

Combined Effects of Game Strategy and Location as Factors of Academic Achievement in Igbo

Grammar

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Abstract

This paper sought to find out the effects of game and location (Urban/Rural) on students' academic achievements in Igbo grammar .

The performance in written/oral Igbo language (IgboIzugbe) in Nigeria tended to implicate locational factors. Hence it is important to find out empirically how far in the present day Nigeria is this locational factors still exerting some influences on achievement of students. In carrying out this study one research question and two hypotheses were posed. The study used a quasi-experimental study of non-equivalent control group design.

JSS 11 students from 4 sampled schools in Nsukka education zone were the research subjects; ANCOVA was the analytical tool after generating data, from the Igbo language achievement instrument, which served both on pre and post tests. The result indicated that location is a significant factor in Igbo achievement in favour of urban students and there is interaction effect of location and method to influence achievement. Based on this result relevant recommendations and suggestions were made.

Introduction

The new Igbo curriculum package is comprehensive in packaging both the curriculum contents, materials and methods as well as evaluation technique employed in implementing the language policy. The curriculum emphasized the use of appropriate media and methods in teaching Igbo language. The argument of some researchers (Afigbo, 1971, Omeje, 1997) is that the performance in Igbo language is poor because of lack of interest in the subject by both the students and teachers. They

contended that appropriate method and media could change the negative attitude of the generality of the public towards the subject.

Games have been discovered to be an effective teaching strategy in this respect. In a game there are both media and method aspects so it is a special strategy that combines the advantages of both areas in one strategy. Basically a game is any contest (play) among adversaries (Teather 1978). When one or more players compete or co-operate for pay off, a game manifests. From educational point of view, Fien, Gerber and Wilson (1984) see a game as an activity in which students use data and or skills in a competitive situation against themselves, each other, the teacher as a game master chance or environment. Hence a game is educational when it is used to facilitate learning rather than only acting as entertainment stimulant. Games are environmentally based.

The features of a game depend greatly on both the players milieu and their environmental concomitants. Hence a game that is efficacious in one environmental setting might prove otherwise in another. Therefore the researcher developed games on identification and arrangement of alphabets and vowels, formation of harmonized words, infinitives and verbs. These games are tested on various environmental settings to ascertain the differential effects due to location if any. According to the language policy Igbo is a "core" subject at both primary and secondary school levels of education in Nigeria and at all settings. However even in Igbo speaking areas, one observes that the emphasis in Igbo is marginal. In some rural areas where there is dialectical interference teachers and students abhor Igbo due to the fact that centralized form is like teaching English to non English speaking people, and it is required that every person must adhere to the central Igbo. Hence children that grew up in big cities like Enugu, Onitsha, Owerri appear to interact better in central Igbo than the rural dwellers. This phenomenon tend to be a major factor in the seemingly differential performance of students in Igbo due to location. This study therefore aimed at finding the combined influences of game and location on students academic achievements. Specifically the study:

1. Determined the effect of location on achievement of students taught using game strategy
2. Determined the interaction effect of game method and location on students achievement in Igbo language

One Research question and two hypotheses guided the study. They are:

- To what extent do students from urban and rural areas taught with games differ from those taught with conventional method in their achievement in Igbo grammar?
- There is no significant difference in the mean achievement scores of urban and rural students taught Igbo using games ($P < 0.05$)
- There is no significant interaction effect of game method and location on the achievement of students in Igbo language.

Methodology

The design of this study is quasi-experimental. Specifically it is the non-equivalent control group design. The subjects were not randomly assigned to treatment conditions rather intact classes were used. The design is shown as follows.

01 x 02

01 - 02

where

01 = pre test

02 = post test

x = Treatment (experimental)

- = No treatment (control)

The area of this study was Nsukka Education zone of Enugu state. Nsukka education zone was chosen to allow for maximum co-ordination of the experiment as the researcher works in the area.

The population of this study consisted of all JSSII students in secondary schools in Nsukka Education zone.

Multi-staged sampling procedure was adopted to draw the one hundred and ninety seven (197) JSSII students drawn from eight schools in Nsukka Education zone. In the first instance stratified random sampling was used to draw 4 schools from both urban and rural setting making 8 altogether. However Nsukka Urban local government area was the only area with urban setting, hence the purposive sampling was adopted to pick Nsukka Local Government area to represent the urban setting. While schools for rural setting were picked randomly from igbo-etiti LGA. Hence 4 schools in urban area and 4 schools in rural area constituted the schools from where the samples were drawn. The 4 schools in each location were assigned to treatment and control

conditions by balloting. In each sampled school one intact class was used for the study.

The game strategy has been validated and standardized as could be seen in Umo (2001) by the researcher.

The instrument for data collection is Igbo grammar achievement test (IGAT). The instrument IGAT originally having 73 items was validated by four experts, two in language education and two in measurement and evaluation in the Faculty of Education University of Nigeria Nsukka. The IGAT items were reviewed based on the recommendations of the experts. After this review 60 items out of the 73 original items survived. The content validation of IGAT was achieved by the use of table, of specifications as well as the item analysis. After this review, 40 items which constituted the final version of the test emerged. The achievement test passed through all rigors of validation. (Umo 2001).

The research question was answered using means and standard deviation while the hypotheses were tested at 0.05 level significance using a two-way 2x2 analysis of covariance (ANCOVA). In applying the ANCOVA pre-test scores were used as co-variates to the posttest scores. ANCOVA was used in order to control initial differences.

Results

Table 1: Urban and Rural students' Pre/post achievement means scores and standard deviation for both experimental and control groups.

	Experimental						Control						
	Pooled			Pooled			Pooled			Pooled			
	Pre achie	Post achie		Preachie	Post		Preachie	Post		Preachie	Post		
achie	achie		n	x	SD	n	x	SD	n	x	SD	n	
x	SD												
U	1	2	5	1	4	2	7	2	7	2	6	6	6
r	6	4	5	5	5	5	5	5	5	4	5	5	5
b	.	.	2	.	.	.	5	.	5	.	5	.	5

a	4		4					3		8	5
n	5		4							1	
R	1		2					1		2	4
u	2		1					9		0	
r	9
a	6		2					2		1	3
l								5		9	

Table 1 shows that the post achievement mean scores of urban and rural students in the experimental setting are 24.4 and 21.2 respectively as against pre-achievement mean scores of 16.45 and 12.6 for Urban and rural setting respectively. Whereas in the control setting the post achievement mean scores for Urban and Rural students are 25.3 and 19.25 respectively as against pre-achievement mean scores of 13.7 and 13.3 for the same group respectively. Therefore the urban students achieved higher than their rural counterparts both in the experimental and control setting. However a closer look on the table shows that urban students taught with conventional method achieved higher than those taught with games where as in the rural setting, students taught with games achieved higher than those taught with conventional method. Therefore there is interaction effect of method and location on achievement.

Table 2: Analysis of Covariance (ANCOVA) of students' post-achievement mean scores in IGAT (Treatment by Gender by Location)

Source	Sum of Squares	df	Mean square	F	Sign of F
Covariates	1147.233	1	1147.233	93.191	.
Pre-	1147.	1	1147.	93.19	.

Achie	233		233	1	
Main Effects	1559.832	3	519.944	42.236	.
Method	1.995	1	1.995	.162	N S
Location	448.661	1	449.661	36.4451*	S
Sex	1201.315	1	1201.315	97.584*	S
2-Way Interactions	351.214	3	117.071	9.510	
Method x Location	68.867	1	68.867	5.594*	S
Explained	5074.202	8	634.275	51.523	
Residual	2314.376	188	12.311		

Table 2 Reveals that the computed F-value for the effect of location on achievement of students in Igbo grammar is 36.44. This value is significant at .05 levels. The decision therefore shows that the null hypothesis is rejected. This means that location is a significant factor on students' achievement in Igbo grammar in favour of students in urban area taught with games.

There is no significant interaction effect of method and location on the achievement of students in Igbo grammar. The result used to verify Ho2 is shown on table 2 According to the result the 2 -way interaction effects of method and location is

significant with calculated F-value of 67 & .559, which exceeded the critical F- value of 2.99 (1df for numerator and 188 df for denominator at .05 alpha level). Hence the null hypothesis of no interaction effect of method and location is rejected. This implies that when the method interacts with location the effects on students' achievement are felt. In other words the effects of treatment (game) on achievement is not consistent across location variables that is the game strategy favours one sub-group more than the other Therefore Location was a significant factor on students' overall achievement in Igbo grammar when taught with games, in favour of urban students. There were significant interaction effects of Method and location on achievement.

Discussion

In this study, location is found to have a significant effect on the students' achievement in Igbo grammar. The result reveals that students from the urban schools achieved higher than their rural counterparts. This finding agrees with those of Dale and Miller (1972), Mcgregor (1973), Izuwa (1974) and Anunobi (1984). Nwagu (1990) found out that students in urban located schools achieved statistically higher in social studies than their counterparts in rural located schools. Anunobi (1984) also compared the performance of urban and rural secondary school students in English Language in West African School Certificate (WASC) examination and found that students from rural schools achieved less than their counterparts in the Urban schools. Their explanation for the observed differential achievement in favour of Urban schools is that the surrounding of rural schools are generally unstimulating or insufficiently stimulating unlike Urban areas which have lots of fascinating and stimulating objects for teaching. In discussing the findings of this study with respect to the higher achievement on students in Urban schools, it is pertinent to emphasize Emenanjo's (1979) and Nwachukwu's positions that Igbo language is seen as a difficult subject because it lends itself to many dialects. However in urban areas there seems to be uniformity in the use of standard Igbo but because of the dialectal problems, it appears that students in rural schools do not quite imbibe the standard Igbo as it interacts negatively with the local dialect they use most often in their homes. This poses a problem and the question is, should students be taught with the immediate dialect in their locality? Will there be separate text material, separate teachers that master the dialects, which change from location to location? The society for promoting Igbo language and culture (SPILC) appears to have sorted this problem by seriously emphasizing the use of standard Igbo (igbo-izugbe). However the mixing of people from various locations in urban areas creates a more vantage position for

the use of "Igbo Izugbe" than people in rural areas who are homogenous and enjoy the use of their Language as part of their cultural heritage.

Recommendations

The fact that urban students achieved higher than their rural counterparts indicate that more educational opportunity will be provided for the rural schools. Attention should be given to those factors, which make the rural students lose interest and achieve poorly. Education authorities should not concentrate their supervision only in urban schools. They should extend the same strictcheck on the rural teachers, if they have not been doing so.

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