



EFFECTS OF DIALOGIC METHOD OF TEACHING ON STUDENTS' ACHIEVEMENT IN MARKETING IN COLLEGES OF EDUCATION IN DELTA STATE NIGERIA

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Abstract

The study was carried out to ascertain the effects of dialogic method of teaching on students' achievement in marketing in colleges of education in Delta State. Three research questions and three null hypotheses guided the study. The study adopted quasi-experimental design. The population for the study was 498 NCE II students offering marketing in the four colleges of education in Delta State. The sample size for the study was 106 NCE II students from two randomly sampled colleges of education in Delta State. The instrument for data collection was a 60-item multiple choice Marketing Achievement Test (MAT). The instrument was validated by three experts while Kuder Richardson 21 (KR-21) was used to ascertain the reliability of the instrument which yielded a coefficient of 0.77. Pre-test and post-test scores of the students both in experimental and control groups were taken which represented the data used for the study. The data collected were analyzed using mean and standard deviation to answer the research questions while Analysis of Covariance (ANCOVA) was used for testing the hypothesis at 0.05 level of significance. The study found that students taught marketing with dialogic instructional strategy had significantly higher mean achievement scores than the students in the control group that were taught with conventional lecture method. In addition, the study found that gender of the students had no significant ($p < 0.05$) interaction effects with the treatments. Based on the findings, the study among others recommended that dialogic instructional method should be incorporated into the curriculum of business education for pre-service teachers of business education in order to popularize its use among teachers and lecturers.

Keywords: Dialogic, conventional method, marketing, colleges of education, achievement, gender.

Introduction

Vocational and technical education is receiving global attention because of its strategic position as a veritable tool for national economic growth and development. According to Manyindo (2005), vocational education is expected to provide youths with knowledge, skills and training that satisfy the human resource demand of the nation. One of the institutions in Nigerian education system that are saddled with the responsibility of equipping learners with vocational skills for living is Colleges of education.



College of education is one of the post-secondary education institutions in Nigeria designed specifically to train and prepare students for the teaching industry (Onyesom, 2013). As described by the Federal Government of Nigeria (2014), college of education is an institution that provides knowledge, skills and training to students for the production of teachers and skilled personnel who shall be enterprising and self-reliant. The goals of colleges of education include: to encourage further the spirit of enquiry and creativity in teachers, to provide teachers with the intellectual and professional background adequate for their assignment and make them adaptable to changing situations, to provide the technical knowledge and skills necessary for agricultural, industrial, commercial, economic, and educational development of Nigeria, to give training and impart the necessary skills for the production of technicians, technologists and other skilled personnel who shall be self-reliant and enterprising (Federal Government of Nigeria, 2014). At College of education level, one of the vocational courses where students can enroll and be equipped with saleable skills for self and paid job on graduation is Business education.

Business education typically involves teaching students the fundamentals and theories required for an occupation in business or business-related field, or a teaching career in academia. Aliyu (2006) stated that Business education deals with acquisition and development of skills and competencies, attitudes and attributes in learners which are necessary for efficiency of the economic system. According to Onyesom (2013), Business education is the intellectual and vocational preparation of people for earning a living in the contemporary industrial and business environment. Cross (2009) noted that Business Education provides training in business practices and in specific skills such as accounting, information processing, keyboarding/typewriting, recordkeeping, office management, shorthand and marketing.

Marketing according to Inyang and Etuk (2015) involves the exchange of goods and services for money or using money to acquire the needed goods and services. The exchange could be made through the use of physical cash, or through bank drafts and bank transfers or through electronic means. As our society develops, more sophisticated systems for the exchange of goods and services for money (marketing) develop. We are now witnessing marketing through the internet (e-marketing), which makes it possible for someone in Nigeria to market with customers all over the world. As an academic course taught in tertiary institution, Jobber (2001) stated that marketing makes extensive use of subjects such as Psychology, Sociology, Commerce, Accounting, Economics and Mathematics to foster effective teaching and learning of principles and practice of marketing. Marketing education provide learners with systematic training and instruction leading to the acquisition of a body of knowledge concerning the theory and practice of marketing. Some of the objectives of teaching marketing in Nigerian tertiary institutions according to Ayozie and Raman (2013) include giving the students sufficient knowledge



in marketing, sales, advertising and related subjects, so as to enable them secure self or paid employment in marketing career on graduation.

Unfortunately, the present mode of teaching marketing in Colleges of education in Nigeria and Delta state in particular as observed by the researcher may undermine the achievement of the stated objectives of marketing education. The continuous poor achievement of students in marketing courses for the past few years is discouraging. The poor achievement of the students is worse in some aspects of marketing such as marketing mix, e-marketing, marketing information system and marketing segmentation. The poor trend in students' achievement in marketing could be traced to ineffective teaching methods adopted by the teachers. Ali and Akubue (1997) noted that most teachers in a bid to cover the syllabus use the traditional lecture-based method in teaching. This method according to Liddle (2000) is mainly teacher-centred and subject-content driven. It discourages initiatives, curiosity and creativity in learners and does not offer learners the opportunity to interact effectively with the peers, the teacher and the learning materials (Mbah and Onwuzo, 2010). Making a similar contribution, Okon (2002) submitted that conventional teaching methods are not challenging enough to the needs of the students.

The continuous use of conventional lecture method for teaching by most teachers has resulted to loss of interest, less participation in class and poor learning achievement of students (Unongo, 2015). Hence, to achieve the objectives of any school subjects, Mbah and Onwuzo (2010) noted further that teachers must adopt modern teaching strategies/techniques that will foster effective communication and interaction with students. Dialogic teaching technique no doubt can be one of such teaching techniques that will promote students curiosity, interest and achievement in learning.

Dialogic teaching has been one of the subjects of increasing discussion as it holds greater cognitive potential for learners, while at the same time demands the most contribution from the teachers (Nystrand, Woodman and Mark1997). According to Alexander (2006), dialogue instructional strategy is a teacher-class, teacher-group, teacher-individual, or pupil-pupil instructional method for achieving common understanding through structured, cumulative questioning and discussion which guide and prompt, reduce choices, minimize risk and error, and expedite handover of information from teachers to the students. It involves ongoing talk between teacher and students, not just teacher-presentation (Staarman and Ametller, 2013). In affirmation, Unongo (2015) stated that dialogic instructional strategy entails the teacher to set goals to be achieved, asking relevant questions on how the goals or tasks are to be achieved while the students on the other hand give their opinions or views on how the tasks are to be achieved. The ideas, views or opinion by both the teacher and the students are shared and agreement is reached. The correct ones are adopted and the teacher uses them to nurture



the students to perform the task correctly for improved mastery and academic achievement (Unongo, 2015).

Academic achievement is the learning outcomes of the students which can be measured by any form of assessment technique to ascertain academic gain of the students. Akinbobola (2006) described achievement of students as learning outcomes which include the knowledge, the skill and experiences acquired in both classroom and laboratory practices. One of the variables that may possibly influence students' achievement in learning is gender. According to Uwameike and Osunde (2005), gender refers to all the characteristics of male and female which describes behaviours or attributes expected of individuals on the basis of being either a male or female in a given society. Sharing his view, Ekeh (2003) submitted that gender is a terminology that categorizes human beings into males and females. Irrespective of gender, Gana (2013) stated that one of the proven ways of preventing poor achievement of students and stimulate their interest in learning is the use of interactive teaching methods. In this era of rapid information explosion, learning activities should be more activity-based, explorative and inquiry oriented rather than passive for improve academic achievement of learners. It is imperative to state that if teachers of marketing in tertiary institutions adopt dialogic instructional methods in teaching, it will produce much greater positive effects on the learners' academic achievement than continuing with their traditional teacher-centred method of teaching.

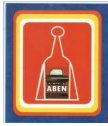
Over the years, Everson and Hmelo (2006) stated that much research efforts have focused on the influence, method and materials, teachers' behaviours, reward pattern on the performance of students, knowledge acquisition and problem-solving. Few studies available to the researcher that have targeted teacher-students interaction pattern and dialogue excluded learning in marketing. The pertinent question of this study is what could be the effect of dialogic instructional method on students' achievement in marketing. Thus, the purpose of this study was to investigate the effects of dialogic method of teaching on students' achievement in marketing in Colleges of Education in Delta State Nigeria. Specifically, the study investigated:

- i. the effect of dialogic method of teaching on students' mean score in marketing achievement test.
- ii. the effect of gender on students' mean score in marketing achievement test.
- iii. the interaction effect of treatments given (dialogic teaching and lecture method) and gender on students' mean score in marketing achievement test.

Research Questions

The study answered the following research questions:

1. What are the effects of dialogic method of teaching on students' mean score in marketing achievement test?



2. What are the effects of gender on students' mean scores in marketing achievement test?
3. What are the interaction effects of treatments given (dialogic teaching and lecture method) and gender on students' mean score in marketing achievement test.

Hypotheses

The following null hypotheses were tested at $p < 0.05$ levels of significance:

1. There is no significant difference in the mean achievement scores of students taught with dialogic instructional method and those taught with conventional method in marketing achievement test.
2. There is no significant difference in the mean achievement scores of male and female students exposed to dialogic method of teaching and those exposed to conventional method in marketing achievement test.
3. There is no significant interaction effect between the treatments given (dialogic teaching and lecture method) and gender on students' mean scores in marketing achievement test.

METHOD

The study was carried out in Delta Nigeria using two colleges of education. To achieve the objective of the study, three research questions and three null hypotheses guided the study. The research design employed was quasi-experimental design. It is pre-test, post-test, randomized control group factorial design (Olugbemi, 2013). In the submission of Gall, Gall and Borg (2007), quasi experimental research design is that method that permits the use of intact classes. The population for the study was 198 NCE II students offering Marketing in the four Colleges of education in Delta State.

The sample size for the study was 106 NCE II students from two randomly sampled Colleges of education in Delta State. These include Federal College of Education (Technical) Asaba with 55 NCE II students and College of Education, Warri with 51 NCE II students. Random sampling technique was used to assign Federal College of Education (Technical) Asaba to dialogic (experimental) while College of Education Warri was assigned to control group (traditional teaching method). The instrument for data collection was 60-item multiple choice Marketing Achievement Test (MAT). The instrument was validated by three experts from the Department of Vocational Teacher Education, University of Nigeria, Nsukka. To establish the reliability of the achievement test instrument, Kuder Richardson 21 (KR-21) was used which yielded a KR-21 reliability coefficient of 0.77. To carry out the study, the students in both experimental (dialogic) and control groups were subjected to a pre-test in order to obtain the pre-test achievement scores. The administration of the pre-test took place a week before the experiment began in the two schools used for the study. The scores obtained by students from the two groups served as the pre-test scores of the study. The actual treatment began



after the pre-test. In that case, NCE II students offering marketing in Federal College of Education (Technical) Asaba were taught marketing mix, e-marketing, marketing information system and marketing segmentation with dialogic instructional strategy while NCE II students of Marketing in College of Education Warri were taught with normal lecture method.

The treatment lasted for a period of seven weeks. On completion of the treatment after the seventh week, the post-test was administered to the students in their respective groups to obtain the post-test scores. The instrument used for the post-test was similar to the one used for the pre-test by the items were reshuffled to avoid mastery of the questions by the students. The scripts of the students were collated and marked by the researcher and the students were scored over 60. The data collected in the two stages (pre-test and post-test) from the dialogic (experimental) group and lecture (control) group were compiled for analysis. The data collected were analyzed using mean and standard deviation to answer the research questions while Analysis of Covariance (ANCOVA) was used for testing the hypothesis at 0.05 level of significance.

Results

Research Question 1

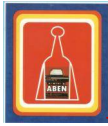
What are the effects of dialogic method of teaching on students' mean score in marketing achievement test)?

The data for answering research question one are presented in Table 1.

Table 1: Mean Achievement Scores of NCE II Students who were taught Marketing with Dialogic Instructional Method and those taught with Conventional (Lecture) Method.

Groups	N	Pretest		Posttest	
		Mean	SD	Mean	SD Gain Scores
Experimental (Dialogic)	55	29.72	8.17	49.75	13.19 20.03
Control (Lecture)	51	29.20	8.22	34.19	9.49 4.99

Table 1 shows the achievement mean scores of NCE II students who were taught marketing with dialogic instructional method (Experimental group) and those taught with conventional lecture method (Control group). Those who were taught marketing with dialogic instructional method had mean achievement score of 29.72 in the pre-test and 49.75 in the post-test making the mean achievement gain of the experimental group to be 20.03. On the other hand, those who were taught marketing with conventional lecture method had mean achievement score of 29.20 in the pre-test and 34.19 in the post-test making the mean achievement gain of the control group to be 4.99. This result indicated that teaching marketing using dialogic instructional method significantly increased academic achievement of the students.



Research Question Two

What are the effects of gender on students' mean score in marketing achievement test?

The data for answering research question two are presented in Table 2.

Table 2: Mean Achievement Scores of Male and Female NCE II Students who were taught Marketing with Dialogic and Conventional Lecture Method

Group Sex	N	PRETEST		POSTTEST	
		Mean	SD	Mean	SD Gain Scores
Experimental Male (Dialogic)	18	29.88	7.13	49.47	14.11 19.59
Female	37	29.56	8.21	50.03	13.27 20.47
Control Male (Lecture)	16	29.31	8.10	34.18	9.72 4.87
Female	35	29.12	8.38	34.19	9.76 5.07

Table 2 shows the achievement means score of male and female students taught marketing using dialogic instructional technique and those taught with conventional lecture method. For the experimental (dialogic) group, male students had mean achievement score of 29.88 in the pre-test and 49.47 in the post-test making the mean achievement gain of the male students in the experimental group to be 19.59. The female students in the experimental group had mean achievement score of 29.56 in the pre-test and 50.03 in the post-test making the mean achievement gain of the female students in the experimental group to be 20.47.

For the control group, male students had mean achievement score of 29.31 in the pre-test and 34.18 in the post-test making the mean achievement gain of the male students in the control group to be 4.87. The female students in the control group had mean achievement score of 29.12 in the pre-test and 34.19 in the post-test making the mean achievement gain of the female students in the control (lecture) group to be 5.07.

Research Question Three

What are the interaction effects of treatments given (dialogic teaching and lecture method) and gender on students' mean score in marketing achievement test.

The data for answering research question three are presented in Table 3.

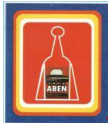


Table 3: Mean Interaction Effect of Treatments and Gender on Achievement of Students in Marketing Achievement Test.

Gender	Group	Pre-test	Post-test	Gain Scores
Male	Mean	29.60	41.83	12.23
	Std. Deviation	8.21	11.31	
	N	34	34	
Female	Mean	29.34	42.11	12.77
	Std. Deviation	7.95	11.10	
	N	72	72	
Total	Mean	15.68	26.51	10.83
	Std. Deviation	8.13	11.32	
	N	106	106	

The data in Table 3 presents the interaction effect of gender and treatments given to the students on their mean scores in marketing achievement test. As a result of the treatments (dialogic and lecture method), the result shows that male students had mean achievement score of 29.60 in the pre-test, 41.83 in the post-test making their overall mean achievement gain in marketing test to be 12.23. The female students had mean achievement score of 29.34 in the pre-test, 42.11 in the post-test making the overall mean achievement gain of female students in marketing test to be 12.77. From the above result, it shows clearly that there is no difference in the mean achievement scores of male and female students in the marketing achievement test (MAT) as a result of the treatments given to them.

Test of Hypotheses

The following null hypotheses were tested at $p < 0.05$ levels of significance:

1. There is no significant difference in the mean achievement score of students taught with dialogic instructional method and those taught conventional method in marketing achievement test.
2. There is no significant difference in the mean achievement scores of male and female students exposed to dialogic method of teaching and those exposed to conventional method in marketing achievement test.
3. There is no significant interaction effect between the treatments given (dialogic teaching and lecture method) and gender on students' mean score in marketing achievement test.

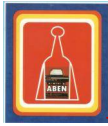


Table 4: Analysis of Covariance (ANCOVA) for test of Significant Difference in Mean Achievement Scores of Students in Marketing and Interaction Effects of the Treatments on Gender.

Source	Sum of Squares	DF	Mean Square	F-cal	(P-value)
Corrected Model	22984.215	2	538.441	61.376	0.000
Intercept	2399.223	1	3732.302	45.583	0.000
Pre-test	11.232	1	10.439	1.438	0.698
Group*	1306.132	2	2180.293	36.742	0.000
Gender	40.744	1	33.654	0.590	0.263
Group * Gender	16.8508	2	35.874	0.532	0.478
Error	4329.066	98	78.381		
Total	329831.291	106			
Corrected Total	8086.231	105			

R Squared = .851 (Adjusted R Squared = .833)
Significant at 0.05 probability level

Data in Table 4 presented the result that treatments (dialogic and lecture) had a significant effect on students' achievement in marketing test. The F-calculated value of 36.742 and the p-value of 0.000 which is less than 0.05 level of significance implied that there was significant difference in the mean achievement scores of students taught marketing based on the treatments given in favour of students taught with dialogic instructional method. Therefore, the null hypothesis of no significant difference in the mean achievement score of students taught with dialogic instructional method and those taught conventional method in marketing achievement test was rejected.

The effect of gender on academic achievement of students as presented in the table showed that, the F-calculated value of 0.590 and p-value of 0.263 which was greater than 0.05 level of significance indicates that there was no significant difference in the mean achievement scores of male and female students in the marketing achievement test. Therefore, the null hypothesis of significant difference in the mean achievement scores of male and female students taught marketing was upheld.

The result of the interaction effect of treatment Group*Gender shows that the F-calculated value was 0.532 while the p-value was 0.478 which is greater than 0.05 level of significance. This indicated that there was no significant interaction effect between the treatments given (dialogic teaching and lecture method) and gender on students' mean score in marketing achievement test.



Discussion

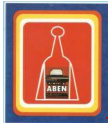
From the data analyzed, the study found that NCE II students taught marketing with dialogic instructional method had higher achievement score than those exposed to conventional method of teaching. The findings of the study corroborated that of Brannon and Dauksas (2014) who investigated the effectiveness of dialogic reading in increasing English Language learning preschool children's expressive language where the author found that dialogic reading significantly increase reading and promote interactive reading skills among students. In addition, Becker (2004) studied the comparison of students' achievement and attitudes between dialogic teaching and traditional classroom environment in Thailand Vocational Electronics programme where the study found that students taught with dialogic instructional method had significantly higher achievement than the group taught with lecturer method.

The findings of the study on the effects of gender on students' achievement reveals that dialogic instructional method had significantly positive effects on mean achievement scores of both male and female NCE II students of marketing test. The findings of this study agreed with that Orabi (2007) on gender differences in student academic performance and attitudes toward their education and themselves in an introductory engineering course where the study found that there was no significant difference between mean scores in the academic performance of male and female students in the course. The finding of this study also conformed with independent findings of the studies of Aguele (2004) and Kurumeh (2004) who found no gender differences in students' achievement in mathematics.

Conclusion

The present trend of poor performance of students in marketing is worrisome and can undermine the nation's struggle for increased employment among graduates and youths. This is because, the achievement of the students is as a result of low interest in studying vocational courses such as marketing that can equip them with saleable skills for self or paid employment on graduation. The observed low interest and poor academic achievement of the students could be traced to the use of traditional instructional method mostly used by Nigerian teachers which seem ineffective in stimulating students' curiosity and interest in learning marketing. Hence, effort must be made to prevent the present situation which necessitated this study to establish the effects of dialogic method of teaching on students' achievement in marketing using Colleges of education in Delta State Nigeria as case study.

From the analyzed, it was found that dialogic instructional method significantly increased students' academic achievement in marketing than conventional lecture method mostly practice by most teachers. In conclusion therefore, the ineffectiveness of the conventional lecture method mostly use for teaching by teachers among other factors is



responsible for the observed poor achievement of students in marketing in Colleges of education in Delta State.

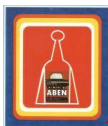
Recommendations

Based on the findings of this study, the following recommendations were made:

1. Dialogic instructional method should be incorporated into the college of education curriculum for pre-service teachers of business education in order to popularize the use among teachers and lecturers.
2. Seminars, workshops and conferences should be organized by the Delta State government for improved used of dialogic instructional technique among teachers, lecturers and curriculum planners for effective teaching and learning of marketing and other courses at all levels of education.

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