ARTICLE

Adapting Language Curriculum for Diverse Learners: Strategy for Inclusive Education

John Edor [1] , *Elizabeth Akpanke Odey* [2*] , *Enyioma E. Nwosu* [2] , *Gabriel Bubu Ncha* [1] , *Essien Udoaka Edem* [3] , *Ekpenyong Obo Ekpenyon* [2] , *Robert Bikom Etta* [2] , *Gideon Imoke Emeng* [2] , *James Ajang Aboh* [4] , *Offiong Offiong Asuquo* [2] , *Lily Nnenna Ozumba* [5] , *Louis Ajom Edet* [4]

[1] *Department of Philosophy, University of Calabar, Calabar 540001, Nigeria*

[2] *Department of Religious and Cultural Studies, University of Calabar, Calabar 540001, Nigeria*

[3] *Department of Commercial and Industrial Law, University of Calabar, Calabar 540001, Nigeria*

[4] *Department of History and International Studies, University of Calabar, Calabar 540001, Nigeria*

[5] *Department of Public Administration, University of Calabar, Calabar 540001, Nigeria*

ABSTRACT

In an era of globalization, classrooms are becoming increasingly diverse, necessitating the adaptation of language curricula to meet the varied needs of learners. This paper investigates effective strategies for designing inclusive language education that acknowledges and leverages students' diverse linguistic and cultural backgrounds. Through a comprehensive literature review, qualitative interviews with educators and quantitative surveys using ex-post-facto or causal comparative research design. The target population consisted of selected primary schools in Calabar Municipality. The estimated primary school population was 108,074 based on the school register. It is assumed that all these members of the population are in one way or another involved in both the diverse language learning process and also not involved vis-à-vis. The sample consisted of 506 individuals drawn from the study population. Stratified random sampling techniques were used in selecting the subjects Questionnaire items was deployed using the theoretical frameworks such as constructivism, culturally responsive teaching, universal design for learning UDL, Socio-cultural theory, differentiated instruction, critical pedagogy, and second language acquisition SLA were adapted as a paradigm to justify the results of the findings and it provided a comprehensive foundation for adapting language curricula for diverse learners. This study identifies key practices that enhance engagement and learning outcomes. Findings suggest that

curricula that incorporate culturally relevant materials, differentiated instruction, and collaborative learning environments significantly benefit diverse learners. The findings underscore the necessity of flexible curricula that accommodate different learning styles and abilities, ultimately enhancing language acquisition and fostering an inclusive atmosphere. The paper concludes with actionable recommendations for educators and policymakers aimed at fostering inclusive language education.

Keywords: Curriculum; Diverse Learners; Languages; Linguistic; Cultural; Cognitive Learning

1. Introduction

Language and culture are inseparable among human societies. Every cultural setting or group has a language or more. Simply put, there is no culture without language and no language without culture. However, the issue of adapting language curriculum for diverse learners is particularly critical for diverse learners, as language affects learners' cognitive perception and performance. According to Kim and Mattila (2025), language is fundamental to an individual's self-identity; it facilitates the expression of emotions, sharing of experiences, narration of stories, and communication of intricate information and knowledge. Language serves as our foremost mediator, facilitating connection and comprehension among individuals [1]. Kim and Mattila asserted that "language is not only interaction/dissemination module, rather a link to ethnic identity." Kim postulation added impetus that language is part of identity and very important in human day to day dealings. In spite of language relevance, it becomes a challenge in an environment where there are diverse learners in a learning environment, hence, the need for a diverse language learners' curriculum is necessary for inclusive education.

Kim and Mattila further posit that "The language barrier elicits adverse emotional and cognitive reactions, hindering customers from undertaking specific actions, such as obtaining essential information or voicing complaints over service deficiencies.". His view is relatable to the learning environment, as such, learners influenced by a language barrier would exhibit poor academic performance. The barrier becomes more serious and effective in a diverse language classroom where there is no nationally recognized language as a second language, which cannot bridge the communication gap. Corroborating further, Hiebert (1983) averred that cultural differences affect the learners' performance and cognitive perception. Each society perceives the world uniquely, a perspective that is reflected in its language and culture. No language is free from bias, nor are cultures devoid of theological, educational, or psychological influences [2]. Therefore, translating and conveying educational content in a new language presents significant challenges. Failing to recognize this can lead to ineffective teaching or, worse, the transmission of lessons that are misunderstood or distorted. This entails acquiring a new language and translating the lesson material into various languages [2].

Cinzia et al. (2009) inferred that "Language is perceived as an impediment in study abroad programs, perhaps limiting students' opportunity to interact with the local culture [3]. They claimed that tourist literature and intercultural communication literature generally perceive language as a constraint in intercultural communication. Chomsky (1988) observed that "specifically, the linguistic divide in international travel has been examined as an impediment to intercultural communication between guests and hosts" [4]. In a progressively multicultural and multilingual environment, the need for inclusive education has never been more pressing. Language learners come from a variety of backgrounds, each bringing unique strengths and challenges to the classroom. Adapting language curricula to accommodate this diversity is essential for fostering equitable learning opportunities. This paper aims to investigate effective strategies for adapting the language curriculum for diverse learners to satisfy the interests of all learners, especially those from marginalized or underrepresented groups.

The landscape of education is continuously changing, impacted by the growing diversity of student populations. As classrooms become melting pots of linguistic and cultural origins, educators must address the challenge of providing fair learning opportunities for all students. Language acquisition is especially vulnerable to these dynam-

ics since language is not only interaction/dissemination module, rather a link to ethnic identity, cultural identity and cognitive development. This paper explores the necessity of adapting language curricula to create inclusive educational environments. By examining effective strategies and practices, this research seeks to enhance the current dialogue on inclusive education and offer pragmatic suggestions for educators.

2. Literature Review

The fundamental principles of inclusive education emphasise the need for a curriculum that reflects the diversity of student backgrounds. Vygotsky's (1986) social constructivism highlights the significance of collective dynamics in knowledge acquisition [5], whereas Bronfenbrenner's (1979) ecological systems theory underlines the influence of diverse environmental conditions on a child's educational experience [6]. Recent studies in language education indicate that conventional language curricula often overlook the requirements of different learners. Research indicates that standardized methods may lead to disengagement and suboptimal performance. Effective language teaching must incorporate culturally pertinent materials and varied instructional methodologies to interest all learners.

Odey et al (2025) opined that successful case studies evaluate the successful implementation of adaptive strategies in language education. For instance, programs that utilize differentiated instruction and culturally responsive teaching have demonstrated improved outcomes for diverse student populations [7]. The theoretical basis for inclusive education is grounded in several key frameworks. Vygotsky's theory of social constructivism asserts that social contact is essential for cognitive growth, suggesting that language learning is most effective in collaborative environments. Additionally, Bronfenbrenner's (1979) ecological systems theory emphasizes the multifaceted influences on a child's development, highlighting the relevance of context in educational experiences. Simultaneously, these perspectives stress the significance of changing educational techniques to match the different circumstances of learners. Current practices in language education show that traditional language education often adheres to a one-size-fits-all approach, which can alienate students from diverse backgrounds. Research indicates that such methods frequently result in disengagement and poor academic performance among marginalized groups. In this view, Ladson-Billing (1994) posits that effective language education must prioritize culturally relevant pedagogy, which not only respects but also incorporates students' backgrounds into the learning process [8]. This section will review various models of language teaching that have successfully integrated inclusive strategies, emphasizing differentiated instruction, scaffolding, and culturally responsive materials. Meyer et al. (2014) highlight successful case studies that outline the effective implementation of adaptive strategies in diverse classrooms [9]. For instance, a study conducted in a bilingual education program demonstrated that students who engaged with culturally relevant texts showed significantly higher levels of engagement and achievement compared to those who used traditional materials. Another case study focusing on project-based learning revealed that collaborative projects allowed students to leverage their unique cultural perspectives, enriching the learning experience for all [9].

Tomlinson (2014) opined that complexity in language and fluency is the cause of language barriers in communication [10]. On like the one above, complexity as a barrier in communication could occur in both cultural and cross-cultural communication and learning environments, even among individuals of the same language. Kreps and Jackson (2022) characterize language complexity and fluency levels as the intricacy and proficiency in employing a specific language [11]. Individuals may exhibit varying degrees of proficiency in a particular language, leading to difficulties in understanding and expression. Furthermore, restricted vocabulary, inadequate grammar, and insufficient fluency might hinder effective communication, potentially leading to misconceptions and insufficient comprehension [11]. Chomsky (1965) further elucidates that intricate languages with elaborate grammatical structures and extensive vocabularies might present extra obstacles [12]. The complexity of a language can hinder individuals' ability to comprehend and utilise it effectively, particularly if the speakers or listeners are non-native or have minimal experience to the language. In a multi-cultural or diverse classroom, culture tends to expose both the teacher and the learners to the language complexity and fluency, which can become a barrier to communication and, in turn, impose a challenge of misconception and misunderstanding in com-

municating the lesson contents.

O'Connor (2013) in a different approach indicates that, irrespective of the involvement of more individuals in communication in the same language, significant gaps in their linguistic competence may exist [13]. Also, someone with a vast lexicon may utilize complex terminology that is not readily understood by their peers. The aforementioned arguments indicate that fluency and complexity in language constitute a barrier for varied learner groups. Another cause of communication barriers that creates significant distortion among learners in varied groups/settings is issues related to accents and pronunciation. Individuals from many areas and cultures may possess distinct accents that can impede communication, even when utilizing a shared language. The meaning of words and phrases can be easily misinterpreted when articulated with a foreign accent, potentially resulting in misinterpretation and interpersonal conflict.

Kreps and Jackson (2022) opined that ethnic accents and speaking variations within a language can create a communication gap. Different ethnic groups, intonation patterns, and pronunciation styles across states can hinder comprehension, particularly for those unfamiliar with these variations. The above reveals that regional accents and pronunciation can cause a barrier in communication that may affect the other person from the full flow of the delivered lesson contents. In Nigeria, as a nation, we can agree with this author that regional accents and pronunciation of words in communication raise barriers to effective understanding and meaning of the lesson contents. Kreps and Jackson further assert that regional accents can complicate the accurate comprehension of spoken discourse. Variations in the pronunciation of particular sounds, rhythm, and speech patterns may result in misinterpretation or challenges in comprehending specific words or phrases.

Ceylan (2017) maintained that language serves as a medium of communication among varied learners and members of society. Language is an essential instrument in presenting lesson information in a diversified learning environment. It is the instrument that conveys traditions and ideals associated with group identity [14]. Language communication is a fundamental characteristic of a community, and the continuous use of a single language serves as the most definitive evidence of the historical continuity of that community. Similarly, Carstairs-McCarthy (2003)

posited that the function of language is closely linked to its social nature, highlighting the interdependence and mutual conditionality between language use and the society along with its intrinsic culture [15]. Communication and language utilisation occur both orally and in written form. Consequently, the examination of various facets of language, including speaking and writing, while acknowledging that the study of language use is a multidisciplinary undertaking, is interconnected with teaching and learning. In class delivery, it is crucial for varied learners to ensure retention, preservation of language, cultural sensitivity, and acknowledgement of ethnic identity realities. The necessity of language in communication encourages both the emergence and evolution of a language, and this necessity intensifies when it is conveyed by another individual in a classroom environment.

In terms of linguistics, Brandi (2023) avers that Language is a foundational theoretical discipline; it is essential to differentiate between the behaviours of "speaking" and "language" [16]. Speaking is specific and tangible; it represents the linguistic process inherent in acts of communication and constitutes an independent facet of language. Conversely, language is a general, abstract concept including a comprehensive array of organizational abilities and concepts; it pertains to the system governing any specific act of communication. Consequently, the utilisation of language in heterogeneous learning groups is essential. Language plays a vital part in the life of every human. The significance of language in our lives is unparalleled. It is not merely a medium for conveying thoughts and ideas, but has also evolved into a mechanism for establishing friendships, cultural connections, and economic links. Historically, intellectuals have contemplated the significance of language in human existence. Ahmed (2012) asserted that language is a crucial means of interaction with others in our vicinity. He contends that we utilise language to communicate our emotions, express our needs, and pose enquiries. We can adapt our language to suit each scenario [17].

Abdurrahman (2019) further validated that language serves as the medium of our mind. Language facilitates our cognitive processes [18]. Thought is referred to as sub-vocal speech. The cognitive process is impaired if the individual possesses a weakness in language. Language serves as the conduit for articulating our emotions and experiences. We

articulate our emotions and experiences through language. We convey messages to one another via language. The emergence of globalisation has facilitated communication and idea exchange among individuals worldwide. While technology advancements facilitate communication, the significance of language cannot be overlooked. The comprehension of a shared language has facilitated communication among individuals from many regions of the globe. Language has emerged as a principal medium of communication among nations, cultural groupings, diverse corporations and organisations, communities, and acquaintances. Countries interact exclusively through language.

Andreas (1978) posits that language is linked to a child's moral development. The process commences when the child reaches approximately 18 months of age [19]. The youngster acquires knowledge of right and wrong by heeding the guidance of parents or other adult authorities. Envision instructing a child on the distinction between right and wrong without the use of language. Language serves as the framework of our consciousness, enabling us to recognize what we may consent to and manifest in our reality. On a subconscious level, we utilize words daily to affirm and negate events. Language facilitates the development and refinement of an individual's personality comprehensively. Baxter (2007) posited that language acquisition, as an aspect of knowledge, is a crucial determinant of competitiveness [20]. In contemporary modern industrial civilization, proficiency in one or more languages has become essential. Confirming concisely, Billing (1997) asserted that language is a fundamental element of human development, distinguishing us from other species and fostering a profound sense of connection among individuals [21]. Cameron (2001) posited that an infant is born devoid of language; nonetheless, by the age of five, the child acquires several hundred words and comprehension of the syntax and lexicon of a specific language, even in the absence of formal instruction. This is an intrinsic human inclination, which is crucial for further development [22]. Any observed mismatch in language acquisition at an early stage may signify a potential sickness in a child.

Vygostshy (1978) emphasizes that language is integral to a child's developmental trajectory, as it is linked to multiple facets of growth. Language acquisition is intrinsically linked to emotional development. For example, an infant observing their parent's face is met with cooing and affectionate remarks from the parents [23]. Nieto (2013) maintains that this remains in the infant's cognition, and as he matures, he starts utilising language to articulate his feelings as well. This literature assessment concluded that language originates from two primary sources: the natural or evolutionary source and the divine source [24]. Evolutionary biologists argue that language originated from gesture communication and subsequently evolved into a phonetic system facilitated by the human brain and vocal apparatus. From the perspective of learning and academic understanding, all forms of teaching and learning are centered around language. Consequently, language is fundamental to self-identity, cultural awareness, ethnic identity, and comprehension in teaching and learning. Language fundamentally facilitates the sharing of emotions, storytelling, and the communication of intricate information and knowledge, as asserted by Vygotsky (1986), Tomlinson (2001) [25], Krashen (1982) [26], and Cummins (2000) [27]. The research also revealed that language and culture are intertwined. The strongest kind of dependency between language and culture is that language is itself a cultural entity. This is to say that, without language, some level of cultural development could never arise.

Hitherto, Corballis (2003) summarized that language barrier often goes hand-in-hand when there are cultural differences. He opined that language barriers can easily affect the academic performance of diverse learners group and impose misunderstanding, increase time and effort, conflict and truancy during learning process [28]. To overcome the negative effect of language deficiency, the incorporated of learning inclusivity technique is necessitated, which aligns with the focus of this research adapting language curriculum for diverse learners: strategy for inclusive education. As put by Crystal (1992) Language is the foundation of all education. School education is primarily focused on language. Literacy, composition, and mathematics are all contingent upon linguistic proficiency. Language serves as the medium for literature. All great literature is produced through the means of language [29]. Crystal (1997) elaborated that language facilitates our ability to read literature and comprehend and appreciate the works of esteemed writers and poets. Language facilitates the advancement of our civilization [30]. Diamond (1959) asserts that language and civilisation are inextricably linked. He asserts that language facilitates the peace process [31]. International

comprehension and global tranquilly have been facilitated through the medium of language. Drew (1992) asserts that language pertains to the manner in which persons structure their minds, ideas, and thoughts to comprehend the world around them [32]. Duursma (2002) asserts that language enhances physical development via the senses of touch, taste, hearing, and play [33]. Emotionally and socially through interaction with peers and social engagement, language and communication abilities are essential instruments for intellectual development. Therefore, the importance of tailoring language curricula for various learners cannot be overstated.

3. Theoretical Framework

Piaget Jean (1970) and Lev Vygotsky (1978) are principal advocates of Constructivist Theory [34,35]. This theory asserts that learners develop knowledge through experiences and interactions. By modifying language curricula, educators can facilitate collaborative learning experiences that honour the different origins and prior knowledge of learners. By doing so, the educator and the students can effectively implement this theory by integrating collaborative work, peer instruction, and culturally pertinent resources that enable learners to leverage their experiences, thereby cultivating a more profound comprehension of language. Similarly, Gloria Ladson-Billings (1994) and Geneva Gay (2010) proposed culturally responsive teaching (CRT) [8,36]. This method emphasises the importance of integrating students' cultural references into all aspects of education. It acknowledges that students' cultural identities impact their learning styles and experiences. Consequently, its applicability necessitates curriculum modifications that incorporate texts, examples, and pedagogical approaches reflecting diverse cultures and languages, allowing learners to connect personally with the content.

Furthermore, Meyer et al. (2014) introduced the Universal Design for Learning (UDL) theory [9], which offers a framework for developing educational environments that cater to individual learning differences. It underscores adaptability in students' interaction with content, exhibition of understanding, and acquisition of information. Meyer et al. assert that this approach can be implemented via language courses that incorporate multiple modes of representation (visual aids, audio resources), engagement (subject

selection), and expression (diverse assessment methods) to accommodate the demands of varied learners. A significant theory utilized in this study is the Socio-Cultural Theory, created by Lev Vygotsky. The concept emphasizes the impact of social interaction and cultural context on learning. Language functions as both a means of communication and a conduit for cultural expression and identity formation. This idea promotes collaborative learning and social engagement among students, leveraging community resources and peer support to improve language acquisition and cultural relevance in education.

Equally significant is Differentiated Instruction, introduced by Carol Ann Tomlinson (2001) [25], which promotes the customization of instruction to address the specific needs of individual learners. It acknowledges that students originate from diverse ethnic backgrounds, possess varying motivations, and have distinct interests. This notion can be implemented through tactics such as tiered assignments, flexible grouping, and continuous evaluation relevant for inclusivity within a diverse language curriculum. Critical Pedagogy, as articulated by Paulo Freire (2000), elucidates learners' enquiries and confronts disparities in their educational experiences [37]. It seeks to empower pupils by fostering critical thinking and contemplation on societal challenges. It integrates conversations on language, power dynamics, and social justice into the curriculum, allowing students to assess its relevance in their lives and communities. Theories of Second Language Acquisition (SLA) proposed by Stephen Krashen and Jim Cummins in 2000 were deemed significant in this research, highlighting that SLA theories concentrate on the mechanisms through which individuals acquire a second language, underscoring the critical roles of input, interaction, and social context. Modify the language curriculum to incorporate sufficient intelligible input, avenues for genuine language application, and methodologies that facilitate both social and academic language advancement.

4. Methodology

The ex-post-facto or causal comparative research design was adopted since the variable had already impacted on the diverse learners in schools before the study and therefore the researcher had no control over the variables [38]. The target population consisted of selected primary

schools in Calabar Municipality. The estimated primary school population was 108,074 based on the school register. It is assumed that all these members of the population are in one way or another involved in both the diverse language learning process and also not involved vis-à-vis. The sample consisted of 506 individuals drawn from the study population. Stratified random sampling techniques were used in selecting the subjects.

A questionnaire was used to obtain information from respondents. The questionnaire was segmented into two sections, A and B. While A had sixteen items comprising respondents' bio-data, section B comprised 32 items designed to measure the degree of respondents' inclusivity through a diverse language learning curriculum. A trial-test was conducted with 50 randomly selected groups using the split-half technique; a product-moment reliability coefficient of 0.78 was obtained, which was considered appropriate for the study.

4.1. Research Question

- To what extent does Adapting Language Curriculum for Diverse Learners influence inclusivity in learning environment?

4.2. Research Hypothesis

The following research hypotheses were tested at ($D<0.05$)

(1) Diverse language learners who are highly, moderately and lowly taught through diverse learners' curriculum would not differ significantly as regards their involvement in learning and inclusivity

(2) Diverse language learners in Nigeria include the three major languages in Nigeria, namely: Igbo, Hausa and Yoruba.

4.3. Data Analysis

Table 1 shows that generally, the level of learners involvement in a class where diverse language learning curriculum is not applied is low. However, the second group, where a diverse language learning curriculum is more applied, indicates (X = 1.51), is more involved in the learning process than the former. Also, (X = 1.42) indicated in **Table 1** portrays that those who moderately applied diverse language learning curriculum, whereas those who were highly involved with diverse language learning curriculum appear to be (X = 1.48).

Table 1. Mean on Extent of Involvement of Diverse Language Learning.

S/N	Variables	Group	Frequency	Mean (X)	Extent of Involvement
1.	Diverse Language Learners	(a)Igbo	292	1.48	Low
		(b) Hausa	193	1.45	Low
		(c)Yoruba	330	1.54	low
2.	Degree of inclusivity	(a)lowly inclusivity	59	1.52	Low
		(b)moderately inclusivity	301	1.42	Low
		(c)highly inclusivity	146	1.42	Low

Mean 3.01 and above–High Extent;
Mean 2.01–3.00–Moderate Extent;
Mean 2.00 and below–low Extent.

From **Table 2**, the calculated F-ratio of 5.30 is greater than the critical F-ratio of 3.003 required for its significance. The researchers therefore failed to accept the stated null hypothesis. This means that the diverse language learning curricula that were highly, moderately or lowly did differ significantly as regards the involvement of this technique in the learning process ($D< 0.05$).

A further post hoc test using Scheffe for multiple comparisons of the variables is shown in **Table 3**.

Table 3 indicates that the mean for the low frequency is 1.52, which is greater than the mean for the moderately frequency of 1.42, and there was a significant difference in the subset (subset 1) for Scheffe's grouping. Similarly, the mean for the lowly learning of (1.52) is greater than the mean for highly adapted diverse language learning group of (1.42). There was also significant difference (subset iii). This means for highly adapted learners and moderately adapted diverse language learners are equal (1.42) and there was no significance difference (subset ii). The interpretation is that adaptation of diverse language learning process enhances inclusivity and learning in multicultural and multilingual learning settings.

Table 4 shows a calculated F-ratio of 0.59, which is less than the critical F-ratio of 3.003 required for significance. The stated null hypothesis is therefore accepted. This implies that Adapting Language Curriculum for Diverse Learners is a strategy for Inclusive Education (D < 0.05).

Table 2. ANOVA Summary of the Low application of Diverse Language Learning Curriculum Class.

Source	Sum Squares	DF	Mean-(X)⁻	F-Cal	F-Crit.
Model	3.17	2	1.59	-	-
Error	151.20	504	0.30	*5.30	3.003
Total	154.37	506			

*significant at 0.05 level.

Table 3. Scheffe's Test for Differences Among Diverse Language Learners Group Using/Adapting Diverse Language Learning Curriculum.

Scheffe's Grouping	Mean (X)⁻	N	Degree of Learning
A	1.52	59	Low
B	1.42	3.01	Moderate
C	1.42	146	High
505			
i	1.52	A	Low
	1.42	B	Moderate
ii	1.42	B	Moderate
	1.42	B	High
iii	1.42	A	Low
	1.42	B	high

Mean with the same letters are not significantly different.

Table 4. ANOVA Summary of the Effects of Adapting Language Curriculum for Diverse Learners: Strategies for Inclusive Education.

Source	Sum of Squares	DF	Mean-(x)	F-Cal	F-Crit
Model	0.36	2	1.18		
Error	151.20	504	0.30	*0.59	3.008
Total	151.56	506			

* Not significant at D < 0.05.

5. Discussion of the Findings

Table 3 indicates that the mean for the low frequency is 1.52 is greater than the mean for moderately frequency of (1.42) and there was significant difference in the subset (subset 1) for scheffe's grouping. Similarly, the mean for the lowly learning of (1.52) is greater than the mean for highly adapted diverse language learning group of (1.42). There was also significant difference (subset iii). This means for highly adapted learners and moderately adapted diverse language learners are equal (1.42) and there was no significance difference (subset ii). The interpretation is that adaptation of diverse language learning process enhances inclusivity and learning in multicultural and mul-

tilingual learning settings. The table shows a calculated F-ratio of 0.59, which is less than the critical F-ratio of 3.003 required for significance. The stated null hypothesis is therefore accepted. This implies that Adapting Language Curriculum for Diverse Learners is a strategy for Inclusive Education (D < 0.05). Hence, this finding aligns with Jean Piaget (1970) and Lev Vygotsky (1978) purviews. Their postulations opined that learners construct knowledge through experiences and interactions. This theory was tested and theorized in a diverse learners setting and the result of the findings revealed that both teachers and diverse learners group conceptualized the strategy and manipulated the learning processing such that it enhances the diverse learners level of comprehension and under-

standing of the lesson content as demonstrated in table one above which indicate positive result. As rightly put by Piaget and Vygotsky adapting language curricula, educators can create opportunities for diverse learners to engage in collaborative learning experiences that respect their backgrounds and prior knowledge. In doing so, the teacher and the learners can constructively apply this theory by enhancing and incorporating group work, peer teaching, and culturally relevant materials that allow students to draw from their experiences, fostering a deeper understanding of language. To justify this finding. Gibbons (2002) posits that an accelerated focus on language learning education is essential for fostering interpersonal and social interactions [39]. This assertion aligns with the significance of language in promoting inclusivity within education. Over the years, language has facilitated interpersonal relationships, social integration, knowledge transfer, cultural adaptation, interpretation, and improved academic performance. Hence, the research serves as a readily available motive to continue to fill the gap in inclusive education.

The relevance of language curriculum for diverse learners in educational inclusivity cannot be overemphasized. This is why Levitt (2007) further stipulated that the use of language within a varied group of learners is both a contentious issue and a foundation for divide and classroom management [40]. Language functions as a motivational factor to ensure academic achievement. At the same time, it can cause poor academic performance if not properly managed. In this vein, Mullins (2022) asserted that adapting multiple learning processes can trigger intellectual prowess of learners through a collaborative learning experience, which suggests that various theoretical paradigms for diverse learners can assume that language implementation is the primary variable that influences change [41].

Fairclough (2001) asserts that variations in local languages and dialects typically serve as the foundation for disunity within varied learners, regularly contributing to ethnic and tribal divide and acrimony [42]. Nevertheless, the use of Nigerian languages offers a supportive environment for various learners of those tribal groups, hence augmenting their sensation of well-being and academic dedication and performance. Ojo (2015) additionally asserted that segregation in formal socialisation among people of same bilingual entity is prevalent in diverse learning environments [43]. When socializing, we naturally seek to engage with individuals who comprehend us. For numerous individuals, communicating in their original language is the most straightforward option. Tension arises among learners from various Nigerian ethnic groups due to the backdrop.

As earlier mention, language learning curriculum for diverse learners enhance the incorporation of group work, peer teaching, and culturally relevant materials that allow students to draw from their experiences, fostering a deeper understanding of language. Donovan (1996) emphasized above view is in alignment with the purview of this research when he said the learning contents can be made indigenized through the use of traditional and cultural music, using of the traditional African musical instrument in the learning environment, all these is done to ensure that the learning process suit the different diverse learners group [44]. In other words, Ojo (2018) asserted that theology and diverse learners group can be compared in terms of conceptualization of the learning group, this process also aids the conceptualization of some of the African heritage [45].

Meyer et al. (2014) proposed Universal Design for Learning (UDL) theory that stipulates educational environments that accommodates individual learning differences [9]. This framework was also put to test in the field in the course of undertaking this research, questionnaire items were formulated, tested using selected sample techniques among educators of diverse learners and the result yielded positive outcome from those educators who make adequate use of the all-inclusive learning strategy. Indicating that language curricula for diverse learners is a positive and productive methodology for inclusivity among diverse learners. In this vein, national commission of colleges of education postulation aligns with the forth going, which states that dissemination of information evolves from language [46]. The corollary from above, is that, the academic performance and universal design for learning UDL are simply co-related, without which, no sound instruction can take place. Therefore, UDL accommodates both ethnic linguistic of Africa and English language adapted by a state or nation. These had to be put in place for a functional classroom operation. Again, the National Policy in Education (NPE, 2014) purports that the missionary's language, including English, is adopted, and students are instructed in both English and the local dialect. In this regard, the English language is utilised as the lingua franca in Nigeria. The National Policy in Education (NPE) stipulated that "the

proceedings of the National Assembly shall be conducted in English, Hausa, Igbo, and Yoruba for proper organisation and comprehension" [47].

Smith (2019) delineates cultural sensitization, which is also in tandem with the frame of UDL [48]. For Smith, learning should be conducted side by side with every participant's ethnic background, as such, for him, there is a significant correlation between bilingualism and the effectiveness of learning among diverse learners [48]. As such, universal design in learning guarantees all supposes and presupposes problems that may be encountered in a diverse learners setting. This purview is further explicated in the words of Okeke (2017). In further corroboration, he asserts that respondents indicated that lessons delivered in a UDL framework and in local languages led to enhanced levels of comprehension and engagement, as evidenced by this research finding [49]. Moreover, advancing the discourse on the influence of inclusivity via the implementation of UDL, Iwuanyanwu (2019) asserts that learners exhibited an increased eagerness to engage in the learning process, while educators showed a profound respect for the linguistic heritage of diverse learners [50]. However, challenges such as limited resources for language teaching and varying degrees of language competency among educators require a response. Likewise, Eze (2021) posited that language acquisition improves the clarity of instructional communication, whereas the utilization of the local language fosters trust and relationship with community constituents [51]. This cultural integration fosters the development of educators and learners who actively engage with local languages and are regarded as more courteous and culturally aware persons. Thus, the UDL framework recognizes the diverse problems encountered in the pursuit of implementing this methodology.

Differentiated instruction, proposed by Carol Ann Tomlinson (2001), this theory propound that lessons should be prepare to align with individual learners' needs [25]. This approach was tested using educators teaching techniques and those who implemented their lessons with this approach also recorded positive results indicating that lessons delivered through tailoring instruction to meet individuals learners yielded positive academic performance. The educators in this category tested learners with an examination after this approach and result was highly positive, thus demonstrating that taking account of diverse learners en-

hances inclusivity. Supporting this motion, Mark-Phillip (2018) posited that the integration of language learning within contemporary educational frameworks is essential, and it is a matter of reason that bilingualism and language acquisition are critical competencies in the pedagogical process [52]. Smith (2010) and Fowler (2012) have underscored that language learning education previously occupied a subordinate position [53,54]; however, contemporary data increasingly indicate that bilingualism constitutes a vital competency in the 21st century. This explains why numerous technological devices are now rendered in the traditional languages of various nations across the globe. This significantly underscores the importance of language and language learning education in our social interactions, relationships, and classroom environments, while also acknowledging the unique needs of individual learners. As noted by Ojo (2018), obstacles in language can obstruct comprehension of lesson materials, resulting in misinterpretations and potential resistance. Moreover, Thompson (2020) underscores that the incorporation of local languages in educational settings improves receptivity and cultivates trust between instructors and students [55]. The study of language education fosters an understanding of cultural nuances, which is essential in educational environments and in addressing the unique requirements of each learner.

Second Language Acquisition (SLA) postulated by Stephen Krashen (2000), Jim Cummins (2000) is a remarkable tool for inclusivity within diverse learners context. The educators in the calabar metropolis all emphasized that Nigerian government today has come to the realization that second language acquisition is prerequisite for admission to the Nigerian schools, hence almost all schools both private and government schools have mandated all students and educators to adapt this, as a compulsory duty of all those involve in education business. This scenario agrees with Stephen Krashen theory of second language acquisition. Further, Smith (2019) posits that a deep comprehension of cultural nuances enables educators to customize their lessons effectively. Through the acquisition of the local language, educators are positioned to interact with the community in a more profound manner, effectively addressing their distinct needs and concerns. A multitude of case studies underscore the efficacy of language learning curricula in Nigeria. For example, Adetunji's (2021) research in the Yoruba-speaking areas demonstrates that the incorporation

of indigenous languages in educational settings enhanced both attentiveness and participation among students [56]. In contrast, research conducted by Nwosu (2022) elucidates the difficulties encountered by non-native speakers in successfully conveying classroom instruction [57]. Throughout this investigation, the researcher noted a distinct absence of existing studies focused on the adaptation of language learning curricula for a diverse range of learners: a strategy aimed at fostering inclusive education. Consequently, this research endeavours to address that void.

Zacharias (2018) concurs with the aforementioned findings, asserting that language unequivocally facilitates social integration. An individual from Africa will undoubtedly align himself primarily with the linguistic group to which he belongs [58]. The primary rationale behind the disdain exhibited by Africans towards European missionaries following the cessation of the slave trade lies in their refusal to align themselves with the missionaries and the Christian faith. This perspective was primarily due to their perception of them as tractors. In the words of Gaiya (2002), it is clear that in regions where religion persisted for an extended period, even to the present day, it was the Africans themselves who were key evangelists in its spread [59].

The process of indigenization alongside second language acquisition serves to enrich and engage a wide array of learners. This approach allows individuals to connect with their identities through their native languages. Consequently, instructional materials must be tailored to accommodate the various ethnic groups, ensuring that lesson notes and content reflect the major ethnicities present in Nigeria's national curriculum. Furthermore, practical subjects such as songs, drama, dance, and poetry require translation, adaptation, and modification to foster inclusivity and address the diverse needs of all learners. In this context, Metuh (1996) asserts that "the proliferation of Afro-centric culture was a consequence of the intolerance exhibited by the foreign cultural mentality, which was aimed at displacing African culture" [60]. Metuh's perspective underscores the importance of tailoring language curricula for a variety of learners, highlighting its role in sustaining ethnic culture and promoting both cultural preservation and sensitivity. It additionally fostered social cohesion, integration, and mobilization, which contribute to accelerated growth and development. More so, Baker (2011) in trying to describe the relevance of second language acquisition

connoted "emphasized the essence is to ensure all interest are well captured and the depth of learning is adapted right at the root of once indigenous language where everyone can grasp the lesson from his local tongue" [61]. An example of where this is already taking place would be the national curriculum accommodating the three major ethnic groups in Nigeria.

The emergence of Christianity in Africa facilitated the exchange of knowledge between Africans and European missionaries through language. Banks (2016) [62], as cited in Pearson et al. (2003), define Intercultural communication as "the exchange of information between individuals from culturally distinct backgrounds" [63]. This indicates that the absence of adequate language acquisition in teaching will hinder information transmission. Furthermore, language acquisition education can facilitate the commercial endeavours of the African continent. As demonstrated through the ability of learners in a second language acquisition which can in turn achieve success in acquiring more than just one's ethnic tongue but also learning other ethnic languages which in turn guarantee ethnic solidarity, social cohesion, and national development and also international networking and interconnectivity

6. Conclusions and Recommendations

The results of this study highlight the essential requirement for modifying language curricula to suit the varied backgrounds of learners. Through the implementation of inclusive practices, educators can cultivate environments that boost language acquisition while promoting belonging and participation. The study emphasises that adaptable, culturally attuned curricula are crucial for attaining educational parity. Modifying language curriculum for various learners is not just advantageous but imperative in the contemporary educational environment. This study's findings indicate that inclusive techniques boost student involvement and improve language acquisition outcomes. Educators should prioritise the creation of adaptable, culturally attuned curricula that acknowledge and respect diversity,

Theoretical frameworks such as Constructivism, Culturally Responsive Teaching, Universal Design for Learning (UDL), Socio-cultural Theory, Differentiated Instruction, Critical Pedagogy, and Second Language Acquisition

(SLA) offer a robust basis for modifying language curricula to accommodate diverse learners. By incorporating these concepts, educators can provide inclusive educational settings that acknowledge and honour difference, guaranteeing fair access to language learning opportunities for all students.

(1) The government ought to establish agencies dedicated to professional development and training initiatives that facilitate the education of educators in inclusive teaching methodologies and adaptive strategies.

(2) It is imperative that governmental bodies and educational institutions prioritise the allocation of resources to materials that authentically represent the diverse cultural backgrounds of students.

(3) It is imperative for the government to initiate collaborative efforts that cultivate partnerships among language educators and experts in special education, linguistics, and cultural studies to create well-rounded curricula.

(4) It is imperative that government and educational institutions establish professional development organisations that promote the provision of training for educators, emphasising inclusive teaching practices, differentiation, and culturally responsive pedagogy.

(5) Government and educational institutions ought to prioritise the allocation of funds specifically designated for educational resources. This approach will empower schools to invest in a variety of instructional materials that accurately represent the cultural and linguistic diversity present within their student bodies.

(6) Schools ought to involve communities and families in the curriculum development process to guarantee that the educational content is pertinent and representative of students' identities.

(7) One fundamental recommendation of this research is that all languages hold significance, particularly for their respective ethnic groups; hence, every language should be considered vital.

(8) No human society should allow its language to become extinct. Consequently, all parents have a responsibility to instruct their children in their native language. Every nation should mandate that foreign immigrants complete an annual course in its language. Nigerian tertiary institutions should incorporate native languages into academic teaching and learning methodologies.

(9) Collaborative initiatives and alliances with local educators and bilingualism can augment lingua-franka laboratory and foster cultural synergy.

(10) Language acquisition must be incorporated into academic calendar to equip future leaders for proficient communication in linguistically varied environments. Schools and government agencies should setup community engagement initiatives that encourage educator's efforts towards prioritizing community involvement, utilizing local languages in outreach activities.

Author Contributions

For research articles with several authors, a short paragraph specifying their individual contributions must be provided. The following statements should be used "Conceptualization, E.A.O. and J.E.; methodology, OO.A.; software, EOE.; validation, LAE., L.N.O.. and O.O.A; formal analysis, E.E.N.; investigation, G.I.E; resources, JA.A; data curation, E.O.E.X.; writing—original draft preparation, E.A.E..; writing—review and editing, O.O.A.; visualization, G.B.N.; supervision, .LAE.; project administration, LN.O.; funding acquisition,. All authors have read and agreed to the published version of the manuscript." Authorship must be limited to those who have contributed substantially to the work reported.

Funding

Institutional Review Board Statement

The study was conducted in accordance with the Faculty of Arts Ethical Clearance Committee, University of Calabar and approved by the Facultyof Ats Ethics Committee Review Board (or Ethics Committee) of University of Calabar (approval number UC/FA/EC/25/002 and date: 16th January, 2025).

Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

Data Availability Statement

Data is available for further inquiry and can be access through the authors.

Acknowledgments

Conflicts of Interest

The authors declare no conflict of interest.

References

[1] Kim, E.E.K., Mattila, A.S., 2021. The Impact of Language Barrier & Cultural Differences on Restaurant Experiences: A Grounded Theory Approach. The School of Hospitality Management. The Pennsylvania State University: University Park, PA, USA. Available from: https://hdl.handle.net/20.500.14394/30135 (cited 13 March 2025).

[2] Hiebert, P.G., 1983. Cultural Anthropology. Baker Book House: Grand Rapids, MI, USA.

[3] Mancini-Cross, C., Backman, K.F., Baldwin, E.D., 2009. The effect of the language barrier on intercultural communication: a case study of educational travel in Italy. Journal of Teaching in Travel & Tourism. 9(1–2), 104–123. DOI: https://doi.org/10.1080/15313220903042004

[4] Chomsky, N., 1988. Language and problems of knowledge: The Manaua lectures. MIP Press: Cambridge, MA, USA.

[5] Vygotsky, L.S., 1986. Thought and Language. MIT Press: Cambridge, MA, USA.

[6] Bronfenbrenner, U., 1979. The Ecology of Human Development: Experiments by Nature and Design. Harvard University Press: Cambridge, MA, USA.

[7] Odey, E.A., et al., 2025. Relevance of language learning evangelism and education in the spread of Christianity in Nigeria. Forum For Linguistic Studies. 4(30), 155–165. Available from: https://journals.bilpubgroup.com/index.php/fls

[8] Ladson-Billings, G., 1994. The Dreamkeepers: Successful Teachers of African American Children. Jossey-Bass: San Francisco, CA, USA.

[9] Meyer, A., Rose, D.H., Gordon, D., 2014. Universal Design for Learning: Theory and Practice. CAST Professional Publishing: Wakefield, MA, USA.

[10] Tomlinson, C.A., 2014. The Differentiated Classroom: Responding to the Needs of All Learners. ASCD: Alexandria, VA, USA.

[11] Kreps, G.L., Jackson, J.A., 2022. Definition of Language Barrier. George Mason University: Fairfax, VA, USA.

[12] Chomsky, N., 1965. Aspects of the Theory of Syntax. MIT Press: Cambridge, MA, USA.

[13] O'Connor, C., 2018. Inclusive Language Education: A Guide for Educators. Routledge: New York, NY, USA.

[14] Ceylan, H., 2017. Different perspectives on the origin of language and the evidences from the field of language acquisition. International Journal of Language and Linguistics. 4(3), 71–79.

[15] Carstairs-McCarthy, A., 2003. The Origin of Complex Language: An Inquiry into the Evolutionary Beginning of Sentences, Syllables and Truth. Oxford University Press: Oxford, UK.

[16] Gratis, B., 2023. Overcoming Language Barrier to Communication. Available from: https://fastercapital.com/topics/overcoming-language-barrier-in-communicaion.html (cited 2 March 2023).

[17] Ahmed, N.U., 2012. The Origin of Language: Its Kinds, Function and Approaches. Journal of Positive School Psychology. 5(2), 212–226. Available from: http://journalppw.com (cited 4 January 2025).

[18] Abdurrahman, I.B., 2019. The origin of language: International Journal of Language. College of Education for Women, English Department. Tikrit University. 4(3), page range. Available from: https://www.researchgate.net/publication/332511386_The_Origins_of_Language (cited 12 January 2025).

[19] Kempe, A., 1978. The Language Spoken in Paradise. John Benjamins Publishing Company: Amsterdam, Netherlands.

[20] Baxter, J., 2007. Post-structuralist analysis of classroom discourse. In: Martin-Jones, M., de Mejia, A.M. (eds.). Encyclopedia of Language and Education: Discourse and Education, Vol 3. Springer: New York, NY, USA. pp. 69–80.

[21] Billig, M., 1997. Rhetorical and discursive analysis: how families talk about the Royal Family. In: Hayes, N. (ed.). Doing Qualitative Analysis in Psychology. Psychology Press: Hove, UK.

[22] Cameron, D., 2001. Working with Spoken Discourse. Sage: London, UK.

[23] Vygotsky, L.S., 1978. Mind in Society: The Development of Higher Psychological Processes. Harvard University Press: Cambridge, MA, USA.

[24] Nieto, S., 2013. Affirming Diversity: The Sociopolitical Context of Multicultural Education. Pearson: Boston, MA, USA.

[25] Tomlinson, C.A., 2001. How to Differentiate Instruction in Mixed-Ability Classrooms. ASCD: Alexandria, VA, USA.

[26] Krashen, S.D., 1982. Principles and Practice in Second Language Acquisition. Pergamon Press: Oxford, UK.

[27] Cummins, J., 2000. Language, Power, and Pedagogy: Bilingual Children in the Crossfire. Multilingual Matters: Clevedon, UK.

[28] Corballis, M.C., 2003. From hand to mouth: The origins of language. Princeton University Press: Princeton, NJ, USA.

[29] Crystal, D., 1992. An Encyclopedia Dictionary of Language and Languages. Blackwell Publishers: Oxford, UK.

[30] Crystal, D., 1997. The Cambridge Encyclopedia of Language, 2nd ed. Cambridge University Press: New York, NY, USA.

[31] Diamond, A.S., 1959. The history and origin of language. Methuen: London, UK.

[32] Drew, P., Heritage, J., 1992. Talk at Work: Interaction in Institutional Settings. Cambridge University Press: Cambridge, UK.

[33] Duursma, K.J., 2002. The Tower of Babel account affirmed by linguistics. Journal of Creation (TJ). 16(3), 22–31.

[34] Piaget, J., 1970. The Science of Education and the Psychology of the Child. Viking Press: New York, NY, USA.

[35] Vygotsky, L.S., 1978. Interaction between Learning and Development. In: Mind in Society: The Development of Higher Psychological Processes. Harvard University Press: Cambridge, MA, USA.

[36] Gay, G., 2010. Culturally Responsive Teaching: Theory, Research, and Practice. Teachers College Press: New York, NY, USA.

[37] Freire, P., 2000. Pedagogy of the Oppressed, 30th Anniversary Edition. Continuum: New York, NY, USA.

[38] Kerlinger, F. N., 1986. Foundations of behavioral research (2nd ed.). Oxford University Press: Oxford, UK.

[39] Gibbons, P., 2002. Scaffolding Language, Scaffolding Learning: Teaching Second Language Learners in the Mainstream Classroom. Heinemann: Portsmouth, NH, USA.

[40] Levitt, S.A., 2007. God Needs no Passport: Immigrant and the Changing Religious Landscape. Walbaun M.T.: USA.

[41] Mullins, C., 2022. Ethnic Identity and Cultural Diversity. Available from: https://ethnicity-identity- and –cultural-diversity.net (cited 20 January 2025).

[42] Fairclough, N., 2001. Language and Power, 2nd ed. Pearson: London, UK.

[43] Ojo, M.O., 2015. Language, Religion, and National Development in Nigeria: The Role of the Church in Education. International Journal of Humanities and Social Science. 5(7), 45–52. DOI: https://https://language-religion-natinal-developmentt.ng.org/

[44] Donovan, W.O., 1996. Biblical Christianity in African Perspective. Nigeria Evangelical Fellowship: Kwara, Nigeria.

[45] Ojo, S., 2018. Breaking the Language Barrier: Effective Communication Strategies in Nigerian Evangelism. International Journal of Church Growth. 12(4), 67–80. DOI: https://doi.org/breaking languagebarrier-effective.net

[46] National Commission for Colleges of Education (NCCE), 2005. Mother-Tongue: It's Pedagogy for Primaries 1-6 – 111.Available from: https://ncce.gov.ng (cited12 January 2025).

[47] National Policies on Education, 2014. The need for mother tongue. Available from: https://education.gov.n (cited 12 January 2025).

[48] Smith, R., 2019. Cultural Sensitivity in Evangelism: The Role of Language Education in Nigeria. Journal of Cross-Cultural Missions. 15(3), 101–115. DOI: https://doi.org/journalof-cross- cultural-mission.net

[49] Okeke, J., 2017. Language, Culture, and Religion: Exploring the Intersections in Nigerian Society. African Studies Review. 60(2), 200–215. DOI: https://doi.org-languAGE-cultureandreligion.net/

[50] Iwuanyanwu, E., 2019. Language and Identity: The Role of Indigenous Languages in Nigerian Christianity. Journal of Language and Religion. 5(2), 34–49. DOI: https://doi.org/journaloflanguageandreligion.net/

[51] Eze, P., 2021. Language Learning as a Tool for Effective Evangelism: Case Studies from Nigeria. Journal of Religious Studies. 14(3), 55–70. DOI: https://doi.org/journal ofreligiousstudies.org/

[52] Mark, P., 2018. The Importance of Language Learning for Education. Studica. Available from: https://www.studica.com/blog/language-learning-education/ (cited 30 January 2018).

[53] Smith, C., 2010. Christianity and the Politics of Language in Nigeria. Journal of Religion in Africa. 40(2), 205–226. DOI: https://doi.org/journal ofreligioninafrica.org/

[54] Fowler, C., 2012. The Dynamics of Language Use in Christian Evangelism in Nigeria. Journal of African Languages and Linguistics. 3(1), 45–60. DOI: https://doi.org/jornalofafricanlanguageandlinguistic/net

[55] Thompson, L., 2020. The Power of Local Language in Evangelistic Outreach: A Nigerian Perspective. Theological Studies. 18(1), 87–99. DOI: https://doi.org/journaloftheologicalstudies/net.org

[56] Adetunji, M.A., 2013. Language and Evangelism: The Role of Indigenous Languages in Church Growth in Nigeria. Journal of Religious Studies. 10(2), 77–90. DOI: https://doi.org/journalofreligiousstudie.org

[57] Nwosu, C., 2022. Challenges of Language Barriers in Evangelism: A Study of Non-Native Speakers in Nigeria. African Journal of Theology and Mission. 10(1), 22–34. DOI: https://doi.org/africanjournaloftheologyandmission.org

[58] Zacharias, R., 2018. Theological Education and Language Learning: Preparing Leaders for the Church in Nigeria. Evangelical Review of Theology. 42(3), 217–230. DOI: https://doi.org/evangelicalreviewoftheology/net

[59] Gaiya, M.A.B., 2002. Christianity in Africa: A Study in the Christian Presence in Africa up to 1900. Ade Printing Press: Jos, Nigeria.

[60] Metuh, I.E., 1996. African Enculturation Theology: Africanizing Christianity. Imico Books Co. Ltd: Onisha, Nigeria.

[61] Baker, C., 2011. Foundations of Bilingual Education and Bilingualism. Multilingual Matters: Clevedon, UK.

[62] Banks, J.A., 2016. Cultural Diversity and Education: Foundations, Curriculum, and Teaching. Routledge: New York, NY, USA.

[63] Pearson, J.C., Nelson, P.E., Titsworth, S., et al., 2003. Human Communication. McGraw-Hill: Boston, MA, USA.