

Global Scientific and Academic Research Journal of Education and literature. ISSN: 2583-7966 (Online) Frequency: Monthly Published By GSAR Publishers Journal Homepage Link- https://gsarpublishers.com/gsarjel-home-page/



INTEGRATING PHONOLOGICAL FEATURES AND TECHNOLOGY IN DESIGNING A COMPREHENSIVE ENGLISH DICTION CURRICULUM FOR EFFECTIVE LEARNING

BY

Bello, Victor Ibrahim¹, Dr. Chukwuemeka, Emeka Joshua², Dr. Ohiare-Udebu, Maryanne Fatima³

^{1,2,3}Department of Educational Foundations, Faculty of Education, University of Abuja, Nigeria



Article History

Received: 11/09/2024 Accepted: 24/09/2024 Published: 26/09/2024

<u>Vol – 2 Issue – 9</u>

PP: - 16-22

Abstract

It is not new that the English language is a very important language in the world, particularly in African countries colonized by the British. In Nigeria (with over 400 indigenous languages), English language plays very important roles: language of education, language of inter-ethnic interaction, language of business, etc. Many schools, especially private schools, now spend extra money to employ the services of experts to coach their students in standardizing their spoken English which they call Diction/Elocution. But the challenge has always been that they only teach the pronunciation of words in isolation which covers only the suprasegmental features. However, without the proper teaching of the prosodic/suprasegmental features like stress, intonation, rhythm, etc., it will be impossible to adequately help students improve their spoken English. Hence this paper looks at how to bring all these elements of segmental and suprasegmental features to develop not only a curriculum but also instructional materials and curriculum-based textbooks for English diction. It also goes further to discuss the use of technology-based instructional materials in delivering the lessons since it requires audio/visual aids.

Keywords: English Diction, Phonology, Curriculum Design, Technology, Instructional Materials

INTRODUCTION

Speaking is one of the important parts of language skill that students should have in order to be able to communicate in any language. Speech is one of the ways through which students practice their English speaking and build their selfconfidence, share ideas, and express themselves to an audience (Harahap and Rozimela, 2021). Teaching speaking has been given much importance at school for many years. It has been part of every curriculum but it is undervalued to the extent that teaching speaking is only through memorization and repetition of drills focusing on the fluency of the production of sounds (Sosas, 2021).

According to Bahadorfar and Omidvar (2014), speaking is the skill that the students will be judged upon most in real-life situations. It is an important part of everyday interaction and most often, the first impression about a person is based on his/her ability to speak fluently and comprehensively. This is true because in most developing cities, one's ability to fluently communicate in English language is used as a yardstick to measure the person's level of education and sometimes, intelligence.

People from all countries are now working and living in globalized environments where communication from and to, almost, anywhere in the world may occur practically instantaneously. Labour mobility and the existence of international employment opportunities have heightened the need to communicate and to be understood. And given that many Africans, Nigerians at the forefront, are increasingly migrating to countries abroad like Canada, UK, US, and other Western Anglophone countries for greener pastures, it becomes even more necessary for them to acquire English speaking skills. Even the International English Language Testing System (IELTS) examinations which require high scores as a prerequisite for traveling abroad, lays a heavier burden on Africans.

In order to have English communication skills, students have to master high level of proficiency in speaking. Through speaking, everyone can express his/her opinions, ideas, and thoughts spontaneously. Speaking is as important as the other skills but it needs more effort and practice to master (Harahap and Rozimela, 2021). Mastering high proficiency in the speaking of English language is very important. Hence, there is need to organize the learning content deliberately to present the learning with a workable curriculum. Over time, what students have been taught is a fragment of the entire English language curriculum that merely treats Diction/Elocution as a less important part. They teach just memorization of correct pronunciation of words which is not enough, since words pronounced in isolation sound different from when pronounced within contexts.

The elements of segmental (consonant and vowel sounds or phonemes) and suprasegmental (stress rhythm, intonation, pitch, length, etc.) phonology have since been taught in isolation, which in most cases are used to prepare students for external examinations like WAEC/NECO and other examinations in Nigeria and other West African countries. There has not been any curriculum designed to integrate these whole elements of segmental and suprasegmental phonology like phonetics, syllabification, word stress, sentence stress, intonation, and connected speech, and to present them in a manner that channels every effort towards actual practicalization for developing effective speaking skills. Various studies have indicated that segmental instruction may not transfer to spontaneous speech; the latter, however, found that suprasegmental instruction had a significant effect on listeners' impressions of the comprehensibility of spontaneously produced speech (Breitkreutz et. al, 2001; Derwing & Munro, 2005).

What this means is that students know what phonetics is in isolation. They know what stress is about in isolation and the rest, but they do not know yet how all these different parts fit together to bring about improved speaking skill. Many Technology-Aided Instructions have been developed, but they only treat pronunciation of words in isolation. They know how to literally apply the phonetic symbols in pronouncing words, or listen to a pronunciation dictionary to repeat until they gain mastery. This pronunciation in isolation does not amount to effective speaking where long stretches of sentences and speeches are involved.

There is no curriculum-based structure or pedagogy designed to cater for the delivery of the segmental and suprasegmental/prosodic elements yet. According to O'Brien and Levis (2017), pronunciation training that makes use of technology has come a long way from its early days in language laboratories equipped with record players. The current explosion in new technologies means that language learners are now capable of working on their pronunciation at any time, regardless of where they are. Web-based programs and mobile apps that claim to improve learners' pronunciation are readily accessible, and most are relatively inexpensive. Nonetheless, many of the commercially available products are often neither pedagogically sound nor informed by research.

It becomes clear then that work has to be done to ensure the development of a curriculum that is student-centered and deployed through Technology-Aided Instructions to assist in the teaching and learning of English Elocution/Diction. To that effect, this curriculum, if designed properly in the form of instructional materials (textbooks/ workbooks) and supported by technology will present the students and the teachers an easy way of learning these elements of segmental and

suprasegmental phonology at a practical level, and ultimately improve their spoken English.

One of the challenges we experience in the teaching of Diction in Nigeria now is that many teachers try to force their students to speak exactly with the native speakers' accent, which is not necessary. What is important is that the speakers obey the basic rules of English phonology and are intelligible and well-understood by their listeners. Pokrivčáková (2015) asserts that instead of nativeness and accentedness, modern pronunciation training should aim at other aspects of pronunciation, such as understandability and intelligibility (Celce-Murcia & Brinton 2004; Derwing & Munro, 2005).

RELATED LITERATURE

Phonetic Sounds (Vowel and Consonant Sounds)

Intelligibility of English is mandatory in the global world. In the English Language, there is no one-to-one relationship between the letters of the alphabet and the sounds they represent. (Rao, 2015).

Rao (2015) presents the following detailed explanation with examples and symbol images. Since there is no one-to-one correspondence between the sounds and the letters of the alphabet, it needs a different notation in which one symbol represents only one sound. The symbols are known as the International Phonetic Alphabet (IPA). The IPA symbols can be used to transcribe the sounds of any language. Phonetic transcription is a universal system for transcribing sounds that occur in spoken language. Instead of 26 letters of the English Language, the phonetic symbols are only used to translate the spoken word into script.

The rendering of written English into spoken English by using symbols is called transcription. The first phonetician who compiled the pronunciation dictionary and wrote a book on pronunciation was Daniel Jones. The next writer to concentrate on phonetics was A.C.Gimson. All the sounds of English are represented by 44 symbols called phonemes. Of these, 24 are consonant sounds and 20 vowel sounds. The 44 sounds of the IPA or International Phonetic Alphabet are very helpful since every phoneme represents only one sound. Consonant sounds are 24; vowel sounds are 20 of which 12 are pure vowels and 8 diphthongs.

The 12 Pure Vowels (Monophthongs)

/æ/ /1/ /ʊ/ /ʊ/ /e/ /ʌ/ /ə/ (Short) /a:/ /i:/ /u:/ /ɔ:/ /ɜ:/ (Long) The 8 Diphthongs /e1/ /a1/ /aʊ/ /ʊə/ /əʊ/ /eə/ / 1ə/ /ɔ1/

The 17 Regular Consonant Sounds

/b/ /d/ /f/ /g/ /h/ /j/ /k/ /l/ /m/ /n/ /p/ /r/ /s/ /t/ /v/ /w/ /z/

The 7 Special Consonant Sounds (Non=Alphabetic Symbols) $\int_{1}^{1} / t_{0}^{1} / d_{0}^{2} / d_{0}^{2} / d_{0}^{2}$

Syllables and Syllabification

A syllable is a unit of pronunciation typically larger than a single sound but smaller than a word (Marchand & Damper, 2007). A syllable is a unit of meaningful sound. Usually, when a syllable is added to or removed from a word, it impacts on the meaning of the word. Therefore, syllabification is the process of breaking down words into their units of meaningful sounds.

According to Marchand and Damper (2007), a syllable is made up of a nucleus, usually a vowel, accompanied by zero or more consonants preceding it (the onset) and zero or more consonants following it (the coda). However, identifying which consonants in a multisyllabic word belong to each syllable can be challenging. In the case of double consonants, one consonant is typically assigned to each of the adjacent syllables.

Word Stress and Sentence Stress

Teaching English **word stress** as one of the prosodic elements is challenging, especially to African speakers of English language, particularly Nigerians who place equal amounts of stress on most of their indigenous languages. English is usually classified as stressed-timed while non-stressed-timed languages are mora-timed or syllable-timed (Essien, 2018). English words have particular syllables that are pronounced with more prominence than the others. There's the primary stress, secondary stress, and even the tertiary stress. Apart from the usual "stress the first syllable in most nouns/adjectives" and "stress the second syllable in most verbs, one way to predict the stress position of words is to use the following formulas created by observing the behaviour of words in associations.

L Stress the penultimate syllables in words ending in the following letters. ic-ion-ial-ian-2 The "2" represents the penultimate syllable, counting from the right-hand side. E.g. ic: symBOlic/ aTOmic, ion: comPASsion/ eDItion, ial: maTErial/ imPErial, ian: coMEdian/ phySIcian, II. Stress the antepenultimate syllables in words ending in the following letters. 3-ate-ity-cy-sy-gy-fy-phy-ble-chy The "3" represents the antepenultimate syllable, counting from the right-hand side. E.g. ate: comMUnicate/ feLIcitate, ity: veLOcity/ inTEgrity, cy: suPREmacy/ deMOcracy, sy: EMbassy/ conTROversy, gy: techNOlogy/ aNAlogy, fy: iDENtify/ CLArify, phy: phoTOgraphy/ phiLOsophy, ble: reLIable/ acCOUNTable, chy:Anarchy/ moNARchy

Note that the foregoing patterns of ending letters are not exhaustive. They continue to grow as we discover more from studying more word patterns.

For secondary stress, (Yurtbasi, 2017) explains thus: "The secondary stress (as we sometimes call the secondary accent) is the weaker of the two degrees of stress in the pronunciation of a single word, a compound word or a phrase forming a thought group. The stronger degree of stress or prominence is called 'primary' and that of a weaker degree is referred to as 'secondary'". According to Ladefoged and Johnson (2011) cited in Yurtbasi (2017), the IPA symbol for secondary stress is a short vertical line preceding and at the foot of the stressed syllable. For example, the syllable "nun" in the word 'pronunciation' $[pro,n \land n, siei[n]]$ has the secondary stress. Another tradition in English to show stress is to assign acute and grave accents for primary and secondary stress as in 'pronunciation' (Roach, 2009). Most languages, if they have stress at all, have only one degree of it on the phonemic level".

However, in English, having such a suprasegmental structure as the secondary stress is a great asset in that the distinction in stress between the compound words and phrases points out the meaning intended to convey the meaning more clearly between the modified element versus the item that modifies it (Knowles, 1987 as cited in Yurtbasi, 2017). For example, in the compound word 'harddrive' ['ha:d ,draɪv], the word 'hard' has higher prominence than 'drive', with the former word having the primary stress reducing the latter to secondary and making the meaning of the word clearer where the stress is placed.

Using another example to explain further is the compound 'French teacher' ['frentʃ,ti:tʃə], the word 'French' ['frentʃ] has prominence over 'teacher' [.ti:tʃə], thus meaning that the teacher actually teaches French but he himself is not necessarily of French origin.

Considering the lexical formation of secondary stresses, much could be said about the recognition of their location. If we study such multisyllable words with their bases such as 'reSERVE' 'SERVE' [rrl'z3:v] vs. ',reser'VAtion' [,rezə'vetʃn], 'IN'dicate' ['Indikett] vs. ',indi'CAtion' [,mdr'ketʃn], we immediately recognise that the derivatives show a change in the position of primary stress leaving their earlier prominence to the reduced form as the secondary stress.

A further explanation on the realization of the secondary stress is that the primary stress is the main stress in a word. The secondary stress is introduced when a second stress is required in a word. Why would a second stress ever be required? Yes, in English language, a word cannot begin with two unstressed syllables.

A	В	С
Educate	eduCAtion	eduCAtion

In the word 'educate' above, A is the root word and is rightly stressed on the first syllable from the left as a verb. B is when the suffix 'tion' is added to make the word a noun which

*Corresponding Author: Dr. Chukwuemeka, Emeka Joshua

moves the primary or main stress to 'CA' the penultimate syllable. Now, at B, we have two unstressed syllables starting the word (e-du). In order to correct that, we move to C. Here we make sure to introduce a secondary stress and place it on the syllable that had the main stress before at the root level (that is syllable –e-). But if it is adjacent to the stressed syllable, you move backwards to the next syllable.

Sentence stress is accent on certain words within a sentence and it is the key component of English intonation (Kucukoglu, 2012). When reading or uttering sentences, not all the words are to be stressed (accented) because words have different levels of importance. Some words are more important than others. While some are the key words conveying the main messages, some others are function words establishing the grammaticality of the sentence. So, sentence stress is the level of stress/accent/force placed on some words in sentences.

Kucukoglu (2012) further explained that "When uttering a sentence, the content words such as nouns, verbs, adjectives and question words are stressed as they carry the meaning. Function words such as articles and prepositions, on the other hand, are not stressed. The basic rules for sentence stress are:

- 1. Content words are stressed
- 2. Structure words are unstressed
- 3. The time between stressed words is always the same.

Intonation

Prosody refers to the domain which studies intonation, accentuation, rhythm, and the duration of the realisation of phonemes (Herment & Tortel, 2021). Intonation is therefore part of prosody and taken in its narrow sense; that is, restricted to "supra-lexical, post-lexical or simply non lexical characteristics, consisting of such phenomena as the overall form of pitch patterns, declination, boundary phenomena, etc."

According Grosser, (1993) as cited in Herment and Tortel (2021) "Prosody is probably the most neglected phonological aspect of language teaching in schools and universities, as evidenced by school manuals lacking prosodic considerations or university curricula with very few courses on prosody or intonation. One of the main reasons for that may be that it is also one of the most complex aspects of phonology for non-specialists, especially teachers themselves who are not certain about which tone they should use in a specific context and probably do not know how to explain the rhythmic differences between their native language and English".

Herment and Tortel (2021) presented another postulation by (Brooks & Kempe, 2012) that English prosody is difficult for L2 learners to master and this happens for different reasons. First of all, it is well known that prosody is acquired in the uterus by the foetus. Studies on new-born children have shown that they recognise the rhythm and melodies of their mother tongue. Since L1 prosody is acquired first, it is anchored deep and is all the more difficult to alter when learning and speaking a foreign language acquired much later. Another reason is that it has attitudinal functions which differ among languages and even among varieties of the same language, as is the case in English. Prosody also varies according to the type of discourse (with more rising contours found in conversation, for example), the context (formal or informal), and even the speaker. Finally, the same speaker will also use different melodies for the same purpose, so that there is intra- as well as inter-speaker variation. Hence, prosody is highly variable and maintains a complex domain, making it difficult to acquire and not easy to teach.

It is clear then that intonation, which is a part of prosody, is not easy to teach to an L2 speaker of English. However, it is not absolutely impossible to work at improving the prosodical or intonation level of L2 speakers. For Africans, like Nigerian speakers of English who have already acquired their prosodic patterns from birth, it will be appreciable to teach them a more general and easy-to-comprehend intonation pattern - a pattern that places a rising intonation on all the content words in a sentence and a falling intonation on the last word in the sentence. Just as Celce-Murcia and Brinton (2004) said, "... pronunciation training should aim at other aspects of pronunciation, such as understandability and intelligibility". Examples:

I WANTed to GO to the MARket YESterday.

- The SCHOOL is a PLACE WHERE we GO to LEARN.

In the examples provided, specific conventions are used to represent stress and intonation patterns in speech:

Stressed syllables in multisyllabic words are written in capital letters to emphasize their prominence. For instance, in "WANTed" and "MARket," the first syllable is stressed.

Content words with only one syllable, like "GO" and "LEARN," are also written in capital letters to highlight their importance in conveying meaning.

Rising intonation is marked by writing the last syllables of multisyllabic words and one-syllable content words in italics. This indicates a rise in pitch, suggesting that the thought or sentence is incomplete. For example, "YESterday" and "GO" in the first sentence show rising intonation.

Grammatical words such as pronouns, articles, and conjunctions (e.g., "to," "the," and "where") are written in lowercase to signal falling intonation, meaning the sentence is moving toward completion.

Ultimate syllables in words at the end of sentences are written without italics to denote falling intonation and finality. For instance, "LEARN" in the second sentence shows the sentence has ended because it's not written in italics.

The rising intonation suggests the speaker has not yet finished their thought while falling intonation signals the end of a sentence or idea. This system helps to visualize the flow of speech and intonation patterns.

*Corresponding Author: Dr. Chukwuemeka, Emeka Joshua

They could also be taught to use tonal units, placing a rising intonation at the end of a tonal unit before entering the next one. This works for sentences with two or more clauses.

Example:

- I. When she got *home*, she went straight to bed.
- II. Immediately I saw *him*, I ran *away* and never came back.

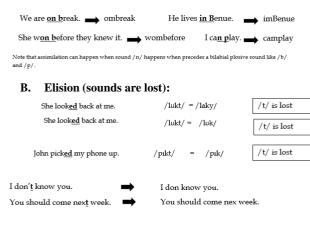
The words written in italics are last words in the tonal units with the rising intonation.

Connected Speech

Words spoken in context (in connected speech) often sound quite different from those same words when they are spoken in isolation. The pronunciation of words in connected speech may leave vowel and consonant sounds relatively intact, as in some types of linking, or connected speech may result in modifications to pronunciation that are quite dramatic, including deletions, additions, or changes of sounds into other sounds, or combinations of all three in a given word in context. Connected speech processes based on registers may lead to what Cauldwell (2013) calls jungle listening. As a result, the pronunciation of connected speech may become a significant challenge to intelligibility, both the intelligibility of native speech for non-native listeners and the intelligibility of non-native speech for native listeners. Connected speech, perhaps more than other features of English pronunciation, demonstrates the importance of intelligibility in listening comprehension (Alameen & Levis, 2015).

When we use many words to form phrases and sentences in speech, it is connected speech. So, the way words sound in isolation differs from the way they sound in connected speech. There are usually no clear boundaries between our words. The pronunciations often sound different and appear like one long word. Example, "We are here and we want to play" could be read thus: "We're here nd we wanna play" We'll be looking at three major things that happen in connected speech: Assimilation, Elision, and Intrusion.

A. Assimilation (sounds change): Here sounds change to become more similar to sounds nearby



NOTE: Elision seem to happen when a consonant sound is followed by another consonant sound, especially /t/. C. Intrusion (sounds added to link words):

Only three sounds can be added: /j /w/ /r/

/j/ I am always happy. → I(y)am always happy.
/w/ I want you to go away. → I want you to go(w)away.
/r/ I see the favour of God. → I see the favour(r)of God.

THE CURRICULUM & INSTRUCTIONAL MATERIAL DESIGN

According to Ware (2014), a curriculum can be viewed as the education system's attempt to reach a match between the students' abilities and needs, and the needs of society, thereby fulfilling the aims of education. This implies that the curriculum is an integrated unit of topics which comprises procedures for content teaching and respective learning experiences required for a student to achieve the targeted goal of a course or study.

A well-designed curriculum should contain different components that expose students to specific skills and enable them to apply those skills immediately. Since the English language has a cyclical curriculum, there are relatively few distinct topics covered from primary school through senior secondary school. This cyclical nature means the same topics are revisited in increasing complexity at each grade level. Diction/Elocution, which focuses on phonology, forms a small part of the broader English curriculum, indicating that there are even fewer topics to cover in this specific area.

Therefore, to create a comprehensive diction curriculum, phonetic sounds, syllabification, word and sentence stress, intonation, and connected speech should be integrated. This approach ensures that student's learning needs are met while expanding the range of topics available for instruction. The following diagram (Figure 1) represents the segmental and suprasegmental features that should be incorporated into the Diction curriculum.

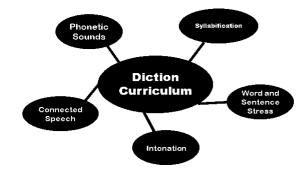


Figure 1. The components of diction curriculum diagram

 \odot \odot \odot

*Corresponding Author: Dr. Chukwuemeka, Emeka Joshua Attribution-NonCommercial 4.0 International License. Hence the curriculum should be in the form of textbooks and lesson plan which can be supported by technologies such as Radio, CD, DVD, Tape Recorder, Headphones, Television, Projector, Computer, and Mobile (smart) phone (Kumar & Durga, 2018; Chukwuemeka & Samaila, 2020), so that the topics of segmental and suprasegmental/prosodic features are

presented with practical activities. Each exercise should have different segments which includes Skill of the feature (the topics in phonology, either vowels, consonants, stress, etc., to be learnt. This is to be presented in the textbook.), Activity to master the skill (these represents the exercises which are presented in the textbook for students to do on the skills treated.), and Speech application (these are practical speaking texts, like short paragraphs for learning to read aloud in the class, providing practical speaking opportunities). With this, the students can learn a particular skill, do an activity to perfect the skills, and read a short speech to bring about immediate application.

Curriculum is what the students should learn and the experiences, while instructional material is the tool used in creating these proposed experiences and achieving the learning proposed. Hence, instructional material is the means by which the curriculum is interpreted. So, both the curriculum and the instructional material are interdependent, since without the curriculum there would be no need for instructional material. According to Ohiare-Udebu (2024) provision of instructional materials is a priority when curriculum. implementing any Although, without instructional material, the curriculum would exist, but it would be impossible to make the experience of it tangible and worthwhile for the students' learning.

THE IMPORTANCE OF DICTION CURRICULUM & INSTRUCTIONAL MATERIAL

The following are the importance of developing an English Diction Curriculum and its aligning with Instructional Materials.

- Realization and organization of English diction education Objectives: The diction curriculum development is done in order to realize the objectives of diction education. This means that the diction curriculum will help to achieve an organized education for the students. Instructional materials, such as textbooks, audio-visual aids, and interactive tools, are essential in translating these objectives into practical learning experiences (Chukwuemeka et al., 2019). These materials help teachers and students follow a structured pathto achieve the targeted goals of diction education.
- **Proper use of Time and Energy:** The diction curriculum will provide the guidelines to the English teachers as well as to students by describing what a teacher has to teach and what the students have to learn. Instructional materials, in turn, simplify the teaching process by offering ready- made exercises, activities, and audio/visual resources. This synergy ensures that both teachers and students use their time effectively, focusing on the most important aspects of diction with minimal

on the most important aspects of diction with minimal effort.

- Acquisition of Knowledge: The curriculum breaks down English diction into smaller units or topics. Instructional materials, such as lesson plans, pronunciation drills, and practice exercises, facilitate the delivery of these topics in a clear and accessible manner. This helps students build a strong foundation in diction by gradually mastering each unit.
- Determining Structure of Content: This will help in determining diction content structure. Since subject's content has its wide structure which is to be taught lower level to the higher level. Thus, the main task of diction curriculum development is determining structure of content from a particular (lower level) to another (higher level) of teaching. Instructional materials align with this structure by presenting content that supports the curriculum's progression, such as interactive lessons that build on prior knowledge, helping students advance through the levels efficiently.
- Development of Personality: The diction curriculum is also important and significant for personality development of the students because the curriculum is designed to help and improve good speaking qualities in students (Ohiare-Udebu, Jacob, & Sarafadeen, 2021; Ohiare-Udebu, 2023). Instructional materials like audio recordings, speech practice modules, and pronunciation guides allow students to practice and refine these skills. By engaging with these tools, students can develop confidence, clarity, and effectiveness in their spoken English, contributing to their overall personality growth.

CONCLUSION & RECOMMENDATIONS

So far, it is obvious that there are many elements of English phonology (segmental and suprasegmental features) that need to be learnt together and applied in order to standardize one's Diction/Elocution. Therefore, for teachers of English language, particularly to ESL students/speakers, it is necessary to learn how to put all these features to use and adequately teach the same principles.

Therefore, the paper recommends as follows;

- 1. The government should adopt the above concept and develop a standard curriculum for the English Diction/ Elocution program using the format explained here.
- 2. The government and stakeholders should invest in the production of instructional materials for the smooth running of the Diction program.
- 3. The federal and state governments should invest in the deployment of technology to aid the smooth running of the program.
- Since the phonology of English language is not broad, just an aspect of the English language curriculum content and is practical-based, there should be a combined curriculum-textbook designed.

*Corresponding Author: Dr. Chukwuemeka, Emeka Joshua

References

- Alameen, G., & Levis, J. M. (2015). Connected speech. *The handbook of English pronunciation*, 157-174.
- 2. Bahadorfar, M., & Omidvar, R. (2014). Technology in teaching speaking skill. *Acme International Journal of Multidisciplinary Research*, 2(4), 9-13.
- Breitkreutz, J., Derwing, T. M., & Rossiter, M. J. (2001). Pronunciation teaching practices in Canada. *TESL Canada Journal*, 51-61.
- 4. Brooks, P. J., & Kempe, V. (2012). *Language development*. John Wiley & Sons.
- 5. Celce-Murcia, M., & Brinton, D. (2004). M.; GOODWIN, Janet. M. *Teaching pronunciation: A* reference for teachers of English to speakers of other languages, 9.
- Chukwuemeka, E. J., Nsofor, C. C., Falode, O. C., & Aniah, A. (2019). Assessing pre-service teachers' technological pedagogical content knowledge selfefficacy towards technology integration in Colleges of Education in South-west Nigeria. *Journal of Science, Technology, Mathematics and Education* (*JOSMED*), 15(3), 131-141
- Chukwuemeka, E. J., & Samaila, D. (2020). Teachers' perception and factors limiting the use of high-tech assistive technology in special education schools in North-West Nigeria. *Contemporary Educational Technology*, 11(1), 99-109.
- Derwing, T. M., & Munro, M. J. (2005). Second language accent and pronunciation teaching: A research-based approach. *TESOL Quarterly*, 39(3), 379-397.
- 9. Essien, N. M. (2018). Stress and rhythm in the educated Nigerian accent of English. *Stress*, 8(10).
- Harahap, Y. O., & Rozimela, Y. (2021, November). An Analysis of Students' Speaking Ability in Speech at English Department of UMN Al-Washliyah Medan. In *Proceedings of the Tenth International Conference on Languages and Arts* (*ICLA 2021*) (pp. 1-6). Atlantis Press.
- Kucukoglu, H. (2012). Sentence stress and learning difficulties of ELT teachers: a Case Study. *Procedia-Social and Behavioral Sciences*, 46, 4065-4069.Herment, S., & Tortel, A. (2021). The intonation contour of non-finality revisited Implications for EFL teaching.

- Kumar, M. P., & Durga, M. S. S. (2018). The use of technological aids and tools in teaching/learning English. *Journal for Research Scholar professionals for English Language Teaching ISSN*, 2456-8104.
- Marchand, Y., & Damper, R. I. (2007). Can syllabification improve pronunciation by analogy of English?. Natural Language Engineering, 13(1), 1-24.
- O'Brien, M. G., & Levis, J. M. (2017). Pronunciation and technology. *Pronunciation in Second Language Learning and Teaching Proceedings*, 8(1).
- Ohiare-Udebu, M. F. (2024). Impact of Inflation on Curriculum Implementation in Tertiary Education in Nigeria. *American Journal of Alternative Education*, 1(7), 46-54.
- Ohiare-Udebu, M. F. (2023). Impact of subsidy removal and curriculum implementation in Nigerian schools. *European Journal Of Modern Medicine And Practice*, 3(11), 130-135.
- Ohiare-Udebu, M. F., Jacob, O. N., & Sarafadeen, R. O. (2021). Implementation of curriculum programme in Nigerian higher institutions: problems and way forward. *Academicia Globe*, 2(6), 185-195.
- 18. Pokrivčáková, S. (2015). 2.2 CALL and teaching pronunciation. *CALL and Foreign Language Education: e-textbook for foreign language teachers*.
- Rao, C. S. (2015). The intelligibility of English sounds: A study of phonetics. English for Specific Purposes World, ISSN, 1682-3257.
- 20. Roach, P. (2009). English phonetics and phonology paperback with audio CDs (2): A practical course. Cambridge University Press.
- Sosas, R.V. (2021). Technology in teaching speaking and its effects to students learning English. Journal of Language and Linguistic Studies, 17(2), 958-970. Doi:10.52462/jlls.66
- Ware, J. 2014. "Curriculum considerations in meeting the educational needs of learners with severe intellectual disabilities." In L. Florian The SAGE Handbook of special education (Vol. 2, pp.491-503). 55 City Road, London: SAGE Publications Ltd. doi: 10.4135/9781446282236.n31
- 23. Yurtbasi, M. (2017). The Role of the Secondary Stress in Teaching the English Rhythm. *Online Submission*, 7(3), 101-106.

<u>© 0 8</u>