

IMPACT OF CODE-SWITCHING ON ENGLISH LANGUAGE PROFICIENCY AMONG SENIOR SECONDARY SCHOOL STUDENTS IN NIGERIA

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ABSTRACT

This study examines how students in multilingual schools use code-switching when learning and working with English. Drawing on Vygotsky's Sociocultural theory of language learning, the study surveyed 150 students joined by interviews with 10 English teachers from chosen senior secondary schools in Lagos State, Nigeria. Respondents' views were gathered using a set of structured questionnaires for students and a standard interview of teachers. The numerical data was looked at using descriptive statistics and the interviews were interpreted through a thematic analysis. According to the findings, using code-switching in moderation while teaching helped learners understand better and take part more, but doing it too often meant they had fewer opportunities to improve their English skills. The report shows that using code-switching in a limited way can help and suggests that immersion methods should be popularized in class alongside respecting many different languages. The study finds that sometimes code-switching helps and other times not, depending on its frequency and the reason for its use. Effective promotion of English language learning depends on strategic routines in multilingual classrooms.

Keyword: Code-Switching, English Language, Proficiency, Multilingual, Comprehension

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1. INTRODUCTION

In multilingual countries when English functions as a second tongue: teachers and students find ways to talk and learn, moving between their native languages and English during the lessons (Herawati & Fitriani 2021). This means, often called code-switching, when you change between several languages during a conversation. The official language and main instructional medium for secondary and tertiary education in Nigeria is English since the nation is very multilingual (Modupeola 2013). Since indigenous languages are common in daily experiences for most students, teachers and students tend to use code-switching to communicate and teach in schools. Many debates about code-switching in the classroom involve educators, linguists, and policymakers (Martine 2018). It is considered an aid that helps students examine and learn complicated or vague English concepts when they find them hard to grasp. On the other hand, others contend that teaching pupils in many languages might hinder their ability to learn proper and fluent English. Therefore, teaching code-switching is a debated subject in secondary language education, mainly because students in their senior years must show strong English skills for upcoming exams (Oktavia & Trisnawati 2020; Lee 2016). Where English is used together with other languages, Modupeola (2013) opines that lessons in the classroom tend to involve some language mixing to make sure students and teachers are understood. It is common to describe this behavior, code-switching, as the use of different languages in one conversation or even within one sentence. According to Aliyu and Abubakar (2020), English is both the official language,

and the language used primarily for education in Nigeria at secondary and tertiary schools. The fact that many students hear Indigenous languages each day, instructors often use code-switching to communicate and teach. Interest in code-switching in the classroom has led to a lot of conversation among educators, linguists, and policymakers the one hand, it serves as a useful framework for explaining English topics, particularly to pupils who come across difficult or complex words. On the other hand, others contend that pupils who move between languages too often are unable to acquire fluent and quality English. In the view of Jegede (2012), that's why code-switching is still a topic of debate in language education, most notably at the senior secondary level since students are required to be fluent in English for their upcoming exams (Ye 2023; Ahmad & Jusoff 2009).

Students in senior secondary school in Nigeria are going through an important point in their education. At this point, knowing English well is needed for both success in the WASSCE and for getting into college or finding a job later. Many students have had English classes for years, yet they struggle with speaking, grammar, and understanding the language, leading some educators to doubt if teaching in the student's language helps or hurts language learning (Modupeola 2013). This study is important because it seeks to better clarify how and why teachers and students use more than one language in classroom settings (Aliyu & Abubakar 2020). While language interference and learning a second language have been studied many times, just a few studies have looked at the effects of classroom code-switching on students' proficiency. Since many teachers in Nigeria use English and local languages such as Yoruba, Hausa, or Igbo in the same lesson, this research is especially valuable there (Eneremadu, Rosita & Eziku 2024; Sabe & Luka 2020). One must study if such approaches aid in student learning or continue to cause language difficulties for them. As a result, this study tries to find out the degree to which code-switching influences students' English abilities. The study tries to find how often students and educators use more than one language in the classroom, asks them about the role of code-switching, and analyzes its effects on grammar, vocabulary, and being able to use English in speech (Martine 2018).

Objectives of the Study

1. examine the frequency and patterns of code-switching used by English teachers and students in selected senior secondary schools in Lagos State.
2. assess the effect of code-switching on students' English language proficiency in areas such as grammar, vocabulary, and oral fluency.

Research Questions

1. How frequently and in what patterns do English teachers and students engage in code-switching during classroom instruction in Lagos State secondary schools?
2. What is the impact of classroom code-switching on the English language proficiency (grammar, vocabulary, and oral fluency) of senior secondary school students in Lagos State?

Literature Review

Frequency and Pattern of Code-Switching Used by English Teachers

Code-switching is becoming a typical aspect of classroom interaction in multilingual educational environments like those in Lagos State, Nigeria (Jegede 2012). Teachers of English commonly switch between English, Yoruba, Igbo, or Pidgin English to help students better grasp the topics. Patterns in changing from one language to the other often have a significant impact on both teaching and learning, as well as on how well learners master new languages (Aliyu & Abubakar 2020).

Frequency of Code-Switching:

The frequency with which teachers use both English and another language in their classes varies depending on the subject matter (Afifah, Ys & Sari 2020). For many reasons, teachers in senior secondary schools across Lagos State often switch codes from English to Pidgin: to teach complicated subjects, provide instructions clearly, control the classroom, or develop good relationships with students (Gooden-France 2008; Onyejelem & Onyedikachi 2020). Certain teachers only use code-switching when they find it necessary, but others do so all the time, even without realizing it because of the way they speak or assume students' language knowledge. Using a lot of non-standard English at school might lessen students' possibilities of getting used to standard English, weakening their understanding of correct speech (Ishak, Dj, & Nur 2021).

Patterns of Code-Switching:

The patterns refer to how code-switching occurs within the discourse (Yao 2020). Several types of code-switching can be identified among English teachers in the classroom as identified by Ze (2020); Ishak, Dj & Nur (2020) and Onyejelem and Onyedikachi (2020)

1. **Inter-sentential Switching;** When a teacher teaches in English and then provides a clarifying line in Yoruba, for instance, "The verb must agree with the subject," this is known as inter-sentential switching. *Sè o yè yií? (Are you getting this?)*

2. **Intra-sentential Switching:** This kind of switching takes place inside a single phrase or sentence. "We have completed the essay writing topic; let's move on to the next one, *ká tó lẹ sí next topic.*" (Prior to going on to the following subject.)
3. **Tag switching:** Is the process of inserting a discourse marker or tag phrase from a different language into an English sentence: "Are you aware of how to construct plural nouns, *abi?*" ("*abi*" means "*riht?*" in Yoruba.)
4. **Situational Switching:** This pattern appears when the language used varies according to the circumstance or environment in the classroom, such as when discussing punishment or providing cultural explanations. These patterns are often shaped by several factors including the teacher's language background, the linguistic makeup of the students, the perceived difficulty of the lesson content, and the sociolinguistic norms of the community (Ahmad & Jusoff 2009). While some patterns especially intra-sentential switching can enhance contextual understanding, excessive or uncontrolled switching may blur language boundaries and diminish the quality of English language input. Therefore, studying how often and why English teachers switch languages is necessary to estimate its impact on students' English abilities (Macado & Diano 2021).

Effect of Code-Switching on Students' English Language Proficiency

In a linguistically diversified environment like Lagos State, Parma (2023) is of the opinion that the interaction between English and indigenous languages in the classroom has significant implications for students' language development. While code-switching can serve as a valuable instructional tool, its sustained use in English language classrooms raises concerns about its effect on students' overall proficiency in English (Oktavia & Trisnawati 2020). This is an exploration of how code-switching impacts key aspects of students' English language proficiency, particularly grammar, vocabulary, and oral fluency.

Impact on Grammatical Competence

To have grammatical competence, a learner must be able to build well-formed sentences, use proper tenses, correct punctuation, and keep subject and verb in agreement (Erkulova 2020). According to Nasution and Siregar (2021), students may develop confusing grammar models if local languages and English are often utilized in the classroom. Yoruba and Pidgin English are written very differently than Standard English. Exposing yourself to these mixed messages all the time could make you make grammar mistakes or get confused about English grammar rules. Because of this, some learners end up using a style that isn't always highly precise in formal situations such as when writing or taking exams (Ahmad & Jusoff 2009).

Impact on Vocabulary Development

Being able to use a wide variety of words correctly helps us communicate and succeed at school as stated by Nasution and Siregar (2021). Code-switching can be helpful or problematic for students' vocabulary growth. When used selectively, switching to a mother tongue to explain complex or unfamiliar English words can aid comprehension and retention (Blair & Morini 2022). However, habitual reliance on their native language to understand might discourage students from trying to understand new English vocabulary which forces their vocabulary to grow more slowly. Students may also struggle to find appropriate English terms during writing or speaking tasks, defaulting instead to familiar words from their first language (Parma 2023).

Impact on Oral Fluency

The ability to speak English out loud confidently and uninterruptedly is referred to as oral fluency (Sun et al. 2019). When students switch languages freely, they may not be required to fully use English in class, knowing they can often change to their mother language when facing trouble. Doing this may prevent speakers from talking in full English often which can make their speaking skills worse (Blair & Morini 2022; Roxa 2018). Additionally, students often learn from mixed-language classes that speaking in code-mixed ways is correct in formal appointments or exams. In the view of Onyejelem and Onyedikachi (2020), initially, using code-switching in class can help lower proficiency learners communicate and follow instructions, but using it too much can slow down their improvement in English.

If the learning environment does not emphasize the value of studying English as a whole, some students may be less focused on improving their speaking and spelling skills (Erkulova 2020). Invariably, code-switching affects someone's English language ability depending on the situation. So, educators must find a way to boost understanding while still giving students full English experiences to improve their skills (Caballero and Celaya 2019; Topic 2022).

Theoretical review

Sociocultural Theory of Language Learning

The main idea of this study is taken from Lev Vygotsky's Sociocultural Theory of Language Learning, which states that cultural environment and social learning are vital for the development of both mind and

language (Lantolf & Beckett 2009). What defines Vygotsky's theory is the Zone of Proximal Development (ZPD), showing what a learner can do alone and how much more can be done with assistance from others. Teachers in language classrooms help guide students by giving them the support needed to climb to a new level of knowledge. Some ways to scaffold are by modeling, asking questions, giving feedback, and, above all, using code-switching for students with different languages (Lantolf, Xi & Minakova 2021). Among students in Lagos State, most do not learn in their native language, so teachers regularly use code-switching to help students understand (Modupeola 2013). According to sociocultural views, code-switching helps students use what they already know in Yoruba, Igbo, Hausa, or Pidgin to help them learn English. When a teacher speaks both English and Yoruba to explain complex issues, they help students understand by keeping the learning content easy to understand and relate to within their ZPD (Gooden-France 2008; Onyejelem & Onyedikachi 2020). When applied in the right way, scaffolding supports students, reduces their anxiety, encourages them, and enhances their confidence, which helps them learn a new language. For this reason, Hawkins (2017) suggests that Vygotsky's principle of social and cultural learning fits well with code-switching during language development. In this context, students can have trouble with language structures because they often use their first language and fail to expand their ZPD. Since they depend on their first language, their growth in grammar, vocabulary, and speaking can be slowed.

For this reason, the theory allows us to see how code-switching can boost or limit someone's English proficiency (Duff 2007; Lantolf & Pavlenko 1995). According to this view, research seeks to examine how switching languages can aid learning from what is known (L1) to the unknown (L2) so long as the goal of learning a language is not threatened. Vygotsky's Sociocultural Theory explains well the reasons behind using code-switching in English language lesson plans. It confirms that language learning goes hand in hand with connecting with others in their culture and wisely using code-switching can increase what a student learns within their ZPD. Even so, the theory advises not to depend too much on these supports because a balanced program is needed to help students master English (Howell 2002).

2. RESEARCH METHOD/MATERIAL AND METHOD/LITERATURE REVIEW

This study investigates the impact of code-switching on English language proficiency among senior secondary school students in Nigeria using a mixed-methods research design necessitating the application of primary and secondary data (Turner, Cardinal & Burton 2017; Battista & Torre 2023). The population of the study is Lagos State, Nigeria secondary school students. The study with includes a sample of 150 students from 10 public secondary schools in Lagos State, Nigeria. A purposive sampling technique is used to select the schools, while a random sampling technique is used for surveying the students. Data collection methods include the use of questionnaires and interviews (Monday 2020). Using a 5-point Likert scale, the study set a 3.00 mean score as the decision threshold. Interviews were conducted with 10 English language teachers, one from each of the selected schools for more insight on the subject matter. Validity and reliability are ensured through triangulation and pilot testing of survey instruments and ethical considerations such as informed consent, confidentiality, and bias reduction were acted on. (Battista & Torre 2023). For data analysis, descriptive statistics summarized the data analysis on the Software app STATA 15.0 to analyze the data (Haghish 2020). However, the study has limitations, including potential biases in self-reported survey responses and limited generalizability due to sample size constraints.

3. RESULTS AND DISCUSSION

Table 1: Return Rate of the Questionnaire

S/N	NAME OF SCHOOL	OUT	IN	%
1	Abesan High School, Abesan Estate	15	14	9.3
2	Government College Ikorodu	15	14	9.3
3	Federal Government College, Ijanikin, Lagos	15	13	8.6
4	Community Senior Secondary School, Mushin	15	13	8.6
5	Command Secondary School, Ipaja	15	15	10
6	Okota Senior Secondary School, okota	15	15	10
7	Ajao Senior Grammar School, Ikeja	15	14	9.3
8	Gbagada Senior Secondary School	15	15	10
9	Egan Senior High School	15	14	9.3
10	Ojo Senior High School	15	15	10

	Total	150	142	95
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Table 1 shows that 150 copies of the structured questionnaire were administered among 10 different schools within Lagos state, of which 142 were properly filled and retrieved making 8 out of the questionnaire representing 5% were not retrieved or found usable. This represents a questionnaire return rate of approximately 95% which is considered significantly accurate for the study.

Demographic Data

Table 2: Respondent Gender, Age, and Educational Level

Gender	Male	Female			
	61(43%)	81 (57%)			
Age	10-12	13-15	16-18	19-21	22+
	35 (25%)	63 (44%)	29 (20%)	11 (8%)	4 (3%)
Educational Level	SSS1	SSS2		SSS3	
	58(41%)	52(37%)		32(22%)	

Table 2 on the study's demographic breakdown reveals a not-balanced gender distribution, with males outnumbering males at 43%. These not-balance statistics show the female dominance perspective but do not in any way affect the reliability of the findings. The age distribution is diverse, with most of the students falling within the 13-15 age range. Younger and older students are less represented but still significant to mention. The educational level of the participants is well-captured, with those who are at senior secondary school (SSS)1 education representing almost half of the sample (41%). As against 37% of senior secondary school 2 and 22% for senior secondary 3 levels. This academic diversity is particularly relevant in this study because education levels are often associated with better literacy capacity and higher thinking skills.

Thematic Data

Table 3: Frequency And Patterns Code-Switching During Classroom Instruction in Lagos State Secondary Schools

My English teacher frequently switches between English and a local language during lessons								
1	142	SA	A (4)	N	DA	SD	Mean Score	Decision
		(5)		(3)	(2)	(1)		
		59	31	29	8	15	3.08	Accept
Code-switching is used mostly when students do not understand English explanations.								
2	142	SA	A (4)	N	DA	SD	Mean Score	Decision
		(5)		(3)	(2)	(1)		
		23	44	51	12	12	3.38	Accept
My teacher code-switches to explain difficult topics more clearly.								
3	142	SA	D (4)	N	DA	SD	Mean Score	Decision
		(5)		(3)	(2)	(1)		
		39	34	39	15	18	3.49	Accept
Code-switching often occurs in the middle of sentences during instruction.								
4	142	SA	D (4)	N	DA	SD	Mean Score	Decision
		(5)		(3)	(2)	(1)		
		26	75	32	6	3	3.81	Accept
Code-switching is used strategically for classroom management or for giving instructions.								
5	142	SA	D (4)	N	DA	SD	Mean Score	Decision
		(5)		(3)	(2)	(1)		
		24	67	30	11	10	3.59	Accept

Table 3 Item 1 with a Mean of 3.08 indicates a neutral view on the general frequency of code-switching. Students strongly agree or disagree, suggesting varied or moderate usage among teachers. The mean outcome of 3.33 on item two falls within the neutral range but leans toward agreement. This suggests that code-switching is often perceived as a tool for clarifying misunderstandings. Likewise, the mean was 3.49 almost at the threshold of agreement, showing that students largely believe teachers code-switch to simplify difficult concepts. On the flip side, the mean of 3.81 is clearly in the agreed category, indicating that intra-sentential code-switching (switching within a sentence) is a common classroom pattern. Lastly, the mean of 3.59 is also

in the agreed range, showing that students believe code-switching serves strategic classroom purposes such as managing behavior or giving instructions. The responses suggest that code-switching is not only present but also occurs in patterned and purposeful ways. Teachers are perceived to engage in both intra-sentential and functional code-switching, primarily for clarity and classroom control. The slightly neutral stance on frequency suggests that while it happens often, it may not be uniform across all classrooms or schools.

Table 4: Effect of Code-Switching on Students' English Language Proficiency

Frequent code-switching helps me understand English grammar better.							
6	142	SA (5)	D (4)	N (3)	DA (2)	SD (1)	Mean Score Decision
		24	37	38	26	17	3.17 Accept
Code-switching limits my ability to learn and use new English vocabulary.							
7	142	SA (5)	D (4)	N (3)	DA (2)	SD (1)	Mean Score Decision
		27	22	51	17	0	2.88 Accept
Due to code-switching, I find it difficult to speak English fluently without mixing languages.							
8	142	SA (5)	D (4)	N (3)	DA (2)	SD (1)	Mean Score Decision
		31	34	34	28	15	3.26 Reject
Code-switching has improved my confidence in learning English.							
9	142	SA (5)	D (4)	N (3)	DA (2)	SD (1)	Mean Score Decision
		27	22	49	28	16	3.11 Accept
Relying on code-switching in class reduces my exposure to correct English expressions.							
10	142	SA (5)	D (4)	N (3)	DA (2)	SD (1)	Mean Score Decision
		55	47	30	9	1	4.03 Accept

Table 4 above highlights the results of the real-life effect of code-switching on students' English language proficiency. The results present a mixed perception of the effect of code-switching on English proficiency: The Mean outcome of 3.17 falls in the neutral range. This implies that students are unsure whether frequent code-switching truly enhances their grammatical understanding. Item 7 has a Mean of 2.88 falls within the neutral range, with a slight tendency toward disagreement. Students generally do not strongly feel that code-switching limits their vocabulary acquisition, though some concerns may exist. A mean of 3.26 is still neutral, indicating that some students believe code-switching might hinder fluent English speech, but this is not a strongly held consensus. Again, item 9 with a Mean of 3.11 indicates neutral, suggesting that while some students feel more confident with the support of code-switching, it isn't universally perceived as a booster of language confidence. Last, a resounding Mean of 4.03 is the strongest agreement in this section. It shows that many students agree that over-reliance on code-switching reduces their exposure to proper English usage, which could negatively affect their proficiency.

Descriptive Statistics

Table 5: summarize fpcsc ecsselp

<i>Variables</i>	<i>Obs</i>	<i>Mean</i>	<i>Std.Dev.</i>	<i>Min</i>	<i>Max</i>
<i>Fpcsc</i>	142	3.761549	.67619025	2	5
<i>Ecscelp</i>	142	3.098592	.5862473	1.6	5

Table 5 representing Frequency and Patterns of Code-Switching in Classroom (FPCSC) shows that 142 respondents were observed (Obs). It justifies that Mean 3.76 shows that respondents perceive that code-switching often takes place within well-presented patterns during their classes. Because the data is on a 5-point Likert scale, a score near 4 means they use code-switching very frequently and regularly. The value of Standard Deviation (0.68) means few differences exist between values and most lie very close to the mean. The lowest point in the scale (2) means little agreement and the highest (5) shows strong agreement with how often code-switching happens. Most of the students agree, but there is some variance in the way they see this topic. For the Effect of Code-Switching on Students' English Language Proficiency (ECSELPL), an average of 3.10 suggests that people give moderate or mixed responses to the question about whether code-switching impacts students' English grammar, vocabulary, and fluency. It reflects some of the students' positivity, while others are not as sure. Once more, having a Standard Deviation of 0.59 means most scores are close to

the group's average. Most students view it in the same way, though it is slightly more varied than the view of the FPCSC. Any score below the minimum shows concern about the negative impact of switching languages, while any score close to the maximum says people see a positive impact. Such a wide range confirms that people have differing ideas about this topic. It is evident from the data that code-switching is often and intentionally used by teachers in their lectures in Lagos State (with a high score on FPCSC). There are mixed views about how East West affects students' English language skills (a moderate mean score on ECSSELP), as some students consider it positive and others consider it troubling. Despite small differences in both variables, respondents are generally of the same opinion and ECSSELP has the slightest disagreement.

Qualitative Data- Interview

For more insight into the subject, 10 teachers were interviewed, 1 from each of the selected schools. The responses from the interviews were interpreted through a thematic analysis.

How often do teachers code-switch when teaching English?

Most teachers said they might use code-switching from time to time or even a lot, based on how much the students understand, how detailed the subject is, and if they need to finish the lesson in time. Some people thought it should be used more in SS1 than SS3 since students in SS3 are already more exposed and developed. Some teachers said they do their best to lessen it to fit the curriculum plans.

Reasons and when teachers decide to switch languages

Teachers use code-switching to clarify difficult grammar rules or explain abstractions, provide directions or guidance, manage the class, and help students get involved or relax. Switching between ideas inside a sentence and between sentences was frequent. Having a multi-ethnic class, teachers sometimes swapped to using Yoruba, Pidgin, or the language students used most frequently.

Some of the effects of changes to grammar, vocabulary, fluency, and confidence.

Different opinions: Some feel it helps weak learners get better and become more confident. Some warn that using it too much can limit how much a child absorbs and can affect how the language is learned. Most admitted that code-switching negatively influenced how students spoke, forcing them to use mixed language patterns in speaking. Experts concluded that the process of code-switching between languages reduces students' vocabulary and their ability to use grammar correctly.

Teachers' view and alignment with policy

Most teachers believe code-switching can be useful if it is monitored. It was observed that there was not enough support in how to use language in the classroom. Several voiced that the idea of an English-only curriculum was not reflected in actual teaching.

Balancing code-switching with language development goals

Only switching between languages when needed and slowly put less emphasis on it as students get more confident in their new language. Recommended including visual aids in lessons. Using classmates for help, exploring bilingual terminology, and interacting in English help improve English skills.

Discussion of Results

Engaging with data, it was found that English language teachers in Lagos State code-switch very frequently. It follows the qualitative results, as most teachers stated they choose to code-switch a little or a lot, often to help students understand. It reflects the thinking of Caballero and Celaya, (2019) and Setati, Lee (2016) that teachers use code-switching to help their students connect words from both languages and their meanings. Since Nigeria is such a multilingual country, code-switching comes not only from the teacher using different languages but also as a strategy to make education inclusive. Research by Ye, (2023) and Topic (2022) also proves that teachers will code-switch when difficulty arises in teaching or classroom management. Generally, students see code-switching as slightly helping or not affecting their English proficiency. Many of the students noticed that "Switching to a different dialect often prevents me from practicing clear expressions of strong agreement." They see how code-switching can support their study, even while noticing it may reduce the chance of passing on the target language to others. Eneremadu, et al. (2024) and Sabe and Luka (2020) maintain that though code-switching improves comprehension, going too far might lessen students' practice with the new language.

Some teachers thought that students could better understand abstract grammar and vocabulary by using both the native and international language forms. This is consistent with Vygotsky's Sociocultural Theory which holds that language helps people grow intellectually. For Epilate, code-switching allows learners to navigate from what they already know (L1) to the new language (L2). Teachers are worried that students might end up relying too much on switching to their first language instead of improving in English. This supports Lantolf, et al. (2021) in pointing out that moving from L1 can sometimes bring benefits and sometimes cause problems, depending on the conditions. Many of the teachers noticed that policies were not

always put into practice. Although the curriculum requires them to teach only English, having students from diverse language backgrounds means they must often switch languages. This problem is explained by Lantolf & Beckett (2009) and Hawkins (2017), who suggest that language-in-education policies in countries like Nigeria ought to be sensitive to students' backgrounds. For Vygotsky (1978) and Lantolf and Pavlenko (1995), language skills are built through social interaction, especially when a person with more knowledge helps by using appropriate language. Given this, using code-switching allows students to manage the gap between their present and future language capabilities. Nonetheless, sociocultural theory in support of Howell (2002) stresses that using the target language will eventually be learned by the student, but here is the warning: when students code-switch too much, it can hamper their ability to grasp English thoroughly, according to the concerns discussed by everyone involved.

4. CONCLUSION

By using artificial intelligence, environmental sustainability communication in Nigeria can help to solve its urgent problems in the area. If AI is applied to climate prediction, resource usage, use of clean energy and supporting pollution and biodiversity, Nigeria can advance in being more sustainable. But we need to be careful about using AI like a weapon or tool, as it brings risks, including spreading false content, biases in data processing, privacy issues and problems in regulation of AI. Building an AI policy framework that covers environmental sustainability and includes clear guidelines for ethics are necessary for handling AI in the environmental field. Associations between governments and the private sector, as well as global cooperations, will help increase development by sharing expertise and other resources. Essentially, reliable digital connexions, thriving ecosystems for environmental data and skilled AI developers in Africa are vital to help Nigeria fully benefit from AI for the environment, making the country resilient, prosperous and better for the environment over the years ahead. To get high returns out of AI and protect people from its issues, we need to keep learning, be adaptable and collaborate as the field develops.

5. RECOMMENDATIONS

- a. Education ministry should develop clear policy guidelines on when and how code-switching can be used to support learning without undermining English proficiency.
- b. Teacher training workshops should be focused on strategic code-switching and alternative scaffolding methods such as visuals, concept mapping, and bilingual glossaries.
- c. Teachers should encourage gradual reduction of code-switching in senior classes to promote language immersion and competence.

REFERENCES

- Afifah, N., Ys, S., & Sari, D. (2020). An Analysis of Code Switching Used by an English Teacher in Teaching Process. *English Education Journal*, 5, 19-25.
- Ahmad, B., & Jusoff, K. (2009). Teachers' Code-Switching in Classroom Instructions for Low English Proficient Learners. *English Language Teaching*, 2, 49-55.
- Aliyu, B., & Abubakar, S. (2020). Influence of Geography and Gender as Sociolinguistics Reasons for Hausa to English Code-switching among Students of English in College of Education, Katsina State, Nigeria
- Battista, A., & Torre, D. (2023). Mixed methods research designs. *Medical Teacher*, 45, 585 - 587.
- Blair, M., & Morini, G. (2022). From one language to the other: Examining the role of code-switching on vocabulary learning in adult second-language learners. *Second Language Research*, 39, 1027 - 1048
- Caballero, N., & Celaya, M. (2019). Code-switching by primary school bilingual EFL learners: a study on the effect of proficiency and modality of interaction. *International Journal of Bilingual Education and Bilingualism*, 25, 301 - 313.
- Duff, P. (2007). Second language socialization as sociocultural theory: Insights and issues. *Language Teaching*, 40, 309 - 319.
- Eneremadu, Q., Rosita, N., & Eziku, C. (2024). Language Planning in Nigeria: Clash Between English Language and Indigenous Languages. *Indonesian Journal of Applied and Industrial Sciences (ESA)*. <https://doi.org/10.55927/esa.v3i2.8363>.
- Erkulova, F. (2020). Developing Grammatical Competence In EFL Teaching., 2, 410-413.
- Gooden-France, S. (2008). Dagmar Dueber, Nigerian Pidgin English: Language contact, variation and change in an African urban setting. *Language in Society*, 37, 131 - 134.
- Haghighi, E. (2020). Developing, maintaining, and hosting Stata statistical software on GitHub. *The Stata Journal*, 20, 931 - 951.

- Hawkins, B. (2017). Using Sociocultural Theory to Examine the Context(s) of Language Learning and Teaching. , 8.
- Herawati, H., & Fitriani, S. (2021). Using code-switching as the teaching strategy in classroom for low English proficiency learners. *English Education Journal*. <https://doi.org/10.24815/eej.v12i4.19109>.
- Howell, C. (2002). *SOCIOCULTURAL THEORY AND SECOND LANGUAGE LEARNING*. James P. Lantolf (Ed.). Oxford: Oxford University Press, 2000. Pp. 297. £20.90 paper. *Studies in Second Language Acquisition*, 24, 490 - 491.
- Ishak, N., Dj., M., & Nur, H. (2021). Descriptive analysis of the English teacher's code switching. , 1, 28-38.
- Jegede, O. (2012). Roles of Code Switching in Multilingual Public Primary Schools in Ile-Ife, Nigeria. , 1, 40-46.
- Lantolf, J. (2006). *SOCIOCULTURAL THEORY AND L2: State of the Art*. *Studies in Second Language Acquisition*, 28, 67 - 109.
- Lantolf, J., & Beckett, T. (2009). Sociocultural theory and second language acquisition. *Language Teaching*, 42, 459 - 475.
- Lantolf, J., & Pavlenko, A. (1995). Sociocultural Theory and Second Language Acquisition. *Annual Review of Applied Linguistics*, 15, 108 - 124.
- Lantolf, J., Xi, J., & Minakova, V. (2021). Sociocultural theory and concept-based language instruction. *Language Teaching*, 54, 327 - 342.
- Lee, H. (2016). Code Switching in the Teaching of English as a Second Language to Secondary School Students. , 6, 45.
- Macado, K., & Diano, F. (2021). Acquisition of Language Proficiency in English Among Senior High School Students from the Different Strands. , 2, 69-75.
- Martine, D. (2018). An Assessment of Code Switching to Students' English language Proficiency in Tanzania. A Case of Muleba District. .
- Modupeola, O. (2013). Code- Switching as a teaching strategy: Implication for English Language teaching and learning in a multilingual society. *IOSR Journal of Humanities and Social Science*, 14, 92-94.
- Monday, T. (2020). Impacts of Interview as Research Instrument of Data Collection in Social Sciences. , 1, 15-24.
- Nasution, D., & Siregar, F. (2021). Investigating the Impact of Code-Switching on English Foreign Language Students' Speaking Confidence. , 7, 194-199.
- Oktavia, D., & Trisnawati, W. (2020). The Code Switching and English Language Proficiency Performed by Students in Learning English as a Foreign Language at STKIP-MB. , 334-338.
- Onyejelem, P., & Onyedikachi, O. (2020). The influence of Pidgin English on educational outcomes among secondary school students in Nigeria. *International Journal of English and Literature*, 11, 46-52
- Parma, A. (2023). Attitude Of the Teachers and Students in Code-Switching in English-Instructed Subjects.
- Roxas, M. (2018). Factors, Forms and Functions: An Analysis of Senior High School Students' Filipino English Code-Switching Behavior. *Asian journal of multidisciplinary studies*, 2.
- Sabe, C., & Luka, E. (2020). Impediments to learning the English language in Nigerian education: A philosophical discourse. *International Journal of Educational Research*, 7, 97-107.
- Sun, H., Yussof, N., Vijayakumar, P., Lai, G., O'Brien, B., & Ong, Q. (2019). Teacher's code-switching and bilingual children's heritage language learning and cognitive switching flexibility. *Journal of Child Language*, 47, 309 - 336.
- Topić, A. (2022). Code-Switching in Second Language Teaching of English: Does it Matter? *MAP Education and Humanities*. <https://doi.org/10.53880/2744-2373.2022.2.1.8>.
- Turner, S., Cardinal, L., & Burton, R. (2017). *Research Design for Mixed Methods*. *Organizational Research Methods*, 20, 243 - 267.
- Yao, M. (2020). Structure Patterns of Code-Switching in English Classroom Discourse. , 133-141. <https://doi.org/10.32861/ELLR.68.133.141>.
- Ye, X. (2023). Code-switching in Chinese junior secondary school EFL classes: functions and student preferences. *The Language Learning Journal*, 51, 263 - 278.
- Zee, Z. (2020). *AN ANALYSIS OF CODE SWITCHING IN BILINGUAL SCHOOL IN COMMUNICATION BY NON-NATIVE SPEAKER ENGLISH TEACHER IN BALI*. , 8, 53-64.