Journal of Language and Linguistics in Society
ISSN: 2815-0961
Vol : 02 , No. 04 , June-July 2022
http://journal.hmjournals.com/index.php/JLLS
DOI: https://doi.org/10.55529/jlls.24.33.40

Phonetics Instruction's Effect on Adult Learners and the Production of Second Language Sounds at Ignatius Ajuru University of Education

Odukwu, Better[1], Ordu, Stanley[2*]

[1,2]Department of General Studies, Research, Federal College of Education (Technical), Omoku,CHAPS, Nigeria.*

Email: [1]odukwubetter@gmail.com
Corresponding Email: [2]stanleyordu12@gmail.com*

Received: 04 April 2022 **Accepted:** 19 June 2022 **Published:** 27 July 2022

Abstract: ***The influence of phonetics education on adult learners and the creation of second language sounds was examined at the Ignatius Ajuru University of Education. The study was guided by four research questions. A questionnaire on the influence of phonetics education on adult learners in the generation of English sounds was used in a qualitative study design. A total of 10,000 people were studied with a sample size of 200 people. To obtain responses from the respondents, random and purposive selection approaches were utilized. The data was analyzed using the mean and standard deviations. According to the research, adult second-language learners who learn phonetics improve their pronunciation of English sounds. Adult second-language learners who received phonetics training improved their intonation. After obtaining phonetics education, adult second language learners improve in the placing of emphasis on words. Phonetics teaching helped adults who were learning a new language improve their word pronunciation.***

Keywords: ***Ignatius Ajuru University of Education, Phonetics, Phonology, Second Language.***

1. INTRODUCTION

Nigerians utilize English as the official language in all formal settings, especially where people of many ethnic backgrounds are present. Sociologists have written about the problems Nigerians have when they use English as a second language. Nigerians have acquired the practice of speaking in a way that makes it tough to communicate in English. Without a doubt, Nigerians who speak English as a second language confront significant obstacles in the areas of phonetics and phonology, which include speech sound generation, stress, intonation, and accent. Morphology, syntax, and semantics are also issues for them. Efforts have been made to lessen the impact of the first language on the way people speak English. Nigerian English speakers didn't learn the language in a natural setting or with native speakers, so they can't accurately imitate native speakers and speak the same way they do. While a Nigerian can communicate in English, there are going to be some differences from the British standard.

Copyright The Author(s) 2022.This is an Open Access Article distributed under the CC BY license. (http://creativecommons.org/licenses/by/4.0/)

Journal of Language and Linguistics in Society
ISSN: 2815-0961
Vol : 02 , No. 04 , June-July 2022
http://journal.hmjournals.com/index.php/JLLS
DOI: https://doi.org/10.55529/jlls.24.33.40

These inconsistencies can be seen at all levels of the language.

Nigeria's education policy mandates that children study English in elementary and high schools in order to develop kids who are able to converse effectively in English and integrate into Nigerian society. Nigeria's education policy mandates that children study English in elementary and high schools in order to develop kids who are able to converse effectively in English and integrate into Nigerian society. Those who can converse in English have more opportunities than those who cannot. The capacity to communicate in English has a variety of psychological implications. At the very least, good English users in Nigeria have great self-esteem and a strong sense of responsibility.

Additionally, Nigerians who speak English have mutual intelligibility with English speakers, Americans, and people from other nations who can communicate in English. Nigerians have been able to advertise their products both domestically and worldwide using English. English has been used in local and international trade, including by people, cooperative organizations, and the government. Tourist attractions, educational programs, entertainment, information distribution, medical research, and anything else that brings people from different backgrounds together are examples of things that bring people together. Apart from English language instruction in Nigerian primary and secondary schools, higher education institutions have created English language courses for pupils. These courses are often taught as general studies at levels one and two at most universities. The goal of these English courses is to produce graduates who are able to communicate effectively in English. These classes are aimed at helping students improve their writing, speaking, listening, and reading abilities. These courses are mandatory for all students. Beyond the institutional level of adult English language instruction, several institutions provide departments dedicated to English and communication arts, English and literary studies, or English studies. It is called English and Communication Art at the Ignatius Ajuru University of Education in Port Harcourt.

All components of language, including phonetics and phonology, are covered in a variety of courses offered by English departments. For example, courses like Introduction to Phonetics and Phonology and Advanced English Phonology are offered. Thus, how do you distinguish phonetics from phonology? Phonology is the study, description, categorization, and interpretation of universal speech sounds, while phonetics is the study, description, categorization, and interpretation of these sounds in terms of various languages. Phonetics impart universal knowledge, while phonology changes or patterns that knowledge. In other words, phonetics is concerned with the sounds that human speech organs are capable of creating, while phonology is concerned with the sound systems of unique or specialized languages. (Odden, 2005) claims:

A common distinction between phonetics and phonology is that phonetics is concerned with "actual" physical sounds as they manifest in human speech and is concentrated on acoustic wave forms, formant values, duration in milliseconds, amplitude and frequency, or the physical principles underlying the production of sounds, which includes the study of resonances and the muscles and articulator structures used to produce sounds. On the other hand, phonology is an abstract cognitive system that deals with the laws of mental grammar: the principles underlying subconscious "thoughts" about language.

Phonology is often overlooked when people learn a second language, compared to other fields of study like morphology, syntax, and semantics, which are more important. The ability to speak English in the right way can be very useful when you want to talk to someone. There isa potential that communication will break down if there is a discrepancy or interference in the way English sounds are formed. It's weird, as the point of learning a language is to

Copyright The Author(s) 2022.This is an Open Access Article distributed under the CC BY license. (http://creativecommons.org/licenses/by/4.0/)

Journal of Language and Linguistics in Society
ISSN: 2815-0961
Vol : 02 , No. 04 , June-July 2022
http://journal.hmjournals.com/index.php/JLLS
DOI: https://doi.org/10.55529/jlls.24.33.40

communicate, yet if the pronunciation is poor, no matter how accurate the syntax or the words utilized are, one will be understood (Avery, 1992).

According to Lord (2015), "even if a speaker has outstanding grammar and vocabulary, he may not be understood if he has a strong foreign accent." If we accept the findings of these academics, the ability to properly pattern the English sound system will be as important in communication as the right application of grammatical rules. People say that correct pronunciation is important for people to be able to communicate effectively in a foreign language, and it also plays a big part in how people first think of a learner's "L2 competence." These courses assist adult learners in becoming aware of English speech sounds and their qualities, as well as intonation, stress, syllable structure, and other suprasegmental elements of the language. Despite these two core courses, additional courses deal with speech and pronunciation in some way. A course on word creation or morphology, for example, explains the numerous ways morphemes might be pronounced depending on their context. Numerous components of linguistic study are predicted to have an impact on adult English learners in the domain of sound creation.

Students in the English department are expected to listen to these sounds and practice pronouncing them in a language lab. Adult learners may benefit from audio-visual resources and recorders that may aid in their pronunciation improvement. Students also have access to a number of advanced textbooks with drawings and discussions of English consonants and vowels. Pupils are given this literature, both local and international, for simple understanding. Those who study a second language and are exposed to these options tend to do better on pronunciation tests than students who only learn the language in elementary and secondary school. According to the research, children in second-language classrooms may one day be able to speak and write in the target language with the fluency of a native speaker (Lightbown and Spada, 2006). Adult learners, on the other hand, have struggled with L2 phonology. In no way am I arguing for a lack of progress in sound pronunciation.

Adult learners, regardless of their fluency level, will be misunderstood by other English speakers if they mispronounce several crucial consonants. For example, if an English student says he owns three ships /ʃip/ but really means three sheep /ʃip/, the audience may believe he or she is a very wealthy person when the speaker is simply talking about his private, modest farm. To be able to speak English well with people from all over the world doesn't happen in this case. This could be very discouraging for people who are learning a new language, as well as make them afraid to speak. Effective communication must be able to be both receptive and productive. Due to the fact that English is a stress-timed language, it is necessary to emphasize the appropriate portions of a word and the appropriate terms in a sentence in order to express the desired meaning. When learning English as a second language, a person whose first language is syllable-based rather than stress-based may need a lot of practice with English pronunciation.

Adult English language learners in Nigeria come from a variety of native language backgrounds when it comes to acquiring English pronunciation. They speak languages that have sound systems that are vastly different from English. Individuals from the Ogba, Ikwere, Kalagbari, Echie, Khana, Gokhana, Igbo, and Yoruba ethnic groups make up the majority of the population in our neighborhood. Adult English language learners have a wide range of pronunciation goals and demands. Although many adult education programs teach pronunciation, it is seldom taken seriously or treated in a systematic way (Levis, 2005). In addition, many ESL instructors who engage with adult learners lack training in pronunciation (Derwing and Munro, 2005). (Levis, 2005). As a consequence, instructors may be unable to

Copyright The Author(s) 2022.This is an Open Access Article distributed under the CC BY license. (http://creativecommons.org/licenses/by/4.0/)

Journal of Language and Linguistics in Society
ISSN: 2815-0961
Vol : 02 , No. 04 , June-July 2022
http://journal.hmjournals.com/index.php/JLLS
DOI: https://doi.org/10.55529/jlls.24.33.40

spot patterns in the causes of students' pronunciation issues as well as teach English sound, stress, intonation, and rhythm patterns in a systematic way.

2. METHODS

The researcher conducted a qualitative study. This kind of research enables the researcher to get first-hand knowledge about a group. The study assessed the influence of phonetics education on the creation of English sounds by adult second-language learners. The study employed a self-structured tool to assess children who had never received phonetics teaching and adults who had received phonetics education. Consequently, the researcher was able to look at the impact of phonetics training on adult learners' abilities to produce English speech sounds. All adult English learners who have taken formal classroom phonetics instruction are included in the study. This group consists of students and graduates of English and Communication Arts in Rivers State. Graduates are people who have earned a postgraduate diploma (PGD) or a master's degree. Current students and recent graduates from the past five years are included in the study. The population of the study is estimated to be 10,000.
There were both planned and random sampling methods employed to establish the sample size. Students from Ignatius Ajuru University of Education who had never been taught phonetics, fifty undergraduates, and fifty postgraduates who had previously been taught phonetics were selected at random for the study. The overall sample size has been increased to one hundred (200).Each set of subjects was given a self-designed instrument by the researcher. The instrument is designed such that respondents read a phrase while the researcher attentively monitors how certain speech sounds, notably the more technical ones emphasized in the piece, are pronounced. Additionally, the observation strategy was selected since it is consistent with the survey and allows for data collection in natural settings. The researcher interviewed a lot of students to find out how they made sounds after learning about phonetics.
The Questionnaire on the Effect of Phonetic Instruction on Adult Learners in the Production of English Sounds is the tool utilized in the research. The respondent's personal information was elicited in the first part of the instrument. The second component requires information on the details of the learning experience from persons who had been taught phonetics. In the third portion, the respondents read a paragraph to the researcher. At this stage, the researcher may examine the respondent's intonation, emphasis, and articulation of sounds in the second language.

3. RESULTS

Research Question 1 How does teaching phonetics to adults change how they pronounce English sounds?

Table 4.1 It's important to know how well you can pronounce English sounds before and after taking a test.

Group	**N**	**Pre-test**		**Post-test**		**Mean gain score**
		X	**SD**	**X**	**SD**	
Experimental (Those taught phonetics)	100	3.73	1.98	2.35	1.05	1.38

Copyright The Author(s) 2022.This is an Open Access Article distributed under the CC BY license. (http://creativecommons.org/licenses/by/4.0/)

Journal of Language and Linguistics in Society
ISSN: 2815-0961
Vol : 02 , No. 04 , June-July 2022
http://journal.hmjournals.com/index.php/JLLS
DOI: https://doi.org/10.55529/jlls.24.33.40

Control (Those not taught phonetics)	100	2.61	1.04	2.11	1.01	0.50

In the pre-test, the group had a mean of 3.73 and a standard deviation of 1.98. Then, they hada post-test mean of 2.35, with a standard deviation of 1.05, for a gain of 1.38 points from their previous score to their post-test score. There was a 0.50 pre-test gain. The pre-test mean was 2.61, with a standard deviation of 1.04; the post-test mean was 2.11, with a standard deviation of 1.01, so the gain was 0.50. They did better in terms of how well they were able to sound out words in English with their mouths

Research Question 2: What does phonetics instruction do to the intonation of adults?

Table 4.1.1Mean and standard deviation of the scores on the intonation test for adult learners before and after the test.

Group	**N**	**Pre-test**		**Post-test**		**Mean gain score**
		X	**SD**	**X**	**SD**	
Experimental (Those taught phonetics)	100	3.02	1.31	3.18	1.20	0.16
Control (Those not taught phonetics)	100	1.94	1.08	2.13	1.02	0.19

"The experimental group had a pretest mean of 3.02 and a standard deviation of 1.31, and a post-test mean of 3.18 and a standard deviation of 1.20, for a pretest to post-test increase of 0.16. The control group had a mean of 1.94 and a standard deviation of 1.08 during the pre-test, and a mean of 2.13 and a standard deviation of 1.02 during the post-test, resulting in a 0.19 pre-test gain. This suggests that the experimental group's intonation improved as a result of studying phonetics."

Research Question 3: As an adult learner, how does phonetics instruction help them pronounce words with more stress?

Table 4.1.2In the pre- and post-tests, the mean and standard deviation of these scores in the pronunciation of stress on words were:

Group	**N**	**Pre-test**		**Post-test**		**Mean gain score**
		X	**SD**	**X**	**SD**	
Experimental (Those taught phonetics)	100	3.18	1.20	2.82	1.12	0.36
Control (Those not taughtphonetics)	100	2.13	1.02	1.89	0.90	0.24

"The experimental group had a pretest mean of 3.18 and a standard deviation of 1.20, as well

Copyright The Author(s) 2022.This is an Open Access Article distributed under the CC BY license. (http://creativecommons.org/licenses/by/4.0/)

Journal of Language and Linguistics in Society
ISSN: 2815-0961
Vol : 02 , No. 04 , June-July 2022
http://journal.hmjournals.com/index.php/JLLS
DOI: https://doi.org/10.55529/jlls.24.33.40

as a post-test mean of 2.82 and a standard deviation of 1.12, yielding a 0.36 increase from pretest to post-test. The control group had a mean of 2.13 and a standard deviation of 1.02 before the test, and a mean of 1.89 and a standard deviation of 0.90 after the test, resulting in a 0.24 pre-test gain. The experimental group was able to pronounce words with higher emphasis after receiving phonetics education."

Research Question 4: What does phonetics instruction do to the way words sound?

Table 4.1.3: Mean and standard deviation of scores on a pre- and post-test in the pronunciation of words

Group	N	Pre-test		Post-test		Mean gain score
		X	SD	X	SD	
Experimental (Those taught phonetics)	100	5.20	2.02	3.65	1.98	1.55
Control (Those not taught phonetics)	100	3.23	1.32	2.55	1.08	0.68

This is how it worked: The experimental group had a mean score of 5.20 on the pretest and a mean score of 3.65 on the posttest. This meant that they gained 1.55 points on the pretest. Pretest: 3.23 with a standard deviation of 1.32; posttest: 2.55 with a standard deviation of 1.08;a 0.68 rise between the two tests. This shows that the experimental group did a lot better than the control group when they learned about phonetics.

4. DISCUSSION

Instruction in Phonetics and the Pronunciation of English Sounds by Adult Learners
During the test, the experimental group had a mean of 3.73 and an SD of 1.98. The group hada mean of 2.35 and a standard deviation of 1.05 on the post-test, which means they gained 1.38 points between the two tests. It was 2.61 before the test and 1.04 after the test. This meant they had gained 0.50 points before the test, which is how much they gained after the test. This shows that the group that did the experiment pronounces English sounds correctly. A study by Derwing, Munro, and Wiebe (1998) looked at how three different teaching styles affected the pronunciation of three groups of ESL learners in their second language. In the first two groups, they learned about segmentation. In the third group, they learned about suprasegmental instruction. They learned about L2 skills but not pronunciation. While the segmental group learned how to pronounce sentences better, the suprasegmental group learned how to pronounce narratives better.

Instruction in Phonetics and the Intonation of Adult Students
In the pre-test, there was a mean of 3.02 and a standard deviation of 1.31 for this group. On the post-test, the mean went up 0.16, which means that the group had a better score. Group A hada mean of 1.94, while Group B was spread out. Group A's standard deviation was 1.08. People did better after the test. They had a mean of 2.13 and 1.02, which is 0.19 more than before. This shows that having some knowledge of phonetics helped the experimental group improve their intonation. (Derwing and Munro, 2005) found that English teachers help students think about how their native and second language phonological systems are different. On the one

Copyright The Author(s) 2022.This is an Open Access Article distributed under the CC BY license. (http://creativecommons.org/licenses/by/4.0/)

Journal of Language and Linguistics in Society
ISSN: 2815-0961
Vol : 02 , No. 04 , June-July 2022
http://journal.hmjournals.com/index.php/JLLS
DOI: https://doi.org/10.55529/jlls.24.33.40

hand, phonology, or the science of speech sounds in general, and phonetics, or the science of speech sounds in specific languages, have helped to make clear the issues that need to be addressed when teaching and learning pronunciation: on the one hand, how to make speech sounds, and on the other hand, how to learn the unique sound system of the target language (Fromkon and Rodman, 1993).

Phonetics instruction and how adults learn to pronounce words with stress in them

After the post-test, the average and standard deviation for the experimental group were both 2.82 and 1.12, indicating a gain of 0.36 points between the pretest and post-test. To put it another way, the control group had a pre-test mean of 2.13, while the post-test mean was 1.89; this is a 0.24 pre-test gain. Phonetics instruction was more successful for the experimental group when it came to stressing words. According to (Derwing and Munro ,2005), English teachers should offer students the opportunity to become aware of the differences between their L1 and L2 phonological systems. This result is consistent with this assertion. This conclusion is supported by the "pronunciation issues faced by open and distance learning students enrolled in the B.A English program at the Open University of Nigeria, Lagos" by Theodore Iyere Teaching and learning pronunciation has been made easier because of the difference between phonetics (the study of speech sounds) and phonology (the study of specialized language sound systems). Phonetics studies speech sounds, while phonology studies the sound systems specific to a language.

Word Pronunciation and Phonetics Instruction

Experimenters had a score of 5.20 on the pretest, 3.65 on the posttest, and a standard deviation of 2.02 on the pretest. They gained 1.55 points between the pretest and posttest, which is how much they learned. On the other hand, in the control group, the mean pretest score was 3.23 with a standard deviation of 1.32, while the mean posttest score was 2.55 with a standard deviation of 1.08, indicating a 0.68 rise from pre-to-posttest. This demonstrates that the experimental group outperformed the control group in terms of word pronunciation after phonetics instruction. This investigation's conclusions corroborate those of others (Flege, 1991). The goal of this research was to establish the perception of English vowels by native Spanish speakers. According to the data, ESL students mistake the English vowel / with the Spanish vowel /a/. Dissimilar sounds were easier to learn due to their stark contrasts (Oller and Ziahosseiny, 1970). (Major, 2008) asserts that "little modifications often go unnoticed." Due to the similar or identical phones in German, (Bohn and Flege,1992) proved that German students of English had difficulty creating English vowels /i/ /I/ / / ɛ/

5. CONCLUSION

Despite the fact that our study subjects were all adults with varying L1-L2 phonological discrepancies, the data indicated that phonological education aided in their acquisition of L2 pronunciation. This help appears to have come in the guise of a variety of form-based projects that exposed these children to both clear information and enough practice. The following conclusions were reached from the study's findings:The experimental group (students who were taught phonetics) outperformed the control group on English sound pronunciation (students that were not taught phonetics).

In terms of intonation, the experimental group (students who were taught phonetics) did better than the control group (students who were not taught phonetics).

Copyright The Author(s) 2022.This is an Open Access Article distributed under the CC BY license. (http://creativecommons.org/licenses/by/4.0/)

Journal of Language and Linguistics in Society
ISSN: 2815-0961
Vol : 02 , No. 04 , June-July 2022
http://journal.hmjournals.com/index.php/JLLS
DOI: https://doi.org/10.55529/jlls.24.33.40

The experimental group (students who received phonetics instruction) had improved their stress pronunciation compared to the control group (students that were not taught phonetics). In terms of word

Acknowledgement
There is no internal or external funding.

6. REFERENCES

1. Avery, P. & Ehrlich, S. (1992). Problems of Selected Language Groups. In Teaching American English Pronunciation. Oxford University Press.
2. Brewster, J. & Girard, D., (2002), The Primary English Teacher's Guide, Penguin.
3. Brookfield, S. D. (1990). The skillful teacher. Jossey-Bass.
4. Burgess, J., & Spencer, S. (2000) Phonology and Pronunciation in Integrated Language Teaching and Teacher Education, in System, n. 28, 191-215
5. Celce-Murica, M., &, Goodwin, M., (1996) Teaching pronunciation: A Reference for Teachers of English to Speakers of Other Languages, Cambridge University Press.
6. COOK, V.(2008) Second Language Learning and Language Teaching, Routledge.
7. Cruttenden, A. (1994) Gimson's Pronunciation of English, ELBS.
8. Frențiu, L., & Cozma, M. (2013). Preparing adults for professional English examinations. In F. Szabo (Ed.), International conference on vocational and adult education. "Gyula Juhasz" Faculty of Education, University of Szeged (pp. 66-81). Szeged: SZTE JGYPK.
9. Harmer, J. (2002). How to teach English. Longman.
10. Harmer, J. (2007). The practice of English language teacher . Longman.
11. Jakobson, R. and Halle M. (1956) Fundamentals of Language; Janua Linguarum Monton,
12. Jones, C. & Fortescue, S. (1987) Using Computers in the Language Classroom, Longman.
13. Kelly, G. (2000) How to teach pronunciation, Harlow, Longman.
14. Kenworthy, J. (1987), Teaching English Pronunciation, Longman Handbook for Language Teachers, Longman Publishing.
15. Kenworthy, J. (1990) Teaching English Pronunciation, Longman.
16. Knowles, M. (1984). Andragogy in action. Applying modern principles of adult education. Jossey Bass.
17. Lightbown, P., & Spada, N. (2006). How languages are learned. Oxford University Press.
18. Loewen, S. & Reinders, H. (2011). Key concepts in second language acquisition. Houndmills,
a. Basingstoke, Palgrave Macmillan
19. Merriam, S. B., Caffarella, R. S., & Baumgartner, M. (2007). Learning in adulthood: a comprehensive guide (3rd ed.). Jossey Bass.
20. Nunan, D. (1991), Language Teaching Methodology, Prentice Hall International Ltd..
21. Polson, C. J. (1993). Teaching adult students (IDEA Paper No. 29). Manhattan, KS: Manhattan, KS: Center for Faculty Evaluation & Development, Division of Continuing Education, Kansas State University. Retrieved fromhttp://ideaedu.org/sites/default/files/Idea_Paper_29.pdf
22. Roach, P. (2004) British English: Received Pronunciation, in Journal of the International Phonetic Association, no. 34(21), 239-245.
23. Schane, S.A. (1973) Generative Phonology (Foundation of Modern Linguistics): Eaglewood Cliffs, N.J. Prentice Hall.
24. Sharma, J. (2001) The Practice of English Language Teaching, Longman.
25. Slattery, M., & Willis, J. (2001) English for Primary Teachers: A handbook of activities and classroom language, Oxford, Oxford University Press.
26. William D. (2004) English Language Teaching: An Integrated Approach, Spectrum BooksLimited
27. Wong, R. (1987). Teaching pronunciation: Focus on English rhythm and intonation, Prentice Hall, Englewood .

Copyright The Author(s) 2022.This is an Open Access Article distributed under the CC BY license. (http://creativecommons.org/licenses/by/4.0/)