

Phonological Competence and Performance of Second Language Learners: Production of ed-ending Verbs by English Students in Public Tertiary Institutions in Gombe State

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ABSTRACT

The study aims to investigate the production of English verbs ending in -ed by English students in tertiary institutions. Thus, it describes regular past tense verbs are produced by English learners from different native languages. In the process, each participant will be individually audio-recorded reading a passage with regular past tense verbs and will be given a questionnaire which contains items testing three manifestations of 'ed' morpheme in terms of pronunciation. Thus, the instruments to be used in data collection are closed-ended questionnaires and sound recordings of participant reading of prepared passages. The participants will be individually audio recorded using a digital audio-recorder. The participants may have demonstrated English pronunciation knowledge when responding to the questionnaire but missed the pronunciation while reading. This may be attributed to the difference between language learners' competence and performance. Consequently, the study attempts to add to the field by investigating regular past tense verb productions by English learners from different first language backgrounds. Thus, it may have pedagogical suggestions for teaching pronunciation particularly that of verbs ending with -ed so teachers and authors of pronunciation manuals should take into account the target-like voicing assimilation processes as well as possible syllable simplification strategies manifesting in second language learners' production of the target language.

Keywords: Second Language, Competence, Performance, Consonants Pronunciation

INTRODUCTION

English language is a second language in Nigeria. A second language is a language which is learned and used widely in addition to the mother tongue. The English language was brought to Nigeria through diplomacy, rather than force considering the various means through which it was introduced. The language has been playing many vital roles so its impact is felt in almost all facets of life in our society. It is this functional factor that essentially makes English to be a second language in Nigeria. Thus, English is so important in Nigeria that its influence is manifested in almost every area of life at which speaking and reading it become necessary. To speak or read effectively, the phonological aspect must be known which involves the rules of interaction of the sound system of the language that make a combination of sounds meaningful and acceptable in the language.

The process of speech production involves inhaling air into the vocal tract through the nostrils and the larynx to the lungs where the air causes the lungs and the diaphragm to expand then the pressure from the diaphragm forces the lungs to contract and the air is forced out through the vocal tract to the outside from the mouth and in the case of some sounds from the nostrils (Jolayemi 2016). This implies that various organs contribute to the production of speech as the air passes through the vocal tract which causes the vocal cord to vibrate to produce speech sounds. Thus, all the sounds of English are made using air on its way out from the lungs through lungs pull in and push out of air with the help of the diaphragm. The air goes out via

the trachea, where the first obstruction it meets is the larynx, which it has to pass through. Inside the larynx, the air passes by the vocal folds, which, if they vibrate, make the sound voiced. Afterwards, the air goes up through the pharynx and escapes via either the oral or the nasal cavity.

A phoneme is the smallest/indivisible and contrastive or significant unit of the sound of a language, which when replaced with another sound, results in a change in meaning. Therefore, a phoneme cannot be subdivided into a smaller unit. The smallest distinct sound unit in a given language: e.g. /tIp/ in English realizes the three successive phonemes, represented in spelling by the letters t, i, and p. Udoh (2015) defines allophones as ‘phonetic variants of phonemes, which turn up in different phonetic shapes depending on the environment in which they occur and the effect of the sounds they occur with’. The difference between phonemes and allophones is that allophones are variants of phonemes.

Morpheme is the minimal unit of a language which has a meaning, lexical or grammatical, and cannot be divided into further smaller units. Thus we find that a morpheme is defined as the smallest unit of a language that still has a meaning. Morphemes are said to be the parts of words, such as prefixes, suffixes and roots. For example in the same word “unjustifiable”, “un-” – prefix “Justify” – root “-able” – suffix. Morphs are the actual shape or the realization of a morpheme. They are defined as “an element of speech or writing that represents and expresses one or more morpheme. For example, the word ‘man’ is carrying- 1 morph and 1 morpheme while the word ‘men’ carries- 1 morph and 2 morphemes (man + plural), because the form ‘men’ cannot be divided so it is the actual form of the word means the ‘the morph’ but this single form is carrying two different meanings (man + plural) means “the two morphemes

Allomorphs are the variants of the same morpheme. Raymond (2010) argues that allomorphs are features of the morphology of all languages because even those with highly regular grammatical systems show variants of morphemes depending on the words to which they are attached. They are said to be the different realizations of one morpheme. Allomorphs are the positional variants of a morpheme; they are in complementary distribution which means where one occurs the other cannot occur. For example- the plural marker /-s/ has three allomorphs /-s, -z, -iz / which occur in three different environments such as cats, dogs and buses respectively. It is observed that the plural marker is /-s/ after voiceless sounds such as /p, t, k/ etc. except affricates and sibilants. But it is /-z/ after voiced sounds such as /b, d, g/ etc. except affricates and sibilants. Whereas it is /-iz/ after affricates and sibilants. Similarly, /-t, -d, -id/ are the positional variants (allomorphs) of the same morpheme /-ed/, the past tense marker. Thus, we can say that if the different morphs represent the same morpheme, they are grouped and are called the allomorphs of that morpheme. Accordingly, /-t/ occurs after voiceless sounds except /t,d/. While /-d/ occurs after voiced sounds except alveolar stops /t,d/. But /-id/ occurs after morphs ending with alveolar stops /t, and d/.

PHONOLOGY OF ENGLISH

English is an example of a language that has the full-length association of the segmental phonemes usually called the vowel and consonant sounds. It has a rapid movement from one vowel to another which is called a diphthong or glide; and glides from a diphthong to another vowel which is called a triphthong. In this regard, the English language has 12 pure vowel sounds, 8 diphthongs, about 5 triphthongs, and 24 consonant sounds.

The English Vowel Sounds

Going by the English vowel system, in some vowels the position of the tongue is relatively stable during articulation; such vowels are called monophthongs whereas in other vowels the position that the tongue occupies at the beginning of the vowel differs significantly from what it occupies at the end of the vowel involving some tongue movement Jolayemi, Udofot, Daniel, & Inyere (2010). Such vowels are referred to as diphthongs (and triphthongs). We may also think of this difference as a difference in how many vowels are found within one syllable: in monophthongs, there is one, in diphthongs there are two, while in

triphthongs there are three.

On the other hand, vowels may be short or long depending on their duration. Long vowels are approximately twice as long as short ones. Note that diphthongs and triphthongs are just as long as long monophthongs. Whenever long vowels are referred to, it always means long monophthongs, diphthongs and triphthongs together.

English Consonants

Consonants are sounds which in the process of their articulation the air stream meets some obstacles in the mouth on its way up from the lungs. Most consonants are not as smooth-sounding as vowels; they pop, hiss, snap, or hum Jolayemi, Udofot, Daniel, & Inyere (2010). Consonants are often classified and described by being given a so-called VPM label. Here, VPM stands for Voicing, Place and Manner. Voicing means that the vocal folds are used; if they are not, the sound is voiceless (note that vowels always imply the use of vocal folds). The place of articulation is the place where the airflow will be more or less obstructed. Manner is concerned with the nature of the obstruction.

METHODOLOGY

The research has been designed as a survey study in which instruments such as questionnaires, interviews and recordings will be suitable. The survey research method was adopted to enable the researchers to gather information or data from a large group of the population through the interview method and questionnaire method. The design has the advantage of large sample and variable measurement and strong generalisability of the result. In essence, the cross-sectional survey was used to gather information from a population.

The population of this study was English students of four Public Tertiary institutions in Gombe state. The institutions were Gombe State College of Education and Legal Studies Nafada, Gombe State College of Education Billiri, Gombe State University and Federal University of Kashere. From students learning English as a second language in these institutions, two hundred students were selected as a sample of study representing the entire population. To select the sample, a simple random sampling technique was applied. This was resorted to for the fact that it gives every member an equal and independent chance of being included in the sample.

The researchers used a questionnaire as the method of data collection in this study. The questionnaire was a closed/structured one in which the respondents were supplied with alternative responses from which they had chosen. This type was preferred for the study because the respondents were competent in both reading and writing. Also, the restricted questionnaire was chosen because it is a time saving for respondents where they can just choose from the available alternatives. Besides the items, a passage was prepared for the participants to read. In this regard, each participant was individually audio-recorded while reading the passage containing regular verbs ending in -ed and some irregular verbs as distractors to have information on how the morpheme is produced by the students. As to the validity and reliability of the instrument, the researchers have carried out pilot testing on it to ascertain the capability of the questionnaire items to elicit the information required to answer the research questions and in turn, satisfy the objectives of the study.

The researchers used personal administration with on-the-spot collection. Thus, the questionnaires were delivered by the researchers and the respondents had completed and returned them there and then. With this mode of administration, clarifying questions were asked by the respondents and explanations were offered by the researchers. In total, two hundred questionnaires were delivered to English students in the four higher institutions of learning

The data collected was analysed using a quantitative method of data analysis. Within the quantitative

method, descriptive statistics was used because it is the preferred model in humanities. Percentage was adopted from the descriptive statistics for it is the most useful in describing information about events and situations. Thus, the data gathered through the questionnaire was subjected to frequency counts. In other words, the subjects' responses for each question were added together to find the highest frequency of occurrence that is the number of times that a particular response occurs. These quantified responses to the questions were then presented in percentage forms and a tabular form as well. This was to make it possible for a reader to draw meaning out of the data collected and presented.

DATA PRESENTATION, ANALYSIS AND DISCUSSION

With the data collected for the study, and using percentage as an aspect of descriptive statistics, the three aspects are carried out simultaneously.

Articulation of /t/ Sound

The table below shows participants' responses with regard to the articulation of the /t/ consonant. Thus, responses to five questionnaire items as responded by the two hundred respondents are summed up as follows.

Table 4.1

Response Type	Number of Responses	Percentage
Correct	150	75%
Incorrect	50	25%
Total	200	100%

The table above shows that the articulation of the /t/ consonant by English students of tertiary institutions in Gombe State is 75% correct and 25% incorrect. Thus, the learners have significant knowledge of how to pronounce the sound. So, communication with regard to this sound can be very meaningful.

Articulation of /d/ Sound

The table below shows participants' responses with regard to the articulation of the /d/ consonant. Thus, responses to five questionnaire items as responded by the two hundred respondents are summed up as follows.

Response Type	Number of Responses	Percentage
Correct	90	45%
Incorrect	110	55%
Total	200	100%

The table above indicates that the articulation of the /d/ consonant by English students of tertiary institutions in Gombe State is 45% correct and 55% incorrect. Thus, the learners have insignificant knowledge of how to pronounce the sound. So, communication with regard to this sound can be less meaningful.

Identification of /t/ Sound

The table below shows participants' responses with regards to the identification of the /t/ consonant. Thus, responses to four questionnaire items as responded by the two hundred respondents are summed up as

follows.

Response Type	Number of Responses	Percentage
Correct	110	55%
Incorrect	90	45%
Total	200	100%

The table above indicates that the identification of the /t/ consonant by English students of tertiary institutions in Gombe State is 55% correct and 45% incorrect. Thus, the learners have partial knowledge of aspects related to identifying the sound. Consequently, communication with regards to this sound can be partially meaningful.

Identification of /d/ Sound

The table below shows participants' responses with regard to the identification of the /d/ consonant. Thus, responses to four questionnaire items as responded by the two hundred respondents are summed up as follows.

Response Type	Number of Responses	Percentage
Correct	115	57.5%
Incorrect	85	42.5%
Total	200	100%

The table above indicates that the identification of the /t/ consonant by English students of tertiary institutions in Gombe State is 57.5% correct and 42.5% incorrect. Accordingly, the learners have partial knowledge on aspects related to identifying the sound. Therefore, communication with regards to this sound can be partially meaningful.

Identification of /id/ Sound

The table below shows participants' responses with regard to the identification of the /id/ sound. Thus, responses to two questionnaire items as responded by the two hundred respondents are summed up as follows.

Response Type	Number of Responses	Percentage
Correct	95	47.5%
Incorrect	105	52.5%
Total	200	100%

In the above table, 47.5% of the English language learners in tertiary institutions in Gombe State have correctly identified /id/ sound and 52.5% of the respondents have incorrect identification of the sound. Thus, the learners have less knowledge of aspects related to identification of the sound. Consequently, communication can be partially meaningless with regards to this sound.

Pronunciation of /t/ words in the Passage

The table below shows participants' responses with regards to the pronunciation of the /t/ words. Thus, responses to six words in the passage provided as responded by the two hundred respondents are summed up

as follows.

Response Type	Number of Responses	Percentage
Correct	140	70%
Incorrect	60	30%
Total	200	100%

The table above indicates that 70% of English students in tertiary institutions in Gombe State perform correct pronunciation of words containing /t/ sound and 60% of them perform incorrect pronunciation of the words. Accordingly, they have correct practice of the knowledge acquired. Therefore, very meaningful communication can take place with regard to this sound.

Pronunciation of /d/ words in the Passage

The table below shows participants' responses with regards to the pronunciation of the /d/ words. Thus, responses to eight words in the passage provided as responded by the two hundred respondents are summed up as follows.

Response Type	Number of Responses	Percentage
Correct	80	40%
Incorrect	120	60%
Total	200	100%

The table above indicates that 40% of English students in tertiary institutions in Gombe State perform incorrect pronunciation of words containing /d/ sound and 60% of them perform correct pronunciation of the words. So, the learners have incorrect practice of the knowledge acquired. Thus, less meaningful communication can take place with regard to this sound.

Pronunciation of /id/ words in the Passage

The table below shows participants' responses with regards to the pronunciation of the /id/ words. Thus, responses to six words in the passage provided as responded by the two hundred respondents are summed up as follows.

Response Type	Number of Responses	Percentage
Correct	90	45%
Incorrect	110	55%
Total	200	100%

In the above table, 45% of the English language learners in tertiary institutions in Gombe State have correctly pronounced /id/ sound words and 55% of the respondents have the incorrect pronunciation of the words containing the sound. Therefore, the learners have less practice of the knowledge of aspects related to the sound. Consequently, communication can be partially meaningless with regards to this sound.

MAJOR FINDINGS AND CONCLUSION

Major Findings

- English learners have significant competency in how to pronounce the -ed /t/ sound thereby

communication can be very meaningful with regard to this sound.

- English learners have insignificant competency in how to pronounce the -ed /d/sound thereby communication can be less meaningful with regards to this sound.
- English learners have partial competency in aspects related to identifying the -ed /t/sound resulting in partially meaningful communication with regards to this sound.
- English learners have partial competency in aspects related to identifying the ed /d/ sound so communication with regards to this sound can be partially meaningful.
- English learners have less competency in aspects related identification of the ed /id/ sound thereby communication can be partially meaningless with regards to this sound.
- English learners have a correct performance of the knowledge of the -ed /t/sound acquired thereby very meaningful communication can take place with regards to this sound.
- English learners have an incorrect performance of the knowledge of the -ed /d/sound acquired thus less meaningful communication can take place with regards to this sound.
- English learners have less performance of the knowledge of aspects related to ed /id/sound. So, communication can be partially meaningless with regards to this sound.

Conclusion

In conclusion, this study investigated the production of ed-ending verbs by English students in public tertiary institutions in Gombe State through which their competence and performance in producing the morpheme were tested. The students have been learning English as a second language adding to the language backgrounds of their respective native languages. So, the -ed may manifest a different sound due to non-existent in the first language of the learners or misreading as a result of improper understanding/practice.

These second language learners demonstrate more knowledge of concepts than practicing the knowledge in actual performance as seen in tables 4.1 and 4.6. in chapter four. Thus, the competence is more than the performance with regards to pronunciation of ed-ending verbs. in addition, among the three manifestations of the morpheme -ed (/t/, /d/ and /id/), /t/ is found to be the most correctly known and most correctly produced by the learners whereas /d/ is the less correctly known and less correctly produced by these learners.

Consequently, this study pedagogically suggests an improved plan for teaching pronunciation of verbs ending with -ed in particular and that of consonant sounds in general. Then, teachers should take extra strategies in teaching this aspect and the English learners should intensify efforts to properly internalize as well as practice the concepts learnt for effective communication to enable the overall development of our societies.

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APPENDIX I

QUESTIONNAIRE

Project Title

Phonological Competence and Performance of Second Language Learners: Production of ed-ending Verbs by English Students in Tertiary Institutions in Gombe State

Questionnaire Items

These questionnaire items are meant **for only this research project**. Kindly, answer the items with objectivity because the information should be kept with confidentiality. Tick/circle as appropriate **please**.

Section A

1. Name of Institution
2. Title of respondent (a) Mr. (b) Mrs. (c) Miss
3. Age range of respondent (a) 17 to 22 years (b) 23 to 27 years (c) above 27 years
4. Pursued Qualification (a) B. A. English (b) B. A. Ed. English (c) NCE English
5. Level of Study (a) part I (b) part II (c) part III & above

Section B

1. Which of the following is a voiced consonant? (a) /p/ (b) /t/ (c) /b/
2. The following are voiced consonant except. (a) /d/ (b) /k/ (c) /g/
3. Which of the following is a voiceless consonant? (a) /f/ (b) /z/ (c) /v/
4. The following are voiceless consonant except. (a) /θ/ (b) /s/ (c) /l/
5. Which of the following consonants is articulated by raising the tip of the tongue towards alveolar ridges? (a) /t/ (b) /θ/ (c) /tʃ/
6. Which of the following consonants is articulated by raising the tip of the tongue towards alveolar ridges? (a) /ð/ (b) /d/ (c) /dʒ/
7. Consonant /t/ is ... In terms of manner of articulation. (a) plosive (b) fricative (c) affricate
8. Consonant /d/ is In terms of manner of articulation. (a) nasal (b) plosive (c) fricative
9. When pronouncing ... consonant, the vocal cords are drawn apart and the air is allowed to pass out without vibration. (a) /t/ (b) /d/ (c) /v/
10. During pronunciation of ... consonant, the vocal cords come so close that the air forces itself through causing a sound accompanied by vibration. (a) /f/ (b) /k/ (c) /d/

- | | | | |
|---|-------------|-------------|-------------|
| 11. Which of the following has /t/ consonant sound. | (a) sensed | (b) jailed | (c) loved |
| 12. Which of the following has /t/ consonant sound. | (a) dragged | (b) parked | (c) rubbed |
| 13. Which of the following has /d/ consonant sound. | (a) clapped | (b) rushed | (c) barred |
| 14. Which of the following has /d/ consonant sound. | (a) ruffed | (b) joyed | (c) passed |
| 15. The following has /t/ consonant sound except. | (a) picked | (b) failed | (c) jumped |
| 16. The following has /t/ consonant sound except. | (a) passed | (b) ruffed | (c) manned |
| 17. The following has /d/ consonant sound except. | (a) removed | (b) rammed | (c) mashed |
| 18. The following has /d/ consonant sound except. | (a) matched | (b) viewed | (c) tarred |
| 19. The following has /id/ consonant sound except. | (a) toyed | (b) painted | (c) added |
| 20. The following has /id/ consonant sound except. | (a) landed | (b) jammed | (c) counted |

Thank you for your patronage.