I have explored the relationship between English language proficiency and academic achievement of FYSSS. This was made possible by examining four research questions and corresponding hypotheses. The findings of the analyses and hypotheses testing are presented in the following sections.

Research Question 1

Data analysis for this research question showed a strong positive relationship between English language proficiency and academic performance of FYSSS in English. Data results confirmed that 79% of the total changes in academic performance of FYSSS in English were determined by the level of their proficiency in English. FYSSS who got high grades in the IELTS test also got high scores on the WASSCE. Results also confirmed that those who got low IELTS grades did not perform well on the WASSCE.

FYSSS who scored between 30 and 50 on WASSCE English earned Grade 4 (Limited User) on the IELTS test. Those who scored between 51 and 60 earned a Grade 5 (Modest User). This was a strong indication that mastery of the language is vital to academic performance of students in English. The null hypothesis was rejected because the result showed a significant positive relationship between the two variables. The results confirmed that English language proficiency is a significant predictor of FYSSS' English language performance on the WASSCE (see Li, Chen, & Duanmu, 2010). Francis and Rivera (2007) examined the correlation between language proficiency and performance on content assessments among K-12 learners. Findings indicated that English proficiency scores were significantly predictive of academic reading test scores for K-12 ELLs. Student outcomes reflected not only achievement on standardized tests, but also meaningful learning in the classroom.

Olanipekun and Zaku (2013) opined that English competence is crucial in the Nigerian educational system. English is not only the medium of instruction but also the language of textbooks. Aina and Olanipekun (2013) explained that there is a strong connection between English language proficiency of Nigerian students and their academic performance. Aina and Olanipekun stressed that low proficiency of students has been the major reason for low performance in academics. According to Bailey (2012), students confront academic language in textbooks in the classroom, they must write to demonstrate knowledge, and they must speak and listen to participate in the classroom discourse.

Mastery and control of academic language is necessary for content area learning. It is the most important determinant of academic success for students. (Cummins, 1981). Cummins (2000) recommended increased effort in the development of CALP in the classroom. The teaching of CALP involves not only grammar but syntax, vocabulary, and style. CALP requires deep understanding of the language demands of teachers. Teachers must focus on incorporating the principles of joint productive activity to facilitate ELL proficiency in English. Cummins (1984) advised that teachers should develop language-building activities to make it easier for students to acquire CALP.

Research Questions 2, 3, and 4

Analysis of data for Research Questions 2, 3, and 4 indicated a strong positive relationship between IELTS grades of FYSSS and their scores in biology, government, and mathematics, respectively. IELTS scores are a significant predictor of academic performance. The proportion of variances of FYSSS scores indicated in the regression models for Research Questions 2, 3, and 4 were 75%, 67%, and 69% for biology, government and mathematics, respectively. This implies that the total changes in academic performance of students in these three subjects were determined by the level of FYSSS proficiency in English language.

The results provided evidence to reject the null hypotheses for Research Questions 2, 3, and 4 as they indicated significant positive linear relationship between English language proficiency scores of FYSSS as measured by IELTS and their test scores (biology, government, and mathematics) on the WASSCE. These findings were consistent with findings from other studies (Fakeye, 2014; Maleki & Zangani, 2007;

Sadeghi et al., 2013). Furthermore, Orgunsiji's (2009) findings on the relationship between English proficiency and academic performance of Nigerian students showed significant impact of English language proficiency on students' overall academic achievement. In addition, Ojo (2010) asserted that low reading ability of students is a major catalyst of the general low performance of students in schools. Ojo argued that the policy of paying more attention to science subjects than English language by policymakers in the Nigerian educational system is to the detriment of the education sector. Ojo explained that as long as English remained the medium of communication, English must be given special attention before other school subjects. According to Ojo, students cannot perform well in science subjects when their proficiency in the language of instruction is low. English is the language of science. Communicating in English is not the same as having high cognitive ability in English, especially within the classroom environment.

Cummins (2000) warned that educators in bilingual educational environments should not be misled by students' ability to interact at a high cognitive level when discussing/playing with classmates because it does not mean that they have the same cognitive or communication ability in the classroom. Cummins maintained that an inadequate grasp of the language of instruction is a major source of underachievement in schools. Having the basic interpersonal communication skills is not enough for effective learning in the classroom. It is important for learners to acquire the language of learning to communicate effectively in the classroom (Cummin, 2000). Academic language in science includes presenting information in different ways including writing, oral

presentation, etc. Academic language also involves analysis, prediction, and observation. Teachers must ensure that students put these skills into use through peer-to-peer discussion, group assignments, and designing their own experiments. These methods improve students' English language proficiency. Science instruction can provide contextual learning opportunities to build comprehension of both concepts and language when students are taught through a hands-on experiential approach (Banchi and Bell, 2008). Teachers should integrate English language and literacy instruction with subject area instruction for learning to be meaningful (Echevarria, and Short, 2010).

Calabrese Barton, Tan, and Rivet (2008) stated that when students use academic language in the classroom, they are "not only learning content but also learning how to participate in science related communities" (p. 74). Jamison (2000) added that treating mathematics as a language would help to increase its understanding because many do not see mathematics as a language, so it becomes difficult to learn. Solórzano (2008) study supported Jamison's assertion. Findings from the current study revealed that low language skills influenced low mathematics scores. To fully comprehend scientific concepts, students must learn and practice the discipline-specific written and oral registers of language (Shanahan & Shanahan, 2008). This shows the relevance of Cummins (1979) theory on second language acquisition. CALP is indispensable in the classroom. It is the foundation to learn other school subjects.

Limitations of the Study

This study had some limitations. First, it was limited to only two schools in the same town. Although over 90% of FYSSS from SESS and NESS participated in this

study, the small sample size limited the generalizability of the findings. I would recommend researchers include a larger sample size that would involve more schools from more than one city. Second, this study was limited to a quantitative survey. Using other methods may have provided a deeper insight into the problem. Finally, I examined only the relationship between language proficiency and academic performance of secondary school students. I did not examine other factors, such as availability of teaching aids, the learning environment, and socioeconomic background, which could have influenced academic performance.

Recommendations

According to Cummins (2000), school language policy is a process rather than a product. The policy must address the causes of second language learners' educational underachievement. Cummins also advised that such policies should take account of relevant research on second language learning and academic success and integrate them with the specific circumstances of school communities and their experience. Cummins explained that school language policies relate to the roles not only of specialized language teachers but of all teachers in the school. This implies that teachers, administrators, and stakeholders in the education sector have a significant role to play. I recommend improved clarity in the school language policy in Nigeria, where language policy is divided into three parts: official language policy, educational language policy, and general language policy. This three-way paradigm remains vague and has created confusion. However, policy implementation remains a huge problem in the Nigerian

educational system. (Bolaji & Gray, 2015). There is a wide disparity between policy pronouncements and policy implementations in Nigeria.

Cummins (2000) opined that no one is more important in the learning process than the teacher. Effective teaching and learning can take place only when the teacher uses the right method. Unstructured bilingual practices in classrooms have remained a serious challenge. There is need for teachers to put an end to frequent code switching in classrooms because the practice does not contribute to developing the learners' proficiency in English. It is also important for stakeholders in the educational system to review the recommended textbooks and replace them with learner-friendly texts. Learner-friendly texts increase proficiency in English (Salami, 2008). Moreover, teachers can make learning easier for ELLs by using strategies that will contextualize the content they teach, by moving instruction from Quadrant A to Quadrant D. Cummins divided learning into four quadrants of activity, as shown in Figure 11.

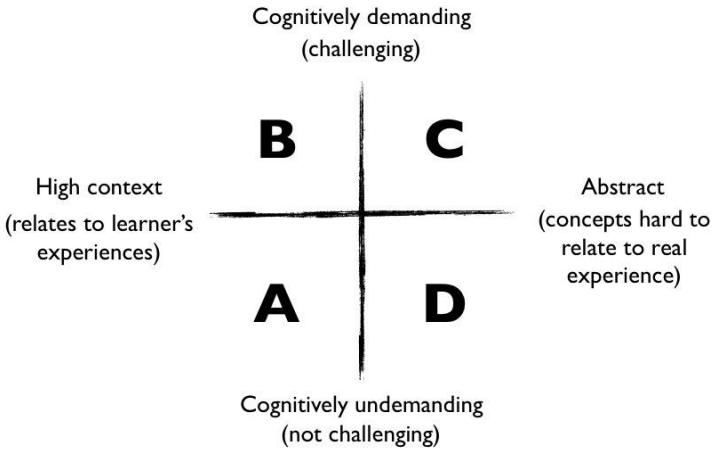

Figure 11. Cummins' quadrants. From Cummins (1984) Bilingualism and Special Education: Issues in Assessment and Pedagogy. Reprinted with permission.

The vertical scale moves from tasks that are undemanding cognitively, to tasks which learners find easy, then to cognitively demanding tasks, that learners find difficult. The horizontal moves from tasks with a high context to tasks with abstract concepts. These class of task are more challenging to relate to real experience, though they are often the 'objectives' that have been defined for the learners. According to Cummins (2000), if there is a simple shift in the order of activities it could make a significant difference in learning, understanding abstract concepts and in the engagement of the learner.

Provision of a more stimulating language environment from primary through secondary schools to develop students intellectual and verbal skills, is vital. It is necessary for students to start learning how to read early in life. Reading out story books to children enhances their literacy development. Making use of a balanced literacy program will put the teachers and students on the right path. This is because a balanced literacy program integrates whole language with phonics to create a balanced reading program. The goal is to include the strongest element of each.

Conducting systematic formative assessments to measure students' content knowledge and academic language competence is essential. When teachers administer assessments regularly, it provides useful feedbacks and enables them to adjust their instruction (Understanding Language, 2013). Apart from written assessments, students must also be assessed orally. Oral assessment is a good method of practicing fluency. Teachers should build activities into their lesson plans that will require students to talk with their classmates about the new concepts by using the key vocabulary terms. This

strategy is referred to as scaffolding of social interaction. According to Bailey et al. (2011), systematic, formative oral assessments require setting learning goals, making success criteria explicit to the student, and evoking a wide range of evidence of student learning. Custar's (2011) study explored the association between receptive oral language proficiency (listening comprehension) and academic achievement of 802 high school students. His research results showed a positive correlation between the two variables.

Teacher mentoring is not a practice in Nigerian schools. Introduction of teacher mentoring is an ideal strategy to improve language proficiency of students. This is because mentoring gives opportunity for older and more experienced teachers to guide new ones. Furthermore, the introduction of professional learning communities in schools will create an opportunity for teachers to interact and find solutions to the challenges they face collectively. In the developed countries, staff meetings in schools are often considered to be professional learning communities because it provides opportunities for professional learning through participation in pedagogical discourse and problem-solving (Horn & Kane, 2015). In Nigeria, staff meetings mostly discuss issues concerning teachers' welfare; non-payment of salary and allowances, impending nationwide strike by teachers, attending a teacher's burial, visiting a sick teacher, baby shower for a teacher, teachers end of the year party etc. Teachers rarely do have forums where they discuss the challenges they face with other teachers. They often work alone and miss the positive experience that come through collaboration with colleagues.

Analysis of results has shown that there is a significant positive relationship between English language proficiency and academic achievement of FYSSS. But the

study was limited to just two schools. For further studies, I recommend inclusion of more schools in different cities to get a wider sample. Besides, very little has been done in this research area. Future researchers should consider the use of mixed methods. Creswell (2012) stated that the use of mixed methods approach gives a deeper and in-depth understanding of a research problem. Mixed method adds strength to the results of a research study. According to Onwuegbuzie and Johnson (2004), the use of mixed method will close gaps in the data collected. It will also lead to greater validity of this study.

Implications

This study adds to the growing body of research on the relationship between English language proficiency and academic achievement. It has made a strong argument for an overhaul of the present language policy in the Nigerian school system. The continual failure of FYSSS in WASSCE is a clear indication that the present language policy is not working.

This study has demonstrated that the effort to improve English proficiency is collective; the teachers, administrators, policymakers and all stakeholders have a role to play. Everyone must join hands to salvage the situation. This research is very vital because the topic has got little attention in Nigeria.

Conclusions

English language plays an important role in the educational system of Nigeria. FYSSS performance in the classroom and in standardized tests is connected to their level

of proficiency in English language. This study has shown that the continual mass failure of FYSSS in WASSCE is connected to their low proficiency in English language.

Education policies remain a major factor that has continued to affect the effective teaching and learning of English language in schools. One of such policy is the language policy. The policy has remained vague and unclear and has led to unstructured bilingual practices by teachers. The crisis in the educational system can be checked by overhauling the present language policy.

Boosting the image of the teaching profession in Nigeria, is a step in the right direction. This is because the most competent teachers have left the profession for more rewarding jobs, due to low and irregular teacher salary. Today, the education sector hires graduates who are not trained and certified teachers.

There is no laid-down strategy for teaching learners who are linguistically and culturally different from others, but it is vital for teachers and other stakeholders in education to understand that how well students learn in the classroom is determined by teacher's knowledge and teaching skills. For students in a second language situation to be taught meaningfully, the teacher must apply the right teaching methods and techniques. The quality of instruction determines the level of literacy.

English is a necessary working language and it is imperative for a nation such as Nigeria to ensure that the language is given the attention it deserves, because English language is a key factor for a better career and status in today's society.

References

Abedi, J. (2004). The no child left behind act and English language learners: Assessment and accountability issues. *Educational Researcher, 33*(1), 4–14.

Abedi, J. (2008). Classification system for English language learners: Issues and recommendations. *Educational Measurement: Issues and Practice, 27*(3), 17–31. doi:10.1111/j.1745-3992.2008.00125.x

Abedi, J. (2010). Research and recommendations for formative assessment with English language learners. In Andrade, H. L., Cizek, G. J. (Eds.), *Handbook of formative assessment* (pp. 37–66). New York, NY: Routledge

Abedi, J., & Herman, J. L. (2010). Assessing English language learners' opportunity to learn mathematics: Issues and limitations. *Teacher's College Record, 112*(3), 723-746. Retrieved from http://www.ncaase.com/docs/Abedi_OTL_TRC_2010.pdf

Abdirahman, M., Abubakar, A., & Abukar, S. (2013). English language proficiency and academic achievement for undergraduate students in Somalia. *SAVAP International 2.* Retrieved from http://www.erint.savap.org.pk/PDF/Vol.2(2)/ERInt.2013(2.2-08).pdf

Abidin, M., Alzwari, H., & Pour-Mohammadi, M. (2012). EFL students' attitudes towards learning English language: The case of Libyan secondary school students. *Asian Social Science, 8,* 119-134. doi:10.5539/ass.v8n2p119

Adams, N. M., Beal, C. R., & Cohen, P. R. (2010). Reading proficiency and mathematics problem solving by high school English language learners. *Urban Education, 45*(1), 58-74. doi:10.1177/0042085909352143

Aina, J. K., & Olanipekun, S. (2013). Students' proficiency in English language relationship with academic performance in science and technical education. *American Journal of Educational Research, 1*(9), 355-358. doi:10.12691/education-1-9-2

Aina, J. K., & Olanipekun, S. (2014). A review of teachers' qualification and its implication on students' academic achievement in Nigerian schools. *International Journal of Educational Research and Information Science, 2*(2), 10-15. Retrieved from http://files.eric.ed.gov/fulltext/EJ903008.pdf

Ajzen, I. (2005). *Attitude, personality and behavior* (2nd ed.). New York, NY: Open University Press.

Akeredolu-Ale, B., & Bodunde, H. (2010). Communicative competence of science students: An illustration with UNAAB1. University of Agriculture, Abeokuta, Ogun State. Nigeria. *English for Specific Purposes World 30*(9).

Akujiobi, O., & Chukwu, E. (2012). Challenges of effective English language learning in Nigerian secondary schools. *An International Journal of Arts and Humanities, 1*(4), 57-68. Retrieved from https://www.ajol.info/index.php/ijah/article/view/106404/96353

Al-Mamun, A., Hossaim, A., Rahman, M., & Rahman, A. R. (2012). Students' attitudes towards English: The case of life science school of Khulna university. *International Review of Social Sciences and Humanities, 3*(1), 200-209. Retrieved from http://irssh.com/yahoo_site_admin/assets/docs/20_IRSSH-264-V3N1.131231435.pdf

Armstrong, T. (2009). *Multiple intelligences in the classroom* (3rd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Anthony, E., & Setati, M. (2007). Exploring the English proficiency-mathematical proficiency relationship in students: An investigation using instructional English computer software. In Woo, JH, HC Lew, KS Park & DY Seo (Eds), Proceedings of the 31st Conference of the International Group for the Psychology of Mathematics Education in Seoul, South Korea 15 July 2007. Seoul, Korea: PME. 217-224

Arsad P., Bauniyamin, N., & Manan, B. (2014). Students' English language proficiency and its impact on the overall students' academic performance: An analysis and prediction using Neural Network Model. *WSEAS Transactions on Advances in Engineering Education, 5,* 44-53. doi:10.12738/estp.2016.6.0052

August, D., & Shanahan, T. (Eds.). (2006). *Developing literacy in second-language learners: Report of the National Literacy Panel on Language Minority Children and Youth*. Mahwah, NJ: Lawrence Erlbaum Associates.

Avary, C., & Carola, S. (2008). Explaining English language proficiency among adolescent immigrant students. *American Educational Research Journal, 45*(4), 1155-1179 doi:10.3102/0002831208321443

Awanta, E. K. (2009). Students' view of mathematics: A survey of junior and senior high schools in the Ashanti and Brong Ahafo regions. *Ghana Policy Journal, 1*(3), 90-109. Retrieved from http://ieagh.org/wp-content/uploads/2014/07/gpj-v3-art5.pdf

Bailey, A. L. (2012). *Academic English.* In J. Banks (Ed.), *Encyclopedia of diversity in education* (pp. 343–365). Thousand Oaks, CA: Sage.

Bailey, A. L., Huang, Y., & Escobar, M. (2011). I can explain: Academic language for science among young English language learners. In P. Noyce & D. Hickey (Eds.). *New frontiers in formative assessment* (pp. 770-804). Cambridge, MA: Harvard Education Press.

Banga, P. (2016). Mastery of language of instruction and its influence on student academic performance evidence from secondary schools in Tanzania. *International Journal of Research.* Retrieved from https://internationaljournalofresearch.com/2016/12/03//

Banchi, H., & Bell, R. (2008). The many levels of inquiry *Science and Children* 46(2) 26-29.

Baker, C. (2011). *Foundations of bilingual education and bilingualism* (5th ed.). Bristol, CT: Multilingual Matters.

Bamgbose, A. (2007). Language and literacy issues in Africa. In N. Alexander and B. Busch (Eds.), *Literacy and linguistic diversity in a global perspective: Intercultural exchange with African countries* (pp. 23-30). Graz, Austria: European Centre for Modern Languages.

Barwell, R. (2010). Tension in teaching mathematics through a second language. *The American Council on Immersion Education Newsletter, 13*(3).

Bayliss, A., & Ingram, D. E. (2004). IELTS as a predictor of academic language performance. *IELTS Research Reports, 7,* 1-68.

Bello, M., & Oke, M. (2012). *An appraisal of candidates' achievement in WASSCE among WAEC member countries*. Retrieved from http://www.iaea.info /documents/paper_4e1239b6.pdf

Biber, D. (1986). Spoken and written textual dimensions in English: Resolving the contradictory findings. *Language and Society, 62*(2), 384-414.

Bloomberg, L. D., & Volpe, M. (2012). *Completing your dissertation: A roadmap from beginning to end (2nd ed.).* Thousand Oaks, CA: Sage.

Boeije, H., Slagt, M., & Wesel, F. (2014). Guidance for deciding upon use of primary mixed methods studies in research synthesis: lessons learned in childhood trauma. *Quality & Quantity, 48*(2)1075-1088. doi: 10.1007/s11135-012-9825-x

Bolaji, S. & Gray, J. (2015). Why do policies fail in Nigeria? *Journal of Education & Social Policy, 2* (5), 57-66.

Bosco, S., & Komba, C. (2015). Do students' backgrounds in the language of instruction influence secondary school academic performance? *Journal of Education and Practice, 6*(30)

British Council (2015). *The international English language testing system*. Retrieved from https://ielts.britishcouncil.org

Brindley, G. (2006). Assessment. In R. Carter, & D. Nunan (Eds.) *Teaching English to speakers of other languages* (pp. 137-143). Cambridge: Cambridge University Press

Brown, C. R., Cady, J. A., & Lubinski, C. A. (2011). *The effects of poverty and language on mathematics achievement for English language learners*. New York: Springer

Bryman, A. (2012). *Social Research Methods* (4th ed.) Oxford: Oxford University Press.

Cain, K., & Oakhill, J. (2011). Matthew effects in young readers: Reading comprehension and reading experience aid vocabulary development. *Journal Learning Disabilities, 44*(5), 431-443. doi:10.1177/0022219411410042

Calabrese Barton, A., Tan, E., & Rivet, A. (2008). Creating hybrid spaces for engaging school science among urban middle school girls. *American Educational Research Journal, 45*(1), 68 -103. doi: 10.3102/0002831207308641

Chen, W., Duanmu, L., & Li, G. (2010). Determinants of international students' academic performance: A comparison between Chinese and other international students. *Journal of Studies in International Education, 14*(4), 389-405. doi:10. 1177/1028315309331490

Cheng, L., Klinger, D., and Zheng, Y. (2007). The challenges of the Ontario secondary school literacy test for second language students. *Language Testing, 24*(2), 185-208. doi:10.1177/0265532207076363

Chou, P. T. M. (2011). The effects of vocabulary knowledge and background knowledge on reading comprehension of Taiwanese EFL students. *Electronic Journal of Foreign Language Teaching, 8*(1), 108-115. Retrieved from https://pdfs.semanticscholar.org/0050/138ea2aa886e7b53b9bf7d85b6f2f3dd82c6.pdf

Collier, V. P. (1989). How long? A synthesis of research on academic achievement in second language. *TESOL Quarterly, 23,* 509-531. Doi:10.2307/3586923

Cohen, J. (2013). Statistical power analysis for the behavioral sciences. Second Edition. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Corson, D. (1995). *Using English words.* New York: Kluwer.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (Laureate custom ed.). Boston, MA: Pearson Education, Inc.

Crystal, D. (2006). English worldwide. In Denison, David, Hogg and Richard, (Eds.). *A history of the English language.* (pp. 420-439). Cambridge University Press. doi. 10.1017/CBO9780511791154.

Cummins, J. (1979). Cognitive/academic language proficiency, linguistic interdependence, the optimum age question and some other matters. *Working Papers on Bilingualism, 19,* 121-129.

Cummins, J. (1980). The construct of language proficiency in bilingual education. In Alatis J.E. (ed.). *Washington, DC: Georgetown University Roundtable on Languages and Linguistics*. Georgetown University Press

Cummins, J. (1981a). Age on arrival and immigrant second language learning in Canada: A reassessment. *Applied Linguistics, 2*(1), 132-149. doi:10.1093/applin/II.2.132

Cummins, J. (1981b). The role of primary language development in promoting educational success for language minority students. In California State Department of Education (Ed.*). Schooling and language minority students: A theoretical framework.* Evaluation, Dissemination and Assessment Center, California State University, Los Angeles.

Cummins, J. (1984) *Bilingualism and Special Education: Issues in Assessment and Pedagogy.* Clevedon, England: Multilingual Matters.

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

Daller, M. H., & Phelan, D. (2013). Predicting international student study success. *Applied Linguistics Review, 4*(1), 173-193. doi:10.1515/applirev-2013-0008

Dawn, P. (2007). The right to mother tongue education: A Multidisciplinary Normative Perspective. *South African linguistics and applied language studies, 25*(1), 27-43. doi:10.2989/16073610709486444

Danladi, S. S. (2013). Language policy: Nigeria and the role of English language in the 21st Century. *European Scientific Journal, 9*(17), 1-21.

David, B. (2010). *Essentials of Statistics.* Copenhagen: Ventus Publishing ApS.

Dixon, L. Q., Zhao, J., Shin, J., Wu, S., Su, J., Burgess-Brigham, R., Gezer, M. U., & Snow, C. (2012). What we know about second language acquisition: A synthesis from four perspectives. *Review of Educational Research, 82*(1), 5-60. doi:10.3102/0034654311433587

Driscoll, D. P. (2003). *English language proficiency benchmarks and outcomes for English Language Learners*. The Commonwealth of Massachusetts: Department of Education.

Duke, N. K., & Pearson, P. D. (2002). Effective practices for developing reading comprehension. In A. E. Farstrup & S. J. Samuels (Eds.). *What research has to*

say about reading instruction (3rd ed., pp. 205–242*).* Newark, DE: International Reading Association.

Dylan, W. (2010) Standardized testing and school accountability. *Educational Psychologist, 45(*2),107-122. doi: 10.1080/00461521003703060

Echevarria, J., & Short, D. (2010). Programs and practices for effective sheltered content instruction. In California Department of Education (Ed), *Improving education for English learners: Research-based approaches*. Sacramento, CA: CDE Press.

Echevarria, J., & Short, D. (2011). *Programs and practices for effective sheltered content instruction* (Webinar 4). Retrieved from: http://www.schoolsmoving up.net/pdf/Schools Moving up ELL Series 2010-11

Edem & Mbaba (2011). Literacy in primary and secondary education in Nigeria. *Journal of Language and Culture 2*(2)15-19. Retrieved from http://www.academicjournals.org/article/article1379495689_Edem%20et%20al.p

Egede, N. (2014). Reasons for continuous decline of students' academic performance in external examinations. *Journal of research and in education and society, 5*(3)

Elliot, J. (2005). *Using narrative in social research: Qualitative and quantitative approaches.* London: Sage.

Erlenawati, S., Simon, M., & Helen F. (2012). International student security and English language proficiency. *Journal of Studies in International Education 1*(21), 434-454. doi:10.1177/1028315311435418

Essien, A. A., & Setati, M. (2007*).* Exploring the English proficiency-mathematical proficiency relationship in learners: An investigation using instructional English

computer software. In J. H. Woo, H. C. Lew, K. S. Park, & D. Y. Seo (Eds.). *Proceedings of the 31st Conference of the International Group for the Psychology of Mathematics Education, 2*, 217-224.

Fakeye, D. (2014). English language proficiency as a predictor of academic achievement among EFL Students in Nigeria. *Journal of Education and Practice,5*(9).

Fakeye, O., & Ogunsiji, Y. (2009). English language proficiency as a predictor of academic achievement among EFL students in Nigeria. *Euro Journals of Scientific Research, 37*(3) 490-495. Retrieved from http://www.eurojournals.com/ejsr.htm

Fakeye, D. (2010). Students' personal variables as correlates of academic achievement in English as a second language in Nigeria. *Journal of Social Sciences, 22*, 205–211. doi:10.1080/09718923.2010.11892803

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41(4),* 1149-1160. doi:10.3758/BRM.41.4.1149

Feast, V. (2002). The impact of IELTS scores on performance at University. *International Education Journal, 3*(4)70-85.

Federal Republic of Nigeria (2004). *National language policy on education (4th ed).* Lagos: Nigerian Educational Research and Development Council Press.

Federal Republic of Nigeria (2004). *National curriculum for senior secondary schools* (4th ed). Lagos: Nigerian Educational Research and Development Council Press.

Fema, B. M. (2003). Problem of teaching English language in NCE programme in Azare. *Journal of Education. 4*(1) 107- 112.

Francis, D. J., Rivera, M., Lesaux, N., Kieffer, M., & Rivera, H. (2006). *Practical Guidelines for the education of English language learners: Research-based recommendations for instruction and academic interventions.* Retrieved from http://www.centeroninstruction.org/files/ELL1-Interventions.pdf.

Fraenkel, J., & Wallen, N. (2006). *Internal Validity. How to design and evaluate research in education* (6th ed). New York: McGraw Hill

Fredua-Kwarteng, E., & Ahia, F. (2015). Learning mathematics in English at basic schools in Ghana: A benefit or hindrance? *European Journal of Educational Research, 4*(3), 124-139. doi:10.12973/eu-jer.4.3.124

Freeman, D., and Freeman, Y. (2007) *English Language Learners: The Essential Guide.* New York: Scholastic.

Geva, E. (2006). Second-language oral proficiency and second-language literacy. In August, D. & Shanahan, T. (Eds.). *Developing literacy in second-language learners: Report of the National Literacy Panel on Language-minority Children and Youth* (pp. 123-139).

Good, R. H., Simmons, D. C., & Kame'enui, E. J. (2001). The importance and decision-making utility of a continuum of fluency-based indicators of foundational reading skill for third grade high-stakes outcomes. *Scientific Studies of Reading, 5,* 257-288. doi:10.1207/S1532799XSSR0503_4

Gottlieb, M. (2006). *Assessing English Language Learners.* Thousand Oaks, CA: Corwin Press.

Gran L.K. (2007). *Language of instruction in Tanzanian higher education: A particular focus on the University of Dar es Salaam*. (Master thesis). University of Oslo, Oslo, Norway.

Han, H. (2011). Tracking the success of English language learners within the context of the Ontario secondary school literacy test. *Canadian and International Education 40* (1)76-96. Retrieved from https://ir.lib.uwo.ca/cie-eci/vol40/iss1/6.

Hatch, J. A. (2008). *Doing qualitative research in education settings*. Albany: State University of New York Press.

Hart, J. (2003). Teacher professional development to improve the science and literacy achievement of English language learners. *Bilingual Research Journal, 27*(3) 475 -501

Haydar, A. & Uyar, A. (2011). Factors associated with student performance in financial accounting course. *European Journal of Economic & Political Studies,4*(2)139-154.

Henry, D., Baltes, B., & Nistor, N. (2014). Examining the relationship between math scores and English language proficiency. *Journal of Educational Research and Practice, 4*(1), 11-29. doi:10.5590/JERAP.2014.04.1.02

Howell, D. C. (2013). *Fundamental statistics for the behavioral sciences* (8th ed.). Belmont CA: Brooks/Cole-Thompson Learning.

IELTS (2011). Information for candidates. Retrieved from http://www.lilalovetolearn.com/media/1720/ielts-information-for-candidates-booklet.pdf

IELTS (2015) Guide for teachers. Retrieved from https://www.ielts.org/-/media/publications/guide-for-teachers/ielts-guide-for-teachers-2015-us.ashx?la=en

Jamison, R. (2000). Learning the language of mathematics. *Language and Learning Across the Discipline, 4*(1) 45-54. Retrieved from https://wac.colostate.edu/llad/v4n1/jamison.pdf

Jeraltin, H., & Ramganesh, E. (2013). Is language proficiency taken care of at higher education level? Need for self-efficacy of post graduate students. *Journal of Language Teaching & Research, 4*(6), 1176–1183. doi:10.4304/jltr.4.6.1176-1183

Jiang, x, (2011). The role of first language literacy and second language proficiency in second language reading comprehension. *The Reading Matrix 11*(2), 177 – 190. Retrieved from http://www.readingmatrix.com/articles/april_2011/jiang.pdf

Jowitt, D. (2009). *Nigerian English usage.* Ikeja: Longman Nigeria Limited.

Karim, K., & Nassaji, H. (2013). First language transfer in second language writing: An examination of current research. *Iranian Journals of Language Teaching Research, 1*(1), 117-134. Retrieved from https://files.eric.ed.gov/fulltext/EJ1127353.pdf.

Kinyaduka, B., & Kiwara, J. (2013). Language of instruction and its impact on quality of education in secondary schools: Experiences from Morogoro region, Tanzania.

Journal of Education and Practice 4 (9), 90-95. Retrieved from http://www.iiste.org/Journals/index.php/JEP/article/viewFile/5752/5915)

Kirkpatrick, L. A., & Feeney, B. C. (2016). *A simple guide to IBM SPSS: For versions 23.0 (14th ed.)*. Boston, MA: Cengage Learning.

Klein, W. (2003). *Second language acquisition*. Cambridge: Cambridge University Press.

Komba, S. and Bosco, S. (2015). Do students' backgrounds in the language of instruction influence secondary school academic performance? *Journal of Education and Practice, 6*(30),148-156.

Kong, J., Powers, S., Starr. L, & Williams, N. (2012). Connecting English language learning and academic performance: A Prediction Study. *American Educational Research Association*, 1-22.

Ladi, A. (2015). An assessment of the effect of Pidgin English on English language communication in public offices in Yola, Nigeria. *Worldwide Journal of Multiplidisciplinary Research and Development 1*(5). 46 – 47

Lay, Y. F. & Khoo, C. H. (2009). *Introduction to statistical analysis in social science research*. Selangor. Venton Publishing.

Li, G., Chen, W., & Duanmu, J-L. (2010). Determinants of international students' academic performance: A comparison between Chinese and other international students. *Journal of Studies in International Education, 14*(4), 389-405. doi:10.1177/1028315309331490

Lodico, M. G., Spaulding, D. T. & Voegtle, K. H. (2010). *Methods in educational research from theory to practice.* San Francisco, CA: Jossey-Bass.

Madoda, C., Baba, T., & Rose, M. (2015). English language proficiency as a predictor of academic achievement among primary English first additional language learners in South Africa. *International Journal Education Science, 9*(3), 325-333.

Mahon, E. A. (2006). High-stakes testing and English language learners: Questions of validity. *Bilingual Research Journal, 30(2), 479-497*.doi: 10.1080/15235882.2006.10162886

Makalela, L. (2005). *We speak eleven tongues. Reconstructing multilingualism in South Africa.* (B. Brock-Utne & R. Kofi Hopson Eds.). Cape Town: CASAS

Maleki A, & Zangani E. (2007). A survey on the relationship between English language proficiency and the academic achievement of Iranian EFL students. *Asian EFL Journal, 9* (3), 86-96. Retrieved from https://www.asian-efljournal. com/ 1029/quarterly-journal/2007/03

Mcleman, L., Fernandes, A. & NcNulty, M. (2012). Regarding the mathematics education of English learners: Clustering the conceptions of pre-service teachers. *Journal of Urban Mathematics Education, 5*(2), 112-132.

McMillian, H., & Schumacher, S. (2006). *Research in education: Evidence-based inquiry* (6th ed.). Boston: Pearson Education Inc.

Mellard, D. F., & Patterson, M.B. (2008). Contrasting adult literacy learners with and without specific learning disabilities. *Remedial and Special Education, 29*(3), 133-144. Retrieved from http://hdl.handle.net/1808/8322

Mills, G. E. (2003). *Action research. A guide for the teacher researcher (2nd ed.).* NJ: Merrill Prentice Hall.

Mlay N. (2010). *The influence of the language of instruction on students' academic performance in secondary schools: A comparative study of urban and rural schools in Arusha-Tanzania*. (Published master thesis). University of Oslo, Norway

Momani, M. (2009). The Jordanian secondary stage students' achievement in reading comprehension according to their views towards learning English as a foreign language. *Journal of Human Sciences, 42,* 1–36.

Morgan, G. A. (2004). *SPSS for introductory statistics: Use and interpretation.* Mahwah, NJ: Lawrence Erlbaum.

Muijs, D. (2004). *Doing quantitative research in education with SPSS.* London, GBR: Sage Publications.

Nelson, D. (2013). Correlation of academic excellence and cognitive academic language proficiency at University Level. *Journal of Education and Practice, 4* (8), 214 - 221. Retrieved from http://www.iiste.org/Journals/index.php/JEP/ article/viewFile/5210/5326

Nemati, M., & Taghizade, M. (2013). Exploring similarities and differences between L1 and L2. *IRJABS, 4*(9), 2477-2483.

O'Connor, R. E., Swanson, H. L., & Geraghty, C. (2010). Improvement in reading rate under independent and difficult text levels: Influences on word and comprehension skills. *Journal of Educational Psychology, 102*(1), 1-19. doi:10.1037/a0017488

Ogunmodimu, N. (2015). Language policy in Nigeria: Problems, prospects and perspectives. *International Journal of Humanities and Social Science, 5*(9), 154-160.

Olagbaju O.O. (2014). Multilingual education in Nigeria: Policy, practice, challenges and solutions. *Journal of Education and Practice,5*(6), 66 -73.

Ojo, J. K. (2010). Students' problems in English reading comprehension: some observations and research findings. *Nigeria Journal of Educational Studies and Research, 5*(1), 25-29.

Olanipekun, S., & Zaku, J. A. (2013). Gender analysis of students' entry qualification in English language in colleges of education in Kwara State. *International Journal of Secondary Education, 1*(5), 23-25.

Olanipekun, S.S. (2013). Appraisal of Nigerian senior secondary school's English language curriculum in the light of modern curriculum. Advances in arts, social sciences and education research. *Sedinst International Journal, 3*(7), 527-532.

Olayide, T., (2012). English language incompetency amongst senior secondary school students in Nigeria. *ISSUU.* Retrieved from https://issuu.com/olayidetikolo/docs/english_language_incompetency_among

Onwuegbuzie, A. J., & Johnson, R. B. (2004). Mixed method and mixed model research. In B. Johnson & L. Christensen, *Educational research: Quantitative, qualitative, and mixed approaches* (pp. 408-431). Boston, MA: Allyn and B

Orisawayi, D. (2007). Knowledge, technologies, language teaching and classroom development. *English Language Teaching Today, 6*, 1-10.

Oribabor, A. (2014). Factors affecting the performance of students in English Language. *Journal of literature, languages and linguistics 4,1*(6), 65-69.

Orgunsiji, Y. (2009). English language proficiency as a predictor of academic achievement among EFL students in Nigeria. *European Journal of Scientific Research, 37*(3), 490-495.

Padwick, A. (2010). *Attitudes towards English and varieties of English in globalizing India*. Newcastle: University of Groningen.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Plonski, P., Teferra, A., & Brady, R. (2013). Why are more African countries adopting English as an official language? Presented at African Studies Association Annual Conference, Baltimore, 2013. Maryland, MD: Books for Africa.

Parker, C. E., Louie, J., & O'Dwyer, L. (2009). New measures of English language proficiency and their relationship to performance on large-scale content assessments. *Issues & Answers Report, 066,* 1-60. Retrieved from http://ies.ed.gov/ncee/edlabs

Paulston, C., Bratt, G. & Richard, T. (2003). *Sociolinguistics: The Essential Readings.* Malden, Ma: Wiley-Blackwell.

Paschal, B. (2016). Mastery of language of instruction and its influence on student academic performance: Evidence from Tanzanian secondary schools. *International Journal of Research 1.*

Prinsloo, D. (2007). The right to mother tongue education: A multidisciplinary, normative perspective. *Southern African Linguistics and Applied Language Studies,25*, 27–43. doi: 10.2989/16073610709486444

Prescott, A., & Hellstén, M. (2005). Hanging together with non-native speakers: The international student transition experience. In P. Ninnes & M. Hellsten (Eds.), *Internationalizing higher education: Critical explorations of pedagogy and policy* 75 - 95. Dordrecht, Netherlands: The University of Hong Kong Comparative

Reese, Garnier, Gallimore and Goldenberg (2000). Longitudinal Analysis of the Antecedents of Emergent Spanish Literacy and Middle-School English Reading Achievement of Spanish-Speaking Students. *American Educational Research Journal 37*(3), 633-662. doi; 10.3102/00028312037003633Riches, C., & Genesee, F. (2006). Cross-linguistic and cross-modal aspects of literacy development. In F. Genesee, K. Lindholm-Leary, W. Saunders, & D. Christian, D. (Eds.). *Educating English language learners: A synthesis of research evidence* (64-108). NY: Cambridge University Press.

Robson, C. (2011). *Real world research: a resource for users of social research methods in applied settings (3rd ed.).* NY: Wiley

Robelle, M., & Ronald, C. (2016). English language proficiency and academic performance of Philippine science high school students. *International Journal of Languages, Literature and Linguistics,2*(2), 44-49. doi:10.18178/ijlll.2016.2.2.65

Sadeghi, B., Kashanian, N. and Maleki, A. (2013). English language proficiency as a predictor of academic achievement among Medical students in Iran. *Theory and Practice in Language Studies, 3*(12) 2315-232. doi:10.4304/tpls.3.12.2315-2321

Saengpakdeejit, R. (2014). Strategies for dealing with vocabulary learning problems by Thai University students. *Journal of Social Sciences, Humanities and Arts 14*(1), 147-167.

Salkind, S. B., & Green, N. J. (2011). *Using SPSS for windows and macintosh: Analyzing and understanding data*. Upper Saddle River, NJ: Prentice Hall.

Salami, O. (2008). Mother tongue education and bilingual classroom practice in Nigeria. *Journal of Language, Identity & Education .7*(2), 91-112.

San Miguel Jr., G. (2013). Shapes of their destiny: A history of the education of Cuban children in the United States since 1959. *U.S.-China Education Review, 3*(4), 276-281.

Saunders, W. & O'Brien, G. (2006). Oral language. In Genesee, F., Lindholm-Leary, K., Saunders, W., & Christian, D. (Eds). *Educating English Language Learners* 14-63. NY: Cambridge University Press.

Schouten, A. (2009). The critical period hypothesis: Support, challenge, and reconceptualization. *TESOL & Applied Linguistics, 9*(1), 1-16. doi:10.7916/D82V2PX

Scott, H. (2014). *Linear regression and correlation: A beginner's guide*. Kindle Edition

Shams, M. (2008). Students' attitudes, motivation and anxiety towards English language learning. *Journal of Research, 2*(2), 121–144.

Shaibu D. (2013). Language policy; Nigeria and the role of English language in the 21st century. *European Scientific Journal 9*(17), 11-21. Retrieved from https://eujournal. org/index.php/esj/article/view/1153/1169.

Shamim, F. (2011). English as the language for development in Pakistan: Issues, challenges and possible situations. *Dreams and Realities: Developing Countries and the English Language 1*,1 - 22.

Shanahan, T. & Beck, I. (2006). Effective literacy teaching for English-language learners. In August, D. & Shanahan, T. (Eds.). *Developing literacy in second-language learners: Goldenberg, English language learners*. Report of the National Literacy Panel on Language-minority Children and Youth (pp. 415- 488. Mahwah, NJ: Lawrence Erlbaum

Shanahan, T., & Shanahan, C. (2008). *Teaching disciplinary literacy to adolescents: Rethinking content-area literacy.* Harvard Educational Review, 78(1), 40-59. doi:10.17763/haer.78.1.v62444321p602101

Short, D. and Fitzsimmons, S. (2007). *Double the work: Challenges and solutions to acquiring language and academic literacy for adolescent English language learners*: New York, Carnegie Corporation.

Skutnabb-Kangas, Tove & Toukomaa, P. (1976). Teaching migrant children's mother tongue and learning the language of the host country in the context of the sociocultural situation of the migrant family. *Research Reports 15* (99)

Solano-Flores, G. (2008). Who is given tests, in what language by whom, when, and where? The need for probabilistic views of language in the testing of English

language learners. *Educational Researcher, 37*(4), 189–199. doi:10.3102/0013189X08319569

Solórzano, R. (2008). High stakes testing: Issues, implications, and remedies for English language learners. *Sage Journals 78(*2) 260-329. doi:10.3102/0034654308317845

Sreejesh, S., Mohapatra, S., & Anusree, M. R. (2013). *Business research methods: An applied orientation*. New York: Springer.

Starcher, K., & Proffitt, D. (2011). Encouraging students to read: What professors are (and aren't) doing about It. *International Journal of Teaching and Learning in Higher Education 23*(3) 396–407.

Suárez-Orozco, C., Suárez-Orozco, M., & Todorova, I. (2008). *Learning a new land: Immigrant students in American society*. Cambridge, MA: Harvard University Press

Tajdini, S., & Nazari, M. (2012). Its outsourcing decision: A quantitative approach. *International Journal of Business and Management, 7* (2), 113. doi:10.5539/ijbm.v7n2p113.

Taber, K. S. (2013). *Classroom-based Research and Evidence-based Practice: An introduction* (2nd ed.). London: Sage.

Tata, S. (2014). The causes of poor performance in English language among secondary school students in Deutse Metropolis of Jigawa state, Nigeria. *Journal of research and method in education 4*(5) 41-47.

Tella, J., Indoshi, F. C., & Othuon, L. A. (2010). Relationship between students' perspective on the secondary school English curriculum and their academic achievement in Kenya. *Educational Research, 1,* 390–395.

The National Institute for Literacy (2008). National early literacy panel report. Retrieved from https://lincs.ed.gov/publications/pdf/NELPReport09.pdf

The Ghana Education Service. (2010). *The development of education national report of Ghana: The basic education division*. Accra: Ghana: Government Publication.

The National Center for Educational Statistics (2011). *The nations report card: Mathematics 2011*. Retrieved from https://nces.ed.gov/nationsreportcard/pdf/main2011/2012458.pdf

The National Center for Educational Statistics (2014). *English language learners: Fast facts.* Retrieved from https://nces.ed.gov/fastfacts/display.asp?id=96

The National Association of Adult Literacy (2009). *Understanding the health literacy of America: results of the national assessment of adult literacy*. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/19190475

The Economist (2011). *The triumph of English: A world empire by other means.* Retrieved from http://www.economist.com/node/883997.

The No Child Left Behind Act (2001). Public Law 103-383.

Theresa, A. & Irvine, D. (2015). Predictors of Latino English learners' reading comprehension proficiency. *Journal of Educational Research and Practice 5*(1) 35-57. doi: 10.5590/JERAP.2015.05.1.03

Thompson, G. L., & Allen, T. G. (2012). Four effects of the high-stakes testing movement on African American K-12 students. *The Journal of Negro Education 81*, 218-227.

Torgeson, J. K. (2002). The prevention of reading difficulties. *Journal of School Psychology, 40*(1), 7-26.

Trice, A. G. (2007). Faculty perspective regarding graduate international students' isolation from host national students. *International Education Journal, 8*(1), 108-117.

Triola, M. F. (2012). *Elementary statistics technology update. (11th ed.).* Boston, MA: Pearson Education, Inc.

U.S. Department of Education. (2001). Introduction: No child left behind act. Retrieved from https://www2.ed.gov/nclb/overview/intro/guide/index.html

U.S. Department of Education. (2011) National assessment of educational progress: Nations report card. Retrieved from http:// www.nces.ed.gov

Usman, R., & Umar, T. (2014). The causes of poor performance in English language among senior secondary school students in Dutse Metropolis of Jigawa State, Nigeria. *Journal of Research & Method in Education,4*(5) 41-47.

Uysal, H. H. (2010). A critical review of the IELTS writing test. *ELT Journal, 64*(3), 314-320.

Vincent, C. (1996). *Singing to a star: The school meaning of second generation of Salvadorean students (Doctoral dissertation).* George Mason University: Fairfax.

West African Examination Council (2014). Analysis of results. Retrieved from https://www.waecdirect.org/results

Wilkinson, L. C., & Silliman, E. (2008). Academic language proficiency and literacy instruction in urban settings. In L. Wilkinson, L. Morrow, & V. Chou (Eds.), *Improving literacy achievement in urban schools: Critical elements in teacher preparation* (pp. 121). Newark, DL: International Reading Association

Wilkinson, L., Morrow, L., & Chou, V. (2008). Improving literacy achievement in urban schools: Critical elements in teacher preparation. *Newark: International Reading Association.* Retrieved from https://searchworks.stanford.edu/view/7643808

Wilson, J., & Komba, C. (2012). The link between English language proficiency and academic performance: A pedagogical perspective in Tanzanian secondary schools. *World Journal of English Language 2*(4) doi:10.5430/wjel.v2n4p1

Woodrow, L. (2006). Academic success of international postgraduate education students and the role of English proficiency. *University of Sydney Papers in TESOL 1*, 51-70.

Wright, W.E. (2010). *Foundations for teaching English language learners: Research, theory, policy, and practice*. San Antonio, TX: Caslon Publishing

Zehr, M.A. (2011). *Few states meeting goals of NCLB for English-learners.* Education week. Retrieved from http://www.edweek.org/ew/issues/english-languagelearners/index.html

Appendix 1

From: James Cummins: james.cummins@utoronto.ca

To: Goldlyn Ugonna Ozowuba: goldlyn.ozowuba@waldenu.edu

Fri 4/13, 9:20 AM

Dear Goldlyn:

There is no problem in reproducing the figures. Good luck in your doctoral research work.

Best wishes,

Jim Cummins.

Appendix 2

25th September 2017

Dear Ms. Ozowuba Goldlyn,

Permission Granted

Sequel to your letter dated June 20th, requesting for permission to be allowed to use results of final year senior students in our school for your doctoral research study, I write to inform you that your request has been granted.

The vice principal (academic) handles all affairs concerning student results. You will have to contact him. He will guide you on the next step.

Warm Regards,

Principal

Appendix 3

October 3rd, 2017

Dear Goldlyn Ozowuba,

Re. Request for Permission

This is to inform you that your application for permission to use our school for your doctoral studies have been approved. You are hereby directed to meet the vice principal (academic), vice principal (administration) and the dean of studies for a meeting.

A copy of this letter has been forwarded to them and the vice principal (academic) will schedule a date for the meeting as soon as you are ready to collect your data.

Best Regards,

Principal