

The Effects of A Developed Instructional Videotape Package for Teaching Vowel and Consonant Sounds in Primary Schools in Minna, Niger State

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Abstract

The aim of the study was to develop instructional videotape package for teaching vowel and consonant sounds in primary schools in Minna, Niger State. The sample, was made up of one hundred and twenty (120) pupils randomly selected from four government owned primary schools in Minna. A pretest posttest Experimental design (Nworgu, 2000) was adopted for the research. The instrument used was a 20 item test developed by the researcher to test pupils performance in the area of vowel and consonant sounds in English language. The instrument was validated and its reliability co-efficient was $r=0.94$ using test-retest method. Data collected were analyzed using Mean, standard deviation and t-test statistic. The study revealed that pupils are faced with English words pronunciation problems in the area of vowel and consonant sounds. There was significant difference in the performance of the Students taught with instructional video tape package ($t_{cal}=14.82 > t_{crit}=1.67$, $p=0.008$) and consonant sounds ($t_{cal} 21.58, >1.67$ $p = 0.008$). There was also significant difference in the performance of boys and girls taught vowel pronunciation using instructional videotape package ($t_{cal}=2.85 > t_{crit}=1.70$, $p=0.008$) and in consonant pronunciation ($t_{cal}=2.04 > t_{crit}=1.20$, $p=0.008$). Some of the recommendations include: (i) English language teachers should employ varieties of instructional media in instruction (ii) Language laboratory or studios should be provided in schools by Ministry of Education and equipped with various instructional media especially instructional videotape package. (iii) Qualified teachers who are not knowledgeable in the act of using instructional media should be trained through seminars, Workshops conferences and in-service programmes. (iv) pre-service and in-service training programme for the preparation of primary school teachers should emphasize the use of and application of instructional media in order to give teachers good training and exposure to instructional techniques for effective and meaningful instruction.

Background to the Study

The Federal Ministry of Education (NPE, 2004) stated that English language is Nigeria's lingua franca and the medium of instruction right from the primary school to tertiary level. Government of Nigeria considers the subject compulsory and a core-subject in the school curriculum hence a veritable tool for national unity and integration. English is not only a core-subject in Nigeria's educational system but a credit pass in it is a prerequisite for admission into higher institution of learning for nearly all programmes. It is the

language used in government offices, for trading and business dealing between individuals and with other countries, for communication both at National and International levels. Ferguson (1981) stated that English is needed to promote our culture and to know and appreciate other people.

The role English language plays in the world of communication and scientific advancement cannot be over emphasized. In spite of all efforts by government to raise the standard of students performance in English, the result has not been encouraging.

Oyewole (1978) stated that, there is no doubt that the country (Nigeria) has lost and is still losing potential scientists, doctors and

Statement of the Problem.

English language is Nigeria's official language and the language of instruction in schools.

Ferguson (1981) stated that English is the medium of instruction in our educational institutions. Our educational policy is centered on English language and virtually all the books we use in our schools are written in English. Consequently, both arts and science students need proficiency in English. As a language of communication in the country, every school child or student no matter his course must study it. English is not only a core-subject in

- (i) Lack of qualified and experienced English teachers
- (ii) Absence of qualitative education
- (iii) Lack of modern and up to date method of teaching
- (iv) Interference of the first language
- (v) Cultural background of students

Research Questions

Specifically, the study was designed to seek answers to the following research questions:-

1. Will there be any difference in the performance of pupils taught vowel sounds with instructional videotape package and those taught without instructional videotape package?
2. Will there be any difference in the performance of pupils taught consonant sounds with instructional videotape

teachers just because such candidates could not make the required grades in English language at secondary school level.

the Nigeria Educational system but a pass in it is a pre-requisite for admission into higher institution of learning for nearly all programme.

FGN/UNICEF (1991-1992) In its finding on situation and policy analysis (SA PA) on basic education in Nigeria revealed acute shortage of teaching and learning materials in Nigeria's primary schools. Related to this is near complete reliance of teachers on the chalk and talk teaching method resulting in rote learning by the pupils. Babatunde and Taiwo (1982) listed the following as some of the problems constraining students learning of English:-

- (vi) Lack of modern instructional or teaching aids.

It is in light of the above that the study aimed at developing and instructional videotape package for use in teaching vowel and consonant sounds in primary schools in Minna, Niger State.

3. Will there be any difference between boys and girls vowel pronunciation when taught with instructional videotape package and those not taught using the same method?
4. Will there be any difference between boys and girls consonant pronunciation when taught

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with instructional videotape package and those not

taught using the same method?

Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance

- **HO₁:** There is no significant difference in the performance of pupils taught vowel sounds with instructional videotape package and those taught without instructional videotape package.
- **HO₂:** There is no significant difference in the performance of pupils taught consonant sounds with instructional videotape package and those taught without instructional videotape package.

- **HO₃:** There is no significant difference between the performance of boys and girls taught vowel sounds with instructional videotape package and those not taught using the same method.
- **HO₄:** There is no significant difference between the performance of boys and girls taught consonant sounds with instructional videotape package and those not taught using the same method.

Methodology

This study is an experimental research. A pretest-posttest was adopted for the study. This method is appreciated because an experimental research is determined through the treatment given to the respondent and its outcome (Nworgu, 2000).

It involved a total of 120 pupils (60 boys and 60 girls) randomly selected from four government owned primary schools in Minna, Niger State. The major criteria for selecting only primary Six (6) pupils was due to the fact that the two concepts (vowel and consonant sounds) pronunciation are in primary six syllabus and other classes would not have any knowledge of the concept.

The instrument used for the study was developed by the researcher and named English language pronunciation Achievement Test

(ELPAT). The instrument consist of twenty test items, ten test items were on vowel sound and the other ten were on consonant sound. ELPAT, was validated by three experts, one expert was from the department of languages, College of Education, Minna and one from school of General Studies, Federal University of Technology Minna and the third one was from Ahmadu Bahago Senior Secondary School, Minna. They certify that the instrument has content validity. The instrument was also subjected to pilot test. The reliability co-efficient of $r=0.94$ was obtained using test retest method. The other instrument used in the study was researcher develop instructional videotape package for teaching vowel and consonant sounds in English language. The recordings and editing

were done by experts in Educational Technology and English Language. The development of this research material follows a systematic approach of instructional development

- (i) Is there a need?
- (ii) Who is to be taught?
- (iii) What is to be taught? (knowledge, facts, skills, task analysis)
- (iv) What level of instruction is needed? (Introductory, awareness, advanced etc).
- (v) How is the material to be taught? (Need to design lesson plan, techniques of presentation, test of understanding).
- (vi) What resources are to be used?
- (vii) Assessment of effectiveness (uses, standard, evaluation techniques such as proto-typing and field test).
- (viii) Revision) modify instructional materials in the light of experience with them.

The instructional package was validated by experts in educational technology and English language in line with the systematic approach of instructional development model put forth by Dick and Carely, (1996).

Data Analysis

The data collected were analyzed using the percentage, mean, standard deviation and t-test statistics.

model put forth by Dick and Carey (1999). They identified a list of basic factors that need to be considered during development as follows:-

Results

The analysis and presentation of the results are done in tabular form below.

HYPOTHESIS ONE (H0.1)

There is no significant difference in the performance of pupils taught vowel sounds with instructional videotape package and those taught without instructional videotape package.

Table 1 t-test Result for the Performance of pupils on Vowel Sounds

Variable	No in sample	df	Mean	SD	t-value calculated	t-value critical	p
Experimental Group	60	59	70.42	14.00	14.82*	1.67	0.008
Control Group	60		43.17	9.96			

Significant at P0.008

Table 1 above shows that the calculated t-value (14.82) is greater than the t-value critical (1.67) at 0.05 level of significance with probability value of 0.008. This indicates that there is statistical significant rejected. There is therefore, significant difference in the performance of

difference in the performance of experimental group taught with instructional videotape package and those taught without instructional videotape package. On this basis, the null hypothesis 1, was pupils taught vowel sounds with instructional videotape package.

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Hypothesis Two (Ho.2)

There is no significant difference in the performance of pupil taught consonant sound pronunciation

with instructional videotape package and those taught without instructional videotape package.

Table 2: t-test Result for the Performance of Pupils on Consonant Sounds

Variable	No in sample	df	Mean	SD	t-value calculated	t-value critical	p
Experimental Group	60	59	70.92	8.76	21.58*	1.67	0.000
Control Group	60		42.08	8.25			

* Significant at P0.000

Table 2 above shows that the calculated t-value (21.58) is greater than the critical t-value (1.67) at the 0.05 level of significance with probability value of 0.000. This indicates that there is statistical significant difference in the performance of pupils on consonant sounds. On that basis, the null

hypothesis 2 was rejected. There is therefore, significant deference in the performance of pupils taught consonant sounds with instructional videotape package and those taught without instructional videotape package.

HYPOTHESIS THREE (HO.3)

There is no significant difference in the performance of boys and girls

taught vowel sound pronunciation with instructional videotape package.

Table 3: The difference in performance of Boys and Girls on Vowel Sounds

Variable	No in sample	df	Mean	SD	t-value calculated	t-value critical	p
Boys	30	29	65.50	16.05	2.85*	1.70	0.008
Girls	30		75.33	9.53			

* Significant at 0.008 level

Table 3 shows that the calculated t-value (2.85) is greater than the critical t-value (1.70). This indicates that there is statistical significant

difference in the performance of boys and girls taught vowel sounds with instructional videotape package.

Table 4: The difference in Performance of Boys and Girls on Consonant Sounds

Variable	No in sample	df	Mean	SD	t-value calculated	t-value critical	p
Boys	30	29	68.67	9.37	2.04*	1.70	0.05
Girls	30		73.17	7.60			

Significant at 0.05 level

Table 4.6 shows that the calculated t-value (2.04) is greater than the critical t-value (1.70). This indicates that there is statistical significant difference in the performance of boys and girls taught

Summary of Findings

1. The use of instructional video tape package improved pupils pronunciation in vowel and consonant sounds.
2. Girls performed better than boys using instructional video tape package.
3. It is simple and cheap to prepare (Instructional

Discussion of Results

The objective of the study was to investigate the effect of researcher designed and developed instructional videotape package for teaching vowel and consonant sounds pronunciation in primary schools in Minna, Niger State.

The result of the analysis of the data for this research revealed that the use of researcher developed instructional videotape package for teaching vowel and consonant sounds pronunciation of English words improved the performance of pupils significantly than those taught without instructional videotape package. The result of the study is in line with the finding of (Oyegebu 1999, Nworgu 2000 and Ayogu 2000). They affirmed those video packages are effective owing to their ability to captivate and hold attention as well as provide for direct interaction of students with what is learnt. The study also revealed that girls performed better than boys in vowel sound and consonant pronunciation. The result is also in agreement with that of Fina, (1979) which stated female top the

consonant sounds pronunciation with instructional videotape package. Therefore, the null hypothesis is rejected.

- videotape package for teaching pronunciation in primary schools where hard wares such as Television, video machine, video camera are available.
4. These findings showed that better performance could result through effective and efficient use of instructional packages.

registration list in French and English Language.

From, the finding of the study, it is observed that primary school pupils find it difficult to pronounce accurately many English language words due to strong interference of local languages. Williams (1977) stated that difficulties in pronunciation always arise where English is different from mother tongue.

Implications

The result of the analysis of data for the research revealed that mother tongue has direct effect on Pupils pronunciation.

Niger State and indeed Nigeria need people who can communicate effectively in English. However, if the problem of pronunciation is not identified and solved at the early stages of education, the child would hardly adjust in later life. Also, it may affect the production of potential scientist, doctors and teachers in Niger State and Nigeria in general because such candidates could not make the grades in English language at the WAEC and NECO levels. It is

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therefore not out of place to emphasize the need to find urgent solutions to pupils' pronunciation problems in English because it has serious implication for economic development of the nation.

Conclusion

Based on the finding of the research, the following conclusions were drawn:

- (i) The use of instructional videotape package would improve the teaching and learning of English language in the primary schools.
- (ii) Girls taught with instructional videotape package performed better than boys in vowel and consonant sounds pronunciation.

Recommendation

In the light of this research, the following recommendations were made:-

- (i) English language teachers should employ varieties of instructional media in instruction. This would make teaching of pronunciation more interesting and effective.

- (ii) Language laboratory or studio should be provided in schools by Ministries of Education and equipped with various instructional media especially instructional videotape package.

- (iii) Qualified teachers who are already in the field and who are not knowledgeable in the act of using instructional media should be trained through seminars, workshops, conferences and in-service programmes.

- (iv) Pre-service and in-service training programme for the preparation of primary school teachers should emphasize the use of and application of instructional media in order to give teachers good training and exposure to instructional techniques for effective and meaningful instruction.

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