Article

The Effectiveness of Hybrid Learning in English Pronunciation Pedagogy in the Nigerian ESL Context

Jacinta Benjamin-Ohwodede
University of Benin, Nigeria

Adekunle Mamudu
University of Benin, Nigeria

Simeon Nyemike Awunor
Delta State University, Nigeria

Abstract
This paper is a study on the effectiveness of hybrid learning; a blend of traditional and technology-based training, vis-à-vis the second language (L2) learner of English pronunciation. Specifically, the objective is centred on demonstrating the functionality of combining the habitual classroom teaching style with the Telegram app (a mobile-based technological tool) for studies relating to speech production and perception in tne Nigerian ESL context. The methodical procedure and design for this study is both quantitative and descriptive; employing the use of a multiple-choice questionnaire in data collection from 401 Nigerian undergraduate and postgraduate students in the University of Benin, Nigeria, to ascertain the effectiveness of digital designs and stratagems. Pie charts are employed to display multiple divisions of the study's data comparison. This study emphasizes the Online-Driver Blended Learning Model; such a pedagogical approach exposes the L2 learner to a more involved and effective way of understanding how to avoid imposing an unfamiliar accent upon the target language. Consequently, results reveal the effectiveness of merging online practical exercises and the exposure to uploaded multimodal texts and native speakers' spoken data (audio-visual recordings/voice notes) with scheduled direct classroom interludes. Findings also confirm that exploiting such a hybrid model enhances students' cognitive abilities and retentive capacity regarding English pronunciation. Such digital audio-visual tools are paramount phonetic strategies for learning how to avoid unacceptable phonetic alterations. Thus, we see the effectiveness of integrating the Telegram app into the traditional brick-and-mortar educational method in handling problems associated with speech sound production and second-language phonological interference in the Nigerian ESL context.

Key words
English pronunciation, ESL, hybrid learning, L2 pedagogy, telegram app

Corresponding author:
Jacinta Benjamin-Ohwodede, University of Benin, Benin City, Edo State, Nigeria
Email: jacinta.igharha@uniben.edu

INTRODUCTION

This study is an investigation into the implication of hybrid or blended learning; and how effective it is to the Nigerian L2 learner of English pronunciation. It therefore aims to depict the significance of student-driven pedagogies in 21st century techno-pedagogical skills. Van Laar et al. (2017) identified seven fundamental 21st-century digital skills namely, technical, information, communication, collaboration, creativity, critical thinking and problem-solving that expose both teachers and students to a range of educational resources which augments inclusion and digital literateness. All of these core digital skills are embedded within the 21st century student-driven pedagogical approaches like online tutoring and learning, cooperative learning, peer-led learning, problem-based learning, and inquiry-based learning amongst others. The English as a Second Language (ESL) learner is typically faced with challenges regarding the appropriate pronunciation of certain English phonemes.

Pronunciation refers to the ability to produce meaningful sounds that make up the phoneme inventory of a language and the capacity to apply certain non-segmental features to words, phrases, clauses and sentences. For O'Connor (1998), a good number of learners from all over the world are keen on speaking English with a pronunciation that makes them intelligible to all hearers. However, he observed that attaining proficiency in English pronunciation involves generating fresh boxes that align with the sounds of English. He further explains that dismantling phonetic and phonological patterns acquired from our native language becomes a challenge. This study focuses on how blended learning; face-to-face teaching and the use of the telegram app can aid L2 pronunciation skills. The ESL tutors are often burdened with proper approaches regarding tackling pronunciation challenges faced by some of these learners. Hence, pronunciation is a major challenge in both ESL teaching and learning process because pronunciation pedagogy has often been avoided by language tutors (Asikin & Ibrahim, 2020). Roach (2000) submitted that pronunciation pedagogy is uncommon with language tutors and pronunciation drills can be exigent despite the fact that there are diverse approaches of teaching and pronunciation assessment. Against this backdrop, this study investigates the role and efficacy of face-to-face classroom teaching methods in combination with Telegram for pronunciation improvement in the Nigerian ESL context.

In Nigeria, English is the official language and the second language of the people; their first being their mother tongue or native language. Kachru's (2006) classification of the global spread of the English language, places Nigeria within the outer circle. That is an area where English is used to execute formal and official national functions. Accordingly, English is primary within the linguistic landscape of Nigeria,both at the regional and national levels (Ugorji, 2010). Ufomata (1996) noted that the use of English in an ESL context like Nigeria is formal with ESL speakers having different levels of proficiency and a recognisable division between mainstream educated spoken Nigerian English as in other ESL contexts. In Nigeria today, English functions as the language of education and instruction; media and politics including the judicial system hence, attention is often given to English language pedagogy (Adebileje & Akinola, 2020). For this reason, this study's concern is to propose a hybrid method of combining the brick-and-mortar classroom teaching style as well as digital technology to improve English pronunciation among Nigerian learners of English as a second language.

The conventional; classroom teaching style has long been overtaken by advances in digital pedagogical skills and is therefore no longer efficient. Such styles that entail direct instructions are teacher-centred and are described as inflexible with a high dependence rate of students on tutors. Jaebi (2020) & Sardi (2022) submitted that this style of learning does not give room for a student's deeper level of understanding of complex concepts/permanent learning and that a student is often seen as a passive receptor of knowledge; repositories and the teachers as knowledge dispensers. Face-to-face teacher-centred classroom pedagogy does not encourage collaborative exercises amongst peers and involves continual listening to an instructor which can lead to boredom and loss of concentration. Also, classroom learning can sometimes be restrictive and introverted students with a high degree of inhibition may have challenges approaching the tutor with queries. Thus, a fusion of an electronic source to eLearning, in this instance, the telegram application, and the conventional pedagogical styles will not only help increase the self-esteem of the second language learner regarding English pronunciation skills but will encourage student/tutor interaction.

Blended Learning

Bryan & Volchenkova (2016) stated that blended learning pre-dates the introduction of digital technology and its genealogy lies in distance learning through correspondence courses. According to Guzer & Caner (2013), the development, in terms of use and acceptance, of the World Wide Web (internet) played a major role in popularizing distance learning. Blended learning is also referred to as hybrid or technology-mediated instruction. It simply refers to a situation where traditional classroom activities are amalgamated with modern-day digital tools. Kseniya & Bryan (2016) explain that, the increase in personal computing in the eighties and the advent of the World Wide Web (www) in the nineties, gave rise to the growth of patterns of procedures regarding blended learning pedagogy. In the same vein, Friesen (2012) explained that this mode of instruction is the latest step in a long history of technology-based training. Given the rapid advancement of educational technology, it is crusial to design a pedagogical method or concept that is suitable for both online learning and academic settings (Rauf et al., 2023). Investigations by several scholars suggest that this step in pedagogical advancement assists in tackling challenges involved in e-learning (Masri, 2020).

This technology-mediated method of instruction provides an avenue for the Nigerian L2 learner of English phonetics to be well grounded as regards the various categories of speech sounds bordering on the production of phones (human sounds); phonemes (meaningful speech sounds) and allophones (variants of phonemes that are non-distinctive). Harasim (2000) explained that students can easily access a wide range of multimodal learning like visual and audio recordings including kinesthetic and cognitive activities which serve as positive reinforcement. For the Nigerian L2 learner, the formation, conveyance and reception of speech sounds through this style of instruction enhances engagement and retention. Procter (2003) defined blended learning as the effective combination of diverse modes of delivery, teaching and learning styles. Thus, the effectiveness of such a model is paramount. In a bid to redefine the term, Friesen (2012) proposed that blended learning should be seen as the scope of an amalgamation of internet and digital media/mobile-based technology with the traditional brick-and-mortar models that requires the physical presence of both the tutor

and the student. Apart from the fact that the adoption of mobile technological tools converts the L2 learner from being an inactive recipient to becoming an active learner in the area of pronunciation instruction, feedback and evaluation for articulation and perception of second language segments is uninhibited. Blended learning is advantageous based on the fact that it is interactive; students have access to experts, cost-effective and convenient; flexible and enhanced learning outcomes. To this extent, Avazmatova (2020) submitted that presently, blended learning is developing in the education system worldwide (507).

Different models of blended learning exist such as face-to-face, rotation, flex, online lab, self-blend and online drive. According to Tong et al. (2022), as cited in Asalhi et al. (2021), Tesch (2016) presented six blended learning models as enumerated above and submits that in advancing students' learning proficiency, tutors adopt technical apparatuses in accelerating learning process. This study is hinged on the online driver method which involves the practice of the instructor delivering the entire syllabi or course content with the possibility of random face-to-face assessments. In other words, the tutor transfers pedagogical techniques available in real-world educational contexts and engages the students using a digital platform in addition to programmed physical contact. Here, teaching is synchronous, students are engaged with online quizzes, assignments are emailed to the tutor and learning is accomplished on the selected platform. Thus, this model is a combination of face-to-face instruction with computer-mediated instruction (Bonk & Graham, 2006). In the ESL context at the phonological level of interference, aspects of stress, rhythm and intonation are unconsciously transferred from the learner's first language (L1) to the second language (L2). Thus, teaching pronunciation to the Nigerian L2 learner entails devoting an ample amount of time to practical exercises without which the learner's overall speaking skills will be adversely affected. The Nigerian L2 speaker of English requires conversation practices, expert support, speech drills and listening exercises because pronunciation is one of the most challenging aspects a language learner is expected to master. Thus, selecting the appropriate communicative technique for teaching English pronunciation in an ESL context is fundamental to delivering effective pronunciation training. A hybrid of the Telegram application and the traditional brick-and-mortar approach to pedagogy is therefore necessary as it offers linguistic, visual and aural multimedia modes that handle problems related to accent, and stress placement and enhance pronunciation. Our decision to utilize Telegram is based on the fact that besides being able to maximally set up group discussions in a single virtual classroom it has unlimited space and does not limit document-type files videos and images. Also, the instructor can simultaneously log in on several devices with the option of copying/pasting videos, images and even executable files. Above all, about student offline activities, Telegram can be operated while offline because of some functionalities which can work seamlessly without access to the internet.

Finally, in explaining the online driver model in hybrid learning, Atan (2018) noted that learners are provided with pedagogical materials on the preferred online platform and are expected to work remotely with minimum face-to-face supervision adding that it is suitable for student flexibility and independence.

The Telegram APP as an English Language Pedagogical Instrument

Figure 1. Telegram Mobile–Based Application

This is a social networking application that was created in August 2013. This software or mobile application is primarily meant for digital communication; and instant messaging. Its functions include sending and receiving of media files, voice/video calls and web-based collective learning. In terms of its significance as an e-learning tool, it is often employed by instructors based on the fact that it is practical and functional for pedagogic tasks and assignments and can be used on several operating systems like Android, iOS, and Windows via mobile devices and desktops. It can create groups with at least 200,000 members; accept and send all types of media files; acknowledge multiple Telegram accounts in a single device and preserve messages for an indefinite period. As a pedagogical instrument, its educational features include the ease of scheduling lecture appointments, assigning tasks and class activities, quick response and feedback, enhancing communal academic participation, secret and private chats with individual students and above all, security and privacy. Mutonono & Palovska (2016) submitted that a chat app like Telegram which is a new tool for learning and collaboration is essential in assisting learners in developing their communication skills and being in complete control of their learning experience.

The Telegram app is indeed a veritable tool for language learning as it can be used as a virtual learning classroom, language study group, language exchange platform and online library where educational resources can easily be accessed anywhere and anytime. This is because of the presence of certain features that are engaging and assist language learners to become more skilled in acquiring a second language or a foreign language. For instance, it has features that permit the conversion of pre-recorded audio messages into texts; features that personalise sounds from a large audio library and the sending of large files (2GB to 4GB). It also has the Telegram BOT feature such as *@LanguageExchangeBot* and *@tandem_bot* that stimulate human conversation by allowing users to connect with native speakers in real-time and to practice language skills with language learning partners from all over the world. All of these features including the presence of several English learning channels such as *English for the Day* and *English Tips and Tools* on the app help promote language development. Specifically, is a Telegram-based pronunciation dictionary that assists second-language learners of English in their pronunciation practice; *Pronuncibot* is a practical tool for pronunciation practice. Developed by @manybot this Telegram feature makes available animal names, vegetable names, body parts, homophones, past regular verbs and some vowel /consonant exercises (Sulukiyyah & Istiqomah, 2022).

LITERATURE REVIEW

Several studies have been carried out in areas regarding the implementation of ICT pedagogical tools in learning. Researchers have proposed that the hybrid instructional approach or technology-mediated mode of instruction vis-à-vis the L2 learner of English Phonetics is fundamental to developing pronunciation skills and fluency. Studies reviewed in this section are closely related to our research but differ in operational and theoretical procedures.

In their study, Yan & Li (2019) suggested that traditional classroom-based pronunciation training for EFL learners can be efficiently augmented with computer-based learning. Their study combined a web-based training platform with a conventional learning situation. Thus, adaptive pronunciation training and collaborative peer assessment engage the EFL students in autonomous learning while receiving timely and personalized feedback. Integrating an online platform into their already established curriculum yielded results that demonstrated the feasibility and benefits of the blended approach as against several current styles of Computer Assisted Pronunciation Training; CAPT that still lack flexibility and functionality. Similarly, Klimova & Kacetl (2015) in their study on the role of hybrid learning in EFL studies revealed that integrating online instruction to face-to-face pedagogy contributes significantly to the typical EFL settings where there is usually the absence of contact with the target language and native speakers and lack of adequate learning strategies (480).

Dell 'Aria & McLoughlin (2013), in an SLA study, investigated the effectiveness of modern-day educational technologies in the development of distance learning and the acquisition of oral and aural skills. They purported that the speech visualization technology which is specifically crafted for visual feedback regarding prosody has a major role to play in students' performance both in perception and production of spoken Italian prosodic features. Accordingly, the second language learner can easily achieve successful communication through actively engaging in authentic social interaction and intercultural awareness in virtual environments regarding the prosodic components of speech. Results from their investigation revealed that using audio-visual feedback (easy-to-read images) produces a clear presentation of the differences existing between L1 and L2 as well as helps learners improve their L2 productions. Also related to this present study, Xin & Zhongbao (2021) carried out an empirical study regarding blended learning in oral English pedagogy amongst students in senior high school. Findings from their investigation of students in both experimental and controlled classes reveal that hybrid learning played a significant role in improving learners' oral English proficiency, among which pronunciation and intonation, range and accuracy of vocabulary and fluency of language are the most significant (Xin & Zhongbao, 2021). In a related study, Bengrait (2021) proposed the idea of integrating computer technologies in learning prosody in an EFL setting. While evaluating the efficacy of introoducing speech technologies in EFL pedagogy, Bengrait suggested supplementing textbook instructions with Computer Assisted Language Learning devices for teaching and learning English Intonation.

Faramarzi et al. (2019) in their survey on the Telegram application demonstrated the pedagogical potentials and features of the Telegram application and explained how it is useful in online language learning projects by both learners and educators. They

described Telegram as an online versatile and user-friendly app that has a massive cloud-based storage system that stores files and serves as a platform for scheduling collaborative online classes. They suggested that such classes possess a great aptitude for solving learner problems when for instance, robots are adopted for discovery learning; peer correction (exchanging information with peers) and an instructor's assistance are integrated into the learning process. Faramarzi et al. proposed that even though the Telegram app lacks specifications such as video chats and live video conferencing, instructional programs should acknowledge Telegram as an acceptable virtual society because it is popular amongst teachers and learners and broadband internet connections be made readily available. Sari (2019) sees the online learning English application in combination with the face-to-face learning process as an effective way to enhance students' efforts in the mastery of English. He surmised that the application serves as "a supporting media, rather than the subject of learning" (Sari, p. 259). In their article, Taufik & Alam (2022) described the degree of satisfaction by university students in online learning at STKIP Muhammadiyah Barru during the Covid-19 pandemic situation. Findings from their investigation revealed that a small percentage of students expressed dissatisfaction in the learning effectivenss regarding online tutoring. However majority of the students expressed their satisfaction with such a teaching method and the role of their lecturers. Within the field of mathematics, Alsalhi et al. (2021) investigated the implication of adopting the blended learning approach in teaching undergraduate students. Just like Sari (2019), they revealed findings that suggest that the hybrid pedagogical approach has a positive impact on student output. Similarly, Aristika et al. (2021) in investigating Advanced Mathematical Thinking Ability (AMT), demonstrated that there is a significant difference in outcome between students engaged in hybrid or blended learning and those within the regular face-to-face pedagogical group. Such that students engaged in hybrid learning presented a higher degree of AMT when compared with students within the conventional grouping.

Lestari & Wardhono (2016) in their study on the use of the Telegram app in basic grammar class explained that the media use of the mobile assisted language learning, MALL, is most important in language learning and teaching of EFL students. Their findings demonstrated that there is a significant development in EFL students' achievement in the integration of Telegram Bot API in their learning with most of them admitting to being satisfied with the fact that this method of assessing student performance is user-friendly, flexible and accurate. Findings are also similar to that of Mustadi et al. (2021) whose study described the implementation of blended learning; social media YouTube, Instagram and Facebook) to improve students' active English skills. Also, Rachmijati et al. (2019), from their investigation into the application of blended learning through YouTube to improve students' speaking ability present findings that suggested that such an approach; specifically vlogging is indeed effective. Their findings are also similar to that of Asri (2018). Her investigation on the use of YouTube in improving pronunciation skills in a hybrid learning environment, revealed that a good number of participants were highly motivated and found the approach advantageous in the sense that they had access to educational resources; phonemes and pictorial representations. The studies discussed so far focus on the implication of the use of the Telegram application in ESL and EFL pedagogy. This research is an attempt to fill the observable gap as it relates, specifically, to the undergraduate Nigerian ESL

learner of English pronunciation, highlighting distinctive features within the Telegram application that aid learners in improving their pronunciation skills and generating quantitative results that reveal the attitude of the Nigerian ESL learner towards the combination of the regular face-to-face teaching method with the mobile-based assisted instructive device vis-à-vis the acquisition of English pronunciation skills.

This present study is an investigation into the effectiveness of utilizing a blended pedagogical approach to facilitating the Nigerian L2 learner's comprehension of human speech sounds and vocalizations; revealing how speech sounds are recognized, used, recorded, perceived and combined to produce meaning. Consequently, this paper is an interpretation of the potential to develop practical English pronunciation exercises for the Nigerian L2 speaker of English through a mixture of the traditional face-to-face method of teaching and the online Telegram application. Hence, it proposes a mixed style to instructing the Nigerian L2 learner on the workings of human speech sound production, specifically, Standard British English. Research questions for this study are stated below:

1. How effective is the combination of the Telegram application and face-to-face teaching style to English pronunciation pedagogy?

2. Does the Nigerian L2 student favour hybrid learning modalities that incorporate the Telegram application over just the brick-and-mortar pedagogy for studies in English pronunciation?

3. Does hybrid learning promote learning and produce improved learner output?

RESEARCH METHOD

Research Design

Methodical procedure and design for this study are quantitative and qualitative; employing the use of a multiple-choice questionnaire in data collection from students in the Department of English and Literature, Faculty of Arts and Education, University of Benin. The research design for this study adopts an online survey research method. Questions were generated with the use of a multi-choice questionnaire sent out by posting a link via email and social media. The survey tool was expected to be completed and sent back within one week.

Participants

The population for this investigation is made up of undergraduate and postgraduate students from the English and Literature Department (ENL), the Department of Educational Foundation (DEF) and Adult Education (ADT) students of the University of Benin, Benin City, Edo State, Nigeria during the 2019/2020, 2020/2021 and 2021/2022 academic sessions. The study sample was derived from Nigerian students; second-language speakers of English enrolled in Spoken English and English Phonetics and Phonology courses. Gender selection is randomly done and is independent of the

selection of another. The age grade of the participants, who are all second language learners, is between 17 to 24 years. Data are anonymised.

With an estimated population of approximately one thousand and fifty-five (1,055) potential students, the estimated sample size is four hundred and one (401). The sample size is ample enough to obtain our desired feedback for most, if not all of our perceptions and objectives as it carries enough evidence that is relevant and germane to this study.

100level Students/Second Semester -

ENL224-Introduction to General Phonetics and

Phonology II: 2019/2020 Academic Session: 467

members

200level Students/First Semester - ENL213-Spoken English Practical and

English Phonology: 2020/2021 Academic Session: 573

members

400level Long Essay Students - ENL424-Long Essay in Phonetics and

Phonology: 2021/2022 Academic Session: 11 members
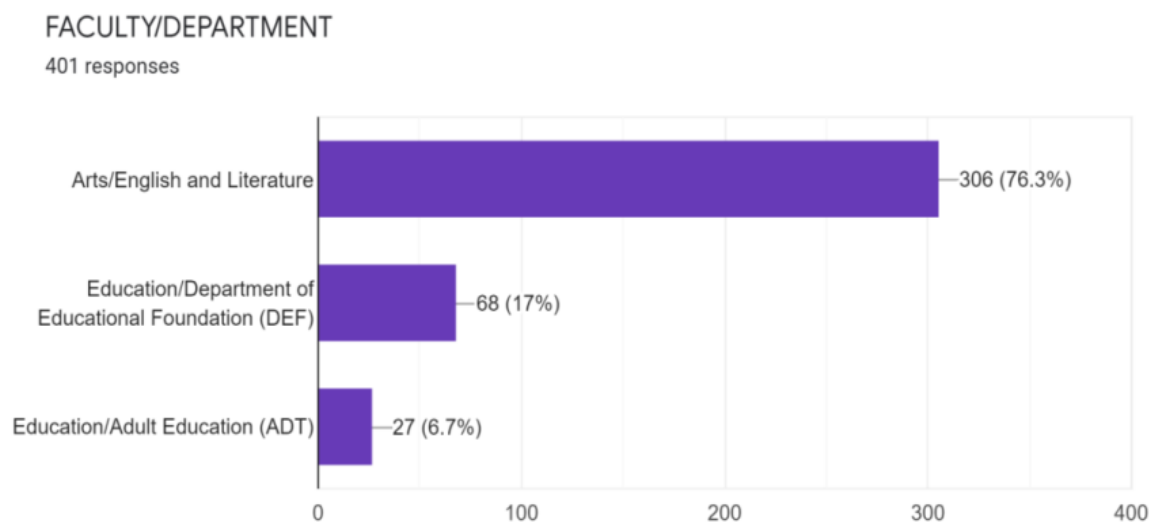
Figure 2. Participant Responses

Figure 3. Academic Class Standing

FINDINGS AND DISCUSSION

Discussions on the connectivity between hybrid learning, L2 English pronunciation and the function of the Telegram app indicate the qualitative aspect of this study. While the qualitative aspect is descriptive of the functioning of the Telegram app in teaching pronunciation skills; displaying non-numerical data, the quantitative part shows numerical data and statistical graphic information presented in pie charts. This method of presentation is adopted because it is precise, systematic and orderly. A pie chart can be easily understood and interpreted. In addition, apart from the fact that it saves time and space, pie charts facilitate comparison. Also, relative proportions of several classes of numerical data are visually displayed indicating percentages of a whole.

In adopting hybrid learning, during each semester of the various academic sessions under study; compared to previous semesters when only the traditional teaching style was employed, reactions from phonetics and phonology students confirm improved learner output. This is a result of the tutor ensuring learners' active participation and regular online assessments involving practical online pronunciation exercises. Students are also exposed to uploaded pronunciation videos and vocabulary podcasts by native speakers and are permitted to send in their voice notes of either phonemes (monophthongs, diphthongs and triphthongs, including consonants) or vocabularies based on Standard British English. Such integrated listening and speaking tasks help to develop pronunciation skills and enhance student performance. Activities such as British accent challenges also form part of online accent-training programmes. Such activities require students to listen attentively to the native speaker and click on the **'mic'** feature at the bottom of the group chat page to record their voice before sending. Words and speech sounds in isolation; the use of minimal pairs; record & and replay and tongue-twisting exercises are all incorporated into the virtual class activities as a way of enhancing ESL pronunciation lessons. The screenshots below are a display of selected pronunciation videos that aid pronunciation instruction and an instance of an ongoing online Telegram class:
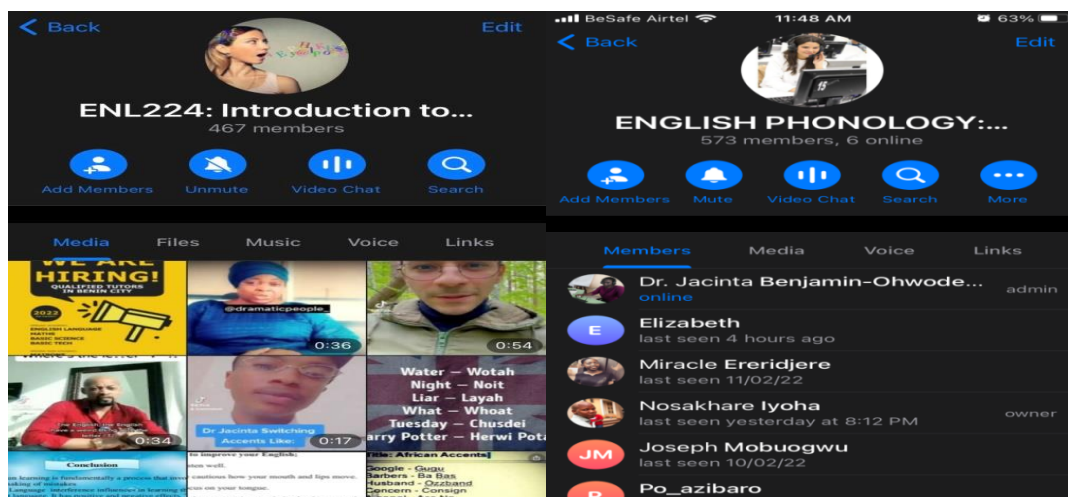
Figure 4. Ongoing Telegram Classes and Uploaded Videos of English Native Speakers

During 'Listen and Repeat' exercises, the tutor uploads pronunciation videos and vocabulary podcasts by native speakers and each student is permitted to send in their voice notes of either phonemes (monophthongs, diphthongs and triphthongs, including consonants) or vocabularies based on the Standard British English. Such integrated listening and speaking tasks help to develop such skills and enhance student performance. Students are also engaged in activities such as British accent challenges as a form of online accent-training programmes. Also, such activities require students to listen attentively to the native speaker and click on the **'mic'** feature at the bottom of the group chat page to record their voice before sending. Words and speech sound isolation; the use of minimal pairs; record & and replay and tongue-twisting exercises are all incorporated into the virtual class activities as a way of enhancing ESL pronunciation lessons as well as stated in the diction study of EFL speakers (Sardi, et al, 2017). Because good pronunciation is much more than simply having a mastery of individual English phones, deploying this mobile technology alongside the traditional teaching method gets the Nigerian L2 learner tasked with the repetitive recorded activity of reading texts without skipping words or running words together, breaking down long and problematic words into individual syllables, acquiring adequate knowledge of intonational patterns (rise and fall of voice) and the understanding the mechanism of word/sentence stress placement. Students are also advised to be consistent with just one accent; the British accent as this is one of the numerous ways to achieve proper English pronunciation in an ESL context. Uploaded videos of British English native speakers assist in this regard.
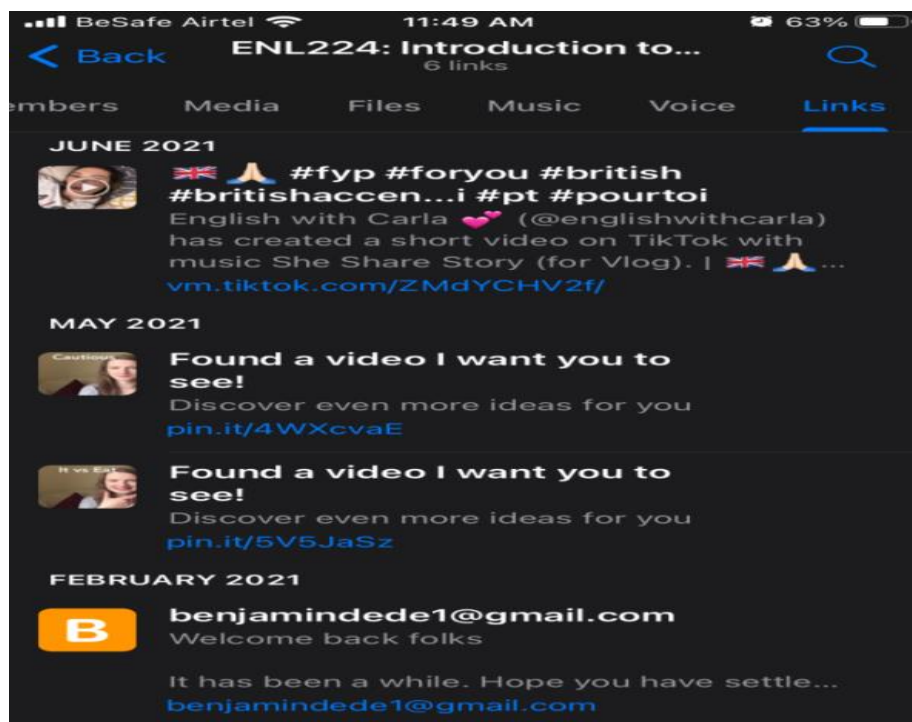
Figure 5. Uploaded Videos

English pronunciation drills and exercises could be embarrassing for the Nigerian L2 learner, especially with regards to words having the English central vowels, the centring diphthongs and sound sequences; and triphthongs. However, with the voice recording feature, students can practice individually until they are confident enough to be heard by others. Immediate feedback is given by the tutor and students with poor pronunciation skills of the target language are corrected, encouraged to listen carefully to the suggestions of the tutor and given another chance to re-do the voice recordings and send in their corrections. Students also listen to each other's voice notes and make their constructive contributions. This is done deliberately by the instructor to give room for collaboration and student-to-student interaction and to encourage autonomous learning and self-correct. Consequently, the L2 learner of English is trained not only to be heard but also to discover his voice (Mutonono & Palovska, 2016). Several students admitted that they became more motivated and developed a full grasp of the understanding of intricacies involved in pronunciation skills. This of course led to there is a gradual reduction in student inhibitions and an increase in self-esteem. Below is a screenshot of some of the voice recordings by the Nigerian L2 learner during an accent challenge
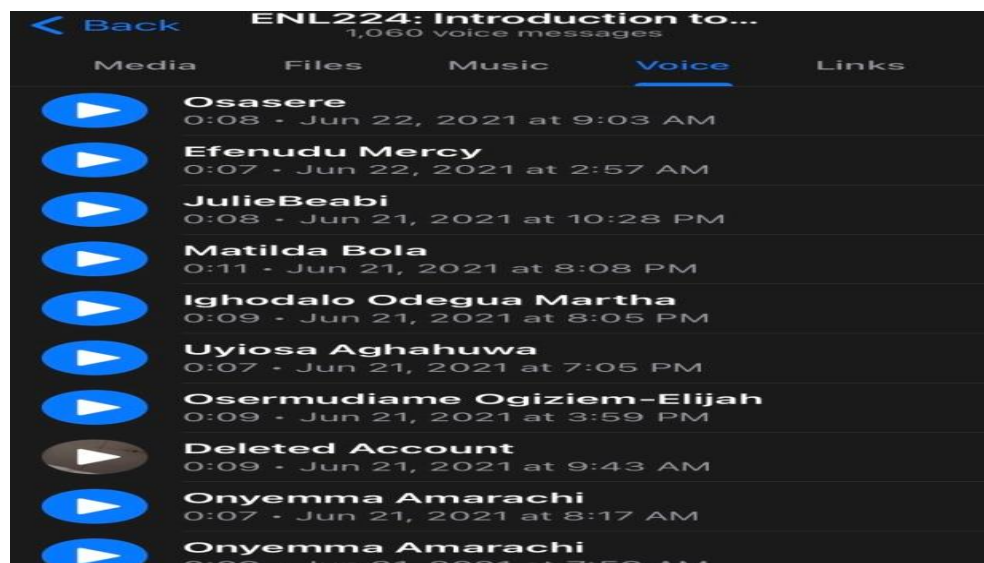
Figure 6. Students' Voice Recordings

The fact that over seventy-eight percent (78.3%) of students who are learning speech sound production agree that the app promotes learning English pronunciation is because the L2 learner is exposed to a robust amount of pronunciation files and documents of different formats; zip, doc, mp3 ppt and mpeg. Fortunately, all multimodal files on English pronunciation are not restricted to size and with one click; they are automatically saved to individual galleries or remain permanently saved on the group page. Combining regular classroom lecture notes and lecture notes in the form of texts, phonetic symbols, charts, e-Poster multimodal texts and pictures help develop the L2 student learning of top essentials of pronunciation like the sounds of English (phonemes, allophones and minimal pairs), consonants, stress and intonation, including several aspects of connected speech. Specifically, the English central vowels /ə ʌ ɜ: / which are often problematic to the ESL learner of are better perceived by the student from either the tutor or the native speaker of English during Telegram online classes. Descriptions of the gradual movement of one sound quality to another and even unto a third, during online explanatory discussions on diphthongs and triphthongs; sound sequences are more easily understandable. Also, phoneme alterations and their variants are distinguishable or discernable from other sounds due to the audible voice quality of the tutor during online lectures. For instance, explaining the differences in the acuities of the various positional variants of the voiceless alveolar plosive /t/: /t^h/ aspirated, /t/ un-aspirated, /t^n/ nasalized, /t^w/ labialized and the /$t̃$/ unreleased are more distinct vis-à-vis the students' audible range during online classes. Students interviewed admitted that combining both the regular classes with the Telegram tutoring helped significantly in their comprehension of some of these complex articulations.

Students also disclosed that the use of visual multimodal texts integrated into Telegram online classes made it easier for them to not only understand the English sound symbols but also contributed to facilitating comprehension and information retention of, for instance, the various diacritic marks like ˆ ˇ ' ⠒ ˜˚, which serve as indicators to segmental values and are often difficult to memorise.
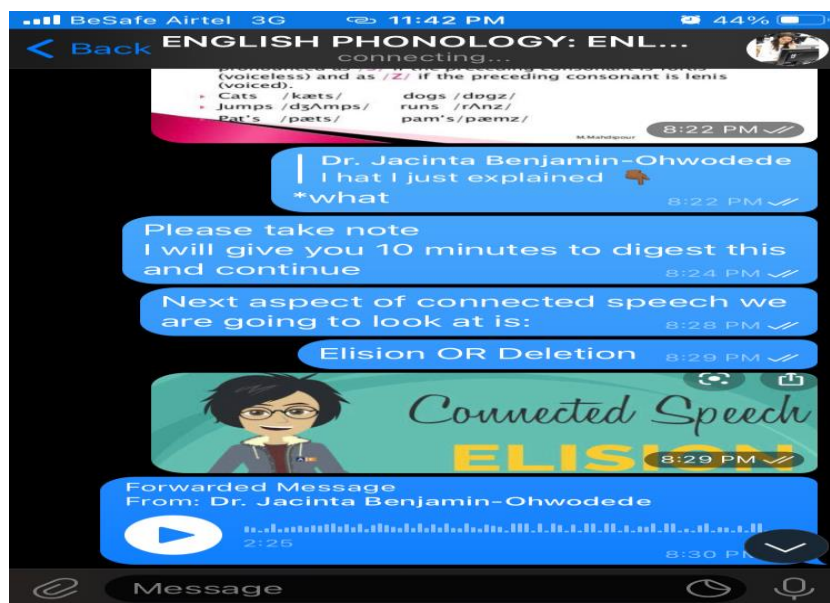
Figure 7. Visual Aids

From your experience with using the telegram application as a learning tool do you think the app promotes learning?
401 responses
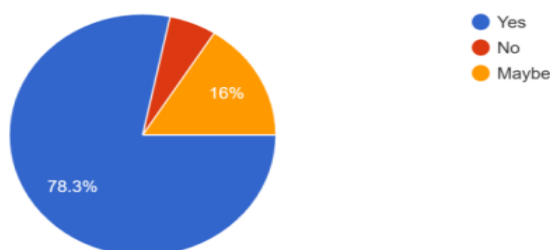
- Yes
- No
- Maybe

16%
78.3%

Figure 8. Pie Chart Indicating Percentage of Students that Agree that the App Promotes Learning

A feature which is significant in English L2 pronunciation vis-à-vis frequency, speech rate, intensity and amplitude is the graph display on each voice note. This is an essential feature for pronunciation teaching because it is a visual representation of some of the physical properties of speech sounds about word and sentence stress placement; and variation of amplitude. This is beneficial to the L2 learner of English as it gives a simple and vivid description of graphic waveform visualisation and how audio frequencies operate. Thus, a combination of the voice notes of the instructor and scheduled face-to-face listening gives the students a more in-depth understanding of speech sound production. The screenshot below from the Telegram group chat page is an example of several voice recordings with accompanying physical properties. Consider the screenshot below:
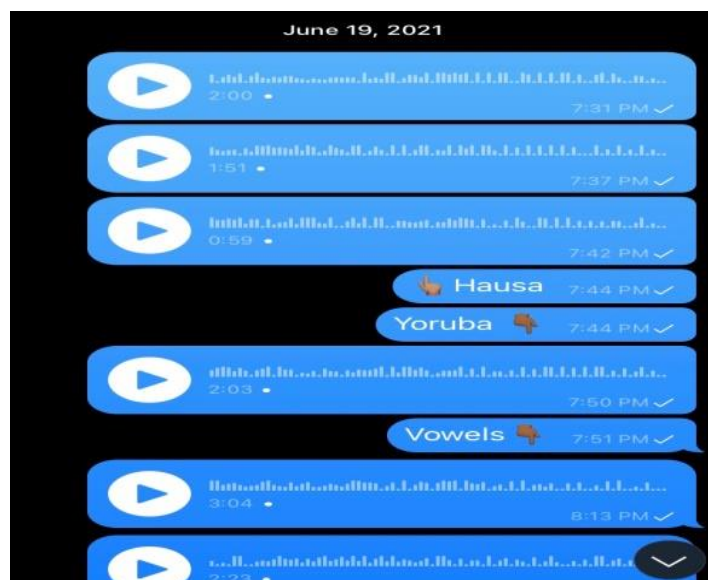
Figure 9. Students' Voice Recordings

The flexibility of scheduling virtual meetings at the convenience of both the tutor and L2 learners resulted in a relaxing, convenient and comfortable learning environment and additional teaching hours which are significantly associated with learner achievement. Consistency in pronunciation exercises is paramount in solving persistent pronunciation errors and inaccuracies; thereby achieving better-quality pronunciation skills. Several students admitted that they are motivated to engage in such pronunciation training in the comfort of their private individual locations in addition to the occasional contact with the pronunciation tutor in the classroom. The outcome of such practices reveals both improved student output because they are more involved. Thus, being involved in hybrid learning encourages the L2 learner to engage in pronunciation drills and practice specific speech sounds like the central vowels, complex diphthongs and unfamiliar triphthongs. Other pronunciation tasks whereby the L2 learner is stimulated to work remotely include self-recording to discover areas of weakness; regular listening to audiobooks by native speakers also promote the sharpening of phonetic skills. Occasional check-ins by the teacher involve additional instructions and clarification of certain complex or controversial issues as a way of positive reinforcement. Indeed, combining the versatile and multifunctional Telegram app with such periodic check-ins caters for the needs of the L2 learner.

Do online classes, using the telegram provide better opportunities to becoming more involved in class activities?
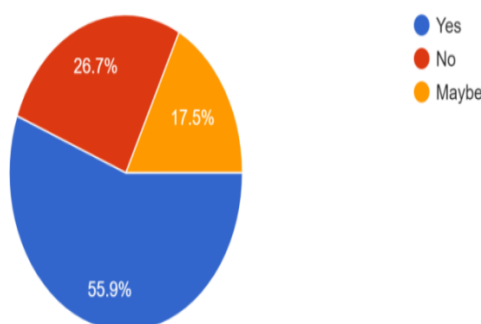
401 responses

- Yes
- No
- Maybe

26.7%
17.5%
55.9%

Figure 10. Improved Class Participation

The percentage of students that attested to the fact that the learning environment was conducive was 59.6% while eighteen per cent (18%) disagreed. The remaining twenty-two per cent (22.4%) were unsure. Results show that while over seventy-seven per cent (77.6%) of spoken English students agreed that there was indeed flexibility in scheduling virtual classes; over fourteen per cent (14.2%) disagreed. However, regarding the opinion of students in scheduling virtual classroom meetings, forty-eight per cent (48%) of them agreed to the fact that it is flexible while just thirty-four per cent (34%) agreed to the flexibility of scheduling regular classroom meetings.

Is there a greater flexibility in scheduling weekly lecture hours for online classes?
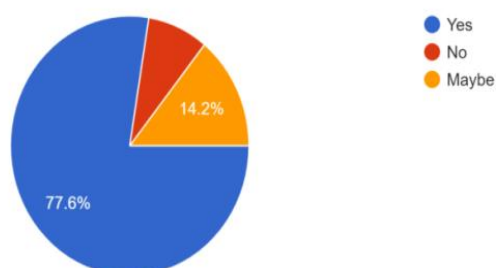
401 responses

- Yes
- No
- Maybe

14.2%
77.6%

Figure 11. Flexibility in Class Planning

As previously mentioned, for the Nigerian L2 learner of English, consistency is vital in improving speaking skills because repetition and practice aid memory consolidation and boost the confidence of the learner. A significant feature of the Telegram app is the day-to-day statistical analysis of class attendance; messages sent or received, class growth,

primary language, top hours, top days of the week, top members and regularity of teaching hours. This feature helps the tutor in student-progress-tracking. In adopting hybrid or blended learning, during each semester of the various academic sessions under study, compared to previous semesters when only the traditional teaching style was employed, findings confirm a remarkable increase in student attendance, reduction in student absenteeism and better learner output. This is a result of the tutor ensuring learners' active participation and regular online continuous assessment. The flexibility of scheduling virtual meetings at the convenience of both the tutor and L2 learners resulted in a relaxing, convenient and comfortable learning environment including additional teaching hours which are significantly associated with learner achievement. Accessibility of online quality discussions on course content, and permanent multimodal materials on the Telegram group page contributed significantly to high levels of student performance and retention rate which was observable in their final semester examinations. Consider the statistics below; figures 12 and 13, indicating some of the aforementioned information generated by the Telegram feature, **'statistics'**:
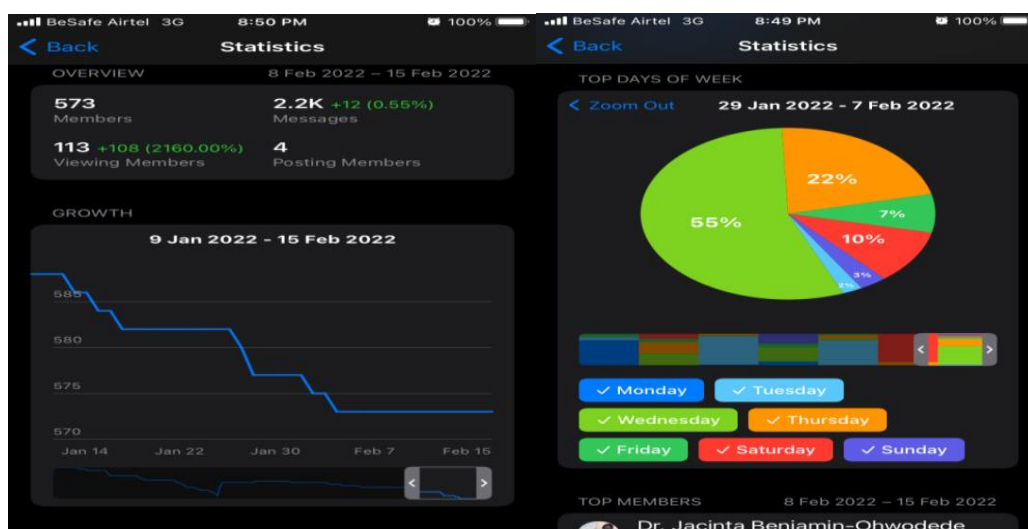
Figures 12 & 13. Monthly Statistics of Class Attendance

Looking at the interference challenges vis-à-vis pronunciation problems; they are often explained as a result of the first language or mother tongue intrusions as observable in the speech production of the Nigerian L2 learner of English. It manifests in wrong stress placement, incorrect pronunciation of the voiced and voiceless dental fricatives, lack of phonemic contrasts, e.g. vowel length distinctions (high vs. tense vowels), vowel breaking by the insertion of semi-vowels/glides before the final schwa sound in the articulation of triphthongs, monophthongization of problematic diphthongs amongst others. Such articulatory challenges result in the indiscriminate substitution of marked sounds.

The online driver blended model for pedagogy becomes expedient in tackling such interference problems as against only the brick-and-mortar mode of pedagogy. The latter only becomes relevant when the need for the physical presence of the tutor arises to demonstrate the importance of focusing on the physicality of sounds. Such tasks require the instructor to engage in the physical demonstration of speech organ manipulation, which is an easy way to increase the L2 students' awareness of how

sounds are formed. The students are also expected to participate by physically touching their lips and tongue to make contact with certain locations of the oral cavity while forming different sounds or touching their throats to highlight voiced and voiceless sounds. Engaging in a series of recurrent practical pronunciation exercises (listening, recording and constant online accent training) necessitates the deployment of the diverse features of the telegram app already demonstrated in the previous sections of this study. A blend of both pedagogical methods therefore resolves segmental (phonemic awareness) and suprasegmental (intonation, stress and connected speech) challenges faced by L2 acquisition of proper English pronunciation.
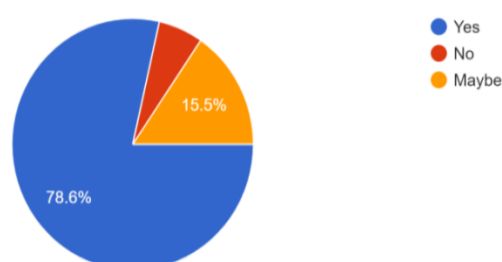

Figure 14. Effectiveness of Instructional Materials

From the above pie-chart, figure14, while over seventy-eight per cent (78.6%) of phonetics students confirm that the voice and audio messages contributed to their understanding of the course content, only about fifteen per cent (15.5%) disagreed. The positive outcome of student performance during the end-of-semester examinations confirms that combining the Telegram application as an instructional tool with regular classroom meetings produces improved student output. Fifty-six per cent (56%) of students reacted positively when asked if adopting the Telegram application as a learning tool compared to when the tutor only applied the face-to-face method improved their performance during the end-of-semester examinations. While over nineteen per cent (19.4%) disagreed, over twenty-four per cent (24.6%) were uncertain.
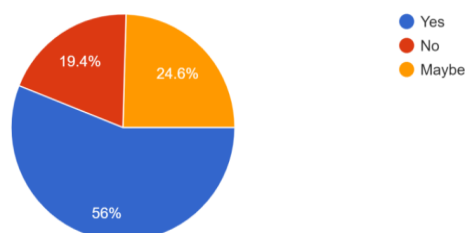
Figure 15. Better Result Outcome of Students

Data discussed so far show the effectiveness of hybrid learning in English pronunciation pedagogy and demonstrate that students favour blended learning modalities that incorporate the Telegram application over just the brick-and-mortar pedagogy. Ultimately, this study answers the questions of how effective combining both pedagogical approaches is; whether such an approach promotes learning and whether it is favoured by the L2 learner of English pronunciation in the Nigerian ESL context. Observe from the plate 16 pie chart below that while over eighty-two (82.8%) of phonetics students recommend blended learning in their university, less than ten per cent; eight point seven per cent (8.7%) disagreed with recommending this method to the university authorities. Less than eight per cent (8.5%) were uncertain. Findings observed by Al-Fisyar et al. (2021) corroborate this study's results. They submitted that students interviewed were satisfied with blended learning implementation in pronunciation classroom (Al-Fisyar et al., 2021).

Do you recommend the use of the telegram application as a pedagogical tool for online lectures together with the regular face to face lectures in your institution?
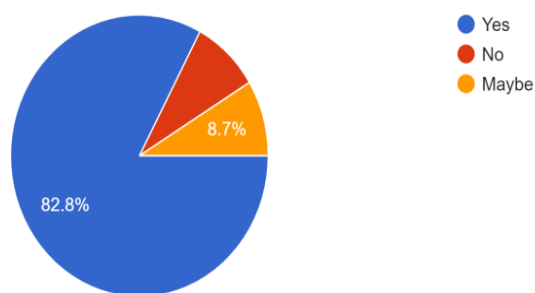401 responses

Figure 16. Students' Recommendations

CONCLUSION

As seen in this study, the blended learning approach requires "rigorous efforts, the right attitude, handsome budget and highly motivated teachers and students for its successful implementation" (Dangwal, 2017, p. 129). Specifically, the Online driver model to blended learning embraces the cognitive approach to L2 instruction. Because this entails mental (mobile technology) and physical (face-to-face) manipulation of materials to be learned, it is expedient that the L2 instructor be furnished with 21st-century pedagogic skills characterized by mobile technology computerized digital tools and any of the traditional teaching strategies. Lamport & Hill (2012) submitted that hybrid instruction makes available to the learner, a combination of individual interface together with the convenience and flexibility associated with online assignments and conversations. This is because such a blend is all-embracing as it applies to achieving

L2 proficiency in pronunciation through strategies known as 'resources in the hand' namely repetition, imagery, auditory representation, and note taking/making. This notion is echoed by Albiladi & Alshareef (2019) who posited that hybrid or blended learning "can be used effectively to develop language skills, enhance the English learning environment and promote students' motivation toward learning the language" (232). Strategies, 'resources in the head' that encourage the L2 learner to take control of their learning include self-monitoring and self-evaluation.

The Telegram mobile application is a self-support pedagogical tool that assists students in overcoming their anxieties and inhibitions as regards pronunciation exercises. It is cloud-based, free, safe, fast, can accommodate a large number of group members and is easily accessible. Its variety of features such as easy access, increase in student engagement, prompt exchange of individual opinions and peer vs. tutor contributions has resulted in this app becoming an integral part of the L2 learner of English and a versatile pedagogical tool of any instructor. The multimodal nature of this application to instruction on pronunciation offers an avenue for listening exercises, self-recordings, and diagrammatic and pictorial self-explanatory images that create meaning and enhance L2 pronunciation skills. In other words, Telegram encourages multimodal learning by providing features that manipulate the different ways a text can be presented, i.e. images, writing, layout and audio/visuals. Hence, Cao (2017) submitted that a blended or hybrid approach to pedagogy makes "learning more convenient and achieves good learning effects" (266).

This study on the effectiveness of blended learning about acquiring pronunciation skills of the Nigerian L2 learner contributes to knowledge in the areas of pedagogy and L2 phonetics/phonological awareness and also provides students and tutors with knowledge of how to improve English pronunciation skills with ease. The applicability of this study lies in the fact that the L2 learner of English pronunciation and the teachers alike will have a deeper understanding of the active engagement in the speaking process and the role of the telegram in grasping the complexities regarding acquiring mastery of segmental and suprasegmental aspects of English pronunciation. Although acknowledging that hybrid learning has a few weaknesses, Abi & Odhabi (2021) posited that this approach to pedagogy "holds great promise for the future of education as it exploits advancements made in the recent past to meet the needs of learners in a variety of contexts without compromising the attainment of desired objectives" (121).

REFERENCES

Abi, M. E. & Odhabi, H. (2021). Hybrid learning is here to stay. *Frontiers in Education Technology*, *4*(2), 121-131. doi:10.22158/fet.v4n2p121

Adebileje, A. & Akinola, A. (2020). Teaching and learning English as a second language in Nigeria: Examining evolving approaches and methods. *Theory and Practice in Language Studies 10*(9), 1015-1024. doi.org/10.17507/tpls.1009.02

Albiladi, W. S. & Alshareef, K. K. (2019). Blended learning in English teaching and learning: A review of the current literature. *Journal of language Teaching and Research*, *10*(2), 232-238. doi.org/10.17507/jltr.1002.03

Al-Fisyar, T., Nur Ardini, S. & Nugrahani, D. (2021). Blended learning in

pronunciation classroom for higher education: Students' perception. *E-Structural, 3*(2), 145-156.

Alsalhi, N. R., Al-Qatawneh, S., Eltahir, M. & Aqel, K. (2021). Does blended learning improve the academic achievement of undergraduate students in the mathematics course?: A case study in higher education. *EURASIA Journal of Mathematics, Science and Technology Education*, *17*(4), 1-14. doi.org/10.29333/ejmste/10781

Aristika, A., Darhim, D., Juandi, D & Kusnandi, K. (2021). The effectiveness of hybrid learning in improving of teacher-student relationship in terms of learning motivation. *Emerging Science Journal*, *5*(4), 443-456. doi.10.24127/ajpm.v10i3.4064

Asikin, N. M. & Ibrahim, N. A. (2020). Challenges in teaching pronunciation in Malaysian secondary schools: Novice teacher's perspective. *LSP International Journal*, *7*(2), 119-137. doi.org/10.11113/lsp.v7.16349

Asri, P. (2018). What EFL learners say about YouTube use to improve pronunciation in a blended learning environment. *Journal of English Teaching, 4*(3), 205-215. Retrieved from https://files.eric.ed.gov/fulltext/Ej1314960.pdf

Atan, N, A. (2018). Blended learning & emerging educational technologies. Retrieved August 2021 from https://people.utm.my/mnazri/wp-content/b/ogs.dir/932/files

Avazmatova, M. M. (2020). Significance of blended learning in education system. *The American Journal of Social Science and Education Innovations*, *2*(8), 507-511. doi.org/10.37547/tajssei/volume02issue08-82

Bengrait, N. (2021).Pedagogical evaluation and recommendations on software design for English intonation learnin. *JELITA: Journal of English Language Teaching and Literature, 2*(1), 69-94.

Bonk, C. J. & Graham, C.R. (Eds.). (2006). *The handbook of blended learning environments: Global perspectives, local designs* (550-567). Retrieved from https://www.publicationshare.com

Bryan, A. & Volchenkova, K. N. (2016). Blended learning: Definition, models, implications for higher education. *Educational Sciences*, *8*(2), 24-30. doi10.14529/ped160204

Cao, R. (2017). The application of blended learning in training primary school English teachers in Xi'an. *Advances in Economics, Business and Management Research*, 53, 266-269. Retrieved from https://www.atlantis-press.com/article/25892596

Dangwal, K. L. (2017). Blended learning: An innovative approach. *Universal Journal of Educational Research*, *5*(1), 129-136. doi:10.13189/ujer.2017.050116

Dell' Aria, C. & McLoughlin, L. I. (2013). Developing phonological awareness in blended-learning language courses. Retrieved September 2021 from http://files.eric.ed.gov

Faramarzi, S., Chalak, A. & Tabrizi, H. H. (2019). Telegram: An instant messaging application to assist distance learning. *Teaching English with Technology*, *19*(1), 132-147. Retrieved from http://www.scholar.google.com

Friesen, N. (2012, September). Report: Defining blended learning. Retrieved August 2021 from http://www.blogs.ubc.ca/nfriesen

Guzer, B. & Caner, H. (2013). The past, present and future of blended learning: An in depth analysis of literature. *Procedia- Social and Behavioural Sciences*, *116*(2014), 4596-4603. doi:10.1016/j.sbspro.2014.01.992

Harasim, L. (2000). Shift happens: Online education as a new paradigm in learning. *The

Internet and Higher Education, 3(1-2), 41-61. Retrieved from https://www.learntechlib.org

Jaebi, I. (2020, February). Disadvantages of traditional classroom training. Retrieved September 2021 from http://www.classroom.synonym.com

Klimova, B. F. & Kacetl J. (2015). Hybrid learning and its current role in the teaching of foreign Languages. *Procedia – Social and Behavioural Sciences*, *182*, 477-481. doi.10.1016/j.sbspro.2015.04.830

Lamport, M.A. & Hill, R. J. (2012). Impact of hybrid instruction on student achievement in post-secondary institutions: A synthetic review of the literature. *Journal of Instructional Research*, *1*, 49-58. Retrieved from https://files.eric.ed.gov/fulltext/EJ1127597.pdf

Lestari, S. & Wardhono, A. The use of telegram apps in basic grammar class of English study program UNIROW Tuban. Retrieved august 2021 from http://www.bingg.unirow.ac.id/po-content

Masri, A. (2020). The effectiveness of using blended learning for teaching English language vocabulary for 1st grade students of Al Tafila directorate of education. *International Scholars Journal*, *8*(8), 001-006.

Mustadi, A., Annisa, F. C. & Mursidi, A. P. (2021). Blended learning Innovation of social media based active English during COVID-19 pandemic. *Elementary Education Online*, *20*(2), 74-88. doi:10.17051/ikonline.2021.02.01

Mutonono, E & Palovska, V. (2017). How chat apps can help students collaborate and self-correct. Retrieved August 2021 from www.britishcouncil.org

O'Connor, J. D. (1980). *Better English Pronunciation*. Retrieved from www.bayanebartar.org

Procter, C.T. (2003). Blended learning in practice. Retrieved August 2021 from http://www.ece.salford.ac.uk/proceedings/papers

Rachmijati, C., Anggraeni, A. & Apriliyanti D. L. (2019). Implementation of blended learning through YouTube media to improve students' speaking skill. *OKARA: Journal Bahasa dan Sastra*, *13*(2), 153-164. doi.10.19105/ojbs.v13i2.2424

Rauf, W., Rajab, A., & Nashruddin, N. (2023). Exploring the Learning Design on Learning Management System for Online Learning : A Case Study in Higher Education. *Jurnal Ilmiah Profesi Pendidikan*, *8*(1), 1–10. https://doi.org/10.29303/jipp.v8i1.1075

Roach, P. (2000). English phonetics and phonology: *A self-contained comprehensive pronunciation Course*. Cambridge: Cambridge UP.

Sardi, A. (2022). The Building up of Students' Vocabulary Mastery through Knowing by Heart Strategy. LETS: Journal of Linguistics and English Teaching Studies, 4(1), 62-72.

Sardi, A., Haryanto, A., & Weda, S. (2017). The Distinct types of diction used by the efl teachers in the classroom interaction. International Journal Of Science and Research (IJSR), 6(3), 1061-1066.

Sari, I. (2019). Students' perception on the effectiveness of blended learning: Efforts in the mastery of English. *International Journal of Research and Review*, *6*(2), 259-265.

Sulukiyyah, A. A. & Istiqomah, D. M. (2022). Pronuncibot: Telegram pronunciation dictionary for EFL learners. *ETERNAL*, *8*(1), 73-93. https://doi.org/10.24252/Eternal.V81.2022.A5

Taufik & Alam, F.A. (2022). The survey on students' satisfaction degree towards online

learning during covid-19 pandemic condition. *JELITA: Journal of English Language Teaching and Literature, 3*(1), 44-56.

Tong, D. H., Bui, P. U. & Lu, K. N. (2022). The effectiveness of blended learning on students' academic achievement, self-study skills and learning attitudes: A quasi-experiment study in teaching the conventions for coordinates in the plane. *Heliyon 8*(12). https://doi.org/10.1016/j.heliyon.2022.el2657

van Laar, E., Alexander, J.A.M van Deursen, Jan, A.G.M. van Dijk, de Han, J. The relation between 21st century skills and digital skills: A systematic literature review. *Computers in Human Behaviour, 72*, 577-588. doi.org/10.1016/j.chb.2017.03.010

Volchenkova, K. & Bryan, A. (2016). Blended learning: Defining models for higher education. *Bulletin of the South Ural State University. Education Sciences, 8*(2), 24-30. Retrieved from http://www.semanticscholar.org

Ufomata, T. (1996). Setting priorities in teaching English pronunciation in ESL contexts. Retrieved September 2022 From https://www.phon.ucl.ac.uk

Ugorji, C. U. C. (2010). *Nigerian English phonology*. Germany: Peter Lang.

Xin, L. & Zhongbao, Z. (2021). An investigation into the influence of blended learning on oral English proficiency of senior high school students. *International Education Studies, 14*(7), 27-35. doi:10.5539/ies.v14n7p27

Yan, H. & Li, Y. (2019). A blended learning approach to EFL pronunciation training. *International Symposium on Educational Technology (ISET),* 105-108. doi.10.1109/iset.2019.00030