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Research Article

Effect Of Reciprocal Peer Instructional Strategy on Student's Academic Achievement and Interest in Business Studies in Kwara State, Nigeria

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ABSTRACT

This study was carried out to investigate the effects of reciprocal peer Instructional strategy on Student Academic achievement and interest in Business Studies in Kwara State. Three research questions were generated and three null hypotheses were formulated to guide the study. The study was a non-equivalent control group quasi-experimental design, involving one treatment and one control group. A total of 134 Junior secondary class two students from three district junior secondary schools in Patigi: LGA Education Zone made up the sample for the study. In each school, one intact class was randomly selected and the intact classes were also randomly assigned to experimental and control conditions. Three instruments namely: the Business Studies Achievement Test (BSAT) Business Studies interest Inventory (BSII) and the Business Studies Lesson Plan namely: the Reciprocal Peer Tutoring Strategy Lesson Plan and Conventional Lesson Plan, were developed, by the researcher. The reciprocal peer tutoring strategy lesson plan was used for the experimental group while the control group received training using the conventional teaching method. The data obtained were analyzed using mean scores, standard deviation, and 2 x 2 analysis of covariance (ANCOVA). The major findings of the study were that intervention using reciprocal peer strategy significantly improved the achievement and, interest in Business Studies Junior secondary school students; and that gender had no significant influence on the achievement and interest in Business Studies students based on the reciprocal peer tutoring strategy; that gender grouping was not a significant factor in the achievement and interest in Business Studies. A major educational implication of the findings was that training in reciprocal peer tutoring strategy improves achievement and interest, this suggests that teachers would achieve better results if trained on how to use the RPT strategy.



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1. INTRODUCTION

Education is the totality of life experiences that people have, which enables them to cope with and derive satisfaction from living in the world. This is because Education enables learners to achieve social competence and optimum individual development. It is on this premise that it is believed that the quality of a nation's education is proportional to the level of its prosperity, Advanced nations of the world are distinguished by the excellence of their educational system. Towards infusing excellence in Nigeria's educational system, the 1969 Curriculum Conference gave birth to the National Policy on Education (the Federal Republic of Nigeria, (FRN. 2007); Curriculum is a document, plan, or blueprint for an instructional guide that is used for teaching and learning to bring about positive and desirable change in behavior (Offorma, 2009 and Esu 2014). This brought changes to the Nigerian educational system. A change is the one from the 6-3-3-.4 system of education to the 9-3-4. system of education which came into operation recently in Nigeria, (FGN 2013).

The 9-3-4 system of Education means nine years of basic education (6 years of primary Education, and 3 years of Junior Secondary Education (9 years). three years of Senior Secondary Education and four years of university Education. The 9-3-4 system brought many reforms to the educational system in Nigeria. At the Junior Secondary level, prevocational subjects were introduced in the curriculum while vocational subjects were introduced in the senior secondary level. The focus of the pre-vocational subjects was to expose students at the Junior Secondary school (J SS) level to the world of works through exploration. Such exposure will enable Junior Secondary School Students to make intelligent career choices and also follow intelligent consumption patterns. Among the prevocational subjects in the junior secondary school curriculum, according to FGN (2013) are Practical Agriculture, French language, Cultural and Creative Arts Arabic (optional), Basic Science, Home Economics, Basic Technology, Social Studies, and Business Studies. Business Studies is an area of study that helps students to gain an awareness of how the labor market functions, and the present and future conditions for employment in the labor market, (Obi 2011). Business Studies is an integration of components of accounting/bookkeeping, shorthand, typewriting, office practice, and commerce. It is a source of gaining entrance and progress in the world of work, the laws affecting economic matters, and how to make rational decisions by applying such economic tools of analysis like opportunity cost and the law of diminishing returns. Osuala (2004) reported that through Business Studies, students are helped to explore the various areas of Business in order to make intelligent career choice. The writer explains further that Business Studies does not in any way provide training for specific occupations but aims at developing competencies Business Studies is one of the core subjects of the pre-vocational subjects of junior secondary schools in Nigeria. (Osuala, 2009); It also involves the academic and practical study of materials and resources with the ultimate intention of applying knowledge from the study to

provide a comfortable environment for man. The study of Business Studies helps to reduce ignorance about business.

2. OBJECTIVES

The subject has three main objectives as stated by the Federal Republic of Nigeria (Federal Ministry of Education, 2013): These include providing pre-vocational orientation for further business training; providing basic business literacy for everyday living, and stimulating creativity. At the Junior Secondary School level, Business Studies is intended to enable students to acquire basic knowledge, as well as help them develop basic skills in office and related occupations and for personal use. It is also expected to prepare them for further training in business-related careers and occupations. As for those who intend to work immediately after school, it is also expected to provide them with the orientation and basic skills with which to start and manage businesses. (Omotosho, 2013). The writer further stated that the objectives of Business studies as reflected in the Junior Secondary school syllabus (Ganiyu 2014. p 44) include;

(1) enabling the students to: appreciate the role of commerce and its relationship.

(2) appreciate and understand the basic concepts and principles relating to practical situations, especially, in a developing economy.

(3) identify types of transactions and open the necessary books of accounts they pass through in modern business activities.

(4) acquire skill in writing correct shorthand outlines by its theories and transcription of simple shorthand passage(s) into a long hand with correct spellings at a determined speed and time. And to also

(5) prepare for further work in commerce, bookkeeping, and office practice/procedure,

Considering the relevance of the stated objectives of Business Studies to the overall economic development of Nigerian society, effective teaching of Business Studies is inevitable. For instance, Azuama (2004) noted that the teaching of Business Studies requires application of different methods or techniques to make it interesting and meaningful. However, the personal observation of the researcher indicates that the conventional methods of instruction are widely used in schools. The conventional methods such as the lecture methods, and demonstration methods, are content-driven, it is a one–way communication method where the teacher does most of the talking and the students more often assume a passive role. Orange (2006) Stated that they are not learnercentered.

Furthermore, In a typical classroom that uses conventional methods, Students' focus is set in the wrong direction; in taking notes rather than understanding and absorbing new concepts. There is much focus on presentation, as little time is left for practice: Since a teacher has to deliver a fixed number of concepts within a limited time, most classroom activities are subjected to the presentation stage only. Practice is left for the

student to do as homework. A teacher's lecture is generally one-size-fit-all. Not every student has the same pace and ability of learning, while some students can follow the teacher's lecture with convenience, some other students do not. Also, each student had a different learning style. For instance, a kinesthetic learner may not master a concept by just listening to a lecture. If a visual learner gets a worse grade than an auditory learner may not, it does not mean that the former is slow or dull; it might simply mean that the classroom strategies were designed for the auditory learner only. (Njoku 2006). For the above reason, examination results have been consistently poor over the years as depicted by the statistics for Ajavi (2009 and Kwara State junior secondary school examination board records of 2012-2016). In Kwara state, the analysis of JSSCE results for the period of 2012-2016 indicates that less than 45 percent had a credit pass in Business Studies. Moreover, the performances of students in Business Studies in JSSCE for both terminal and external examinations have not been impressive. The poor unimpressive examination results have been attributed greatly to poor teaching methods used by teachers of Business Studies. Several other reasons have been identified for the low achievement rate of students in junior secondary schools in Nigeria. The reasons include poor infrastructural facilities, teachers' attitudes to work, and lack of commitment in government schools (Abolade, 2006). As a result of the foregoing, many students are unable to participate in Business Studies classes effectively. (Abdullahi 2013), and as such perform poorly in Business Studies. This resulted in massive cheating and poor performance in terminal and external examinations. (Musa and Aliyu 2014). On the other hand, modern teaching strategy are meant to be as interactive as possible, emphasizing small group work using relevant and practical case studies. Abdullahi (2013) submitted that modern strategies of teaching require less talk on the part of the teacher and more activities by the students. Orifa, Aiisafe and Ajisafe (2015) reported that optimal learning of Business Studies can only be guaranteed when classroom climate is positive and supportive, and the behaviour of the teacher is transactional/relational to enhance interactive instruction. Yakubu (2012) observed that teachers need to vary their teaching strategies in different classroom situations for increased achievement of the learners. In the opinion of Azuama (2004), teaching strategies involving good manner of presentation by the teacher, grouping students, guiding activities, making assignments and providing information to aid learning are required. Adesina, (2016) asserted that the use of a single teaching method causes boredom and discipline problems in the classroom. Hence, Offorma (2009) maintained that teachers had to use different resources and teaching strategies to teach students of different abilities and interests. Some of the modern instructional strategies are interactive and student-centered, among which include reciprocal peer tutoring instructional strategy. Reciprocal peer tutoring (RPT) could be defined as a learning situation where students take turns, acting as the tutors and the tutees for instructional strategy or review of academic materials, in this case students

both give and receive academic assistance, exchange roles during tutoring session, while the teacher supervised rather than teach the students. The students dialogue among themselves as each learner acts in response to another. The dialogue is usefully structured by the use of four strategies, sometimes known as the 'fabulous four' which are; predicting, clarifying, questioning, and summarizing. (Ene, 2002). The goal of reciprocal peer tutoring instructional strategy is to use discussion to enhance students' participation in the class, develop self-regulatory and monitory skills, and achieve overall improvement in motivation (Akanbi, 2012). Reciprocal peer tutoring helps teachers to cope with challenges such as limited instructional time, multiple curricular requirements and appropriate social engagement among students. According to Griffin and Griffin (2012), students function equally as both teacher and learner. Maheady (2001) explained that in using reciprocal peer tutoring, student benefits included; the development of social and relationship skills, the development of self-esteem and responsibility, and the development of cognitive skills and creativity. Webb (2012) explained that students who assist seem to experience greater gains than those who receive the tutorial help. Another benefit of RPT increases academic achievement while simultaneously decreasing disruptive behavior. RPT also promotes social competence, social skills awareness. RPT provides teachers with more time to work on upcoming lesson plans that couldn't use extra time to prepare for upcoming lessons. Maheady added that as for Students, they benefit from receiving more one-on-one instruction and engaging in active learning. Students are also able to track their own progress which gives them more accountability over their learning. Achievement is synonymous to success. The level of achievement or success in academics is measured with an achievement test and the scores obtained from it are the indices of the level of achievement. Irrespective of instructional strategies, research has shown that there is a close connection between achievement and interest. (Turner, 2010 as cited in Garuba, (2017). Achievement is on evidence that a person has excelled in a pursuit usually with effort. Achievement implies the act or process of finishing a task successfully and success in an area of academics is what is referred to as academics achievement; Clark and Mayer, (2008) stated that achievement refers to the degree of success attained in some general or specific area and it is measured using achievement test. Therefore, academic achievement in this context means success in improvement of students in teaching and learning Business Studies using reciprocal peer tutoring instructional strategy base on the student's interest. Interest has been viewed as emotionally oriented behavioural change which determines a student's drive in tackling educational programme or other activities (Kraft, Blazer and Hogan, 2016). Students' interest in any learning activity is sustained by the active involvement of the learner in all aspects of learning. Jibril and Zayum, (2012) described interest as a subjective feeling of intentness or curiosity over something. Interest in a particular thing is a

feeling manifested in an activity. It is a tendency to become absorbed in an experience and to continue in it.

Interest is the zeal or willingness to participate in any activity from which one derives some pleasures. Ogwo and Oranu (2006) noted that unless the teacher stimulates students' interests in learning, their achievement will be minimal. Therefore, it is imperative to state that the instructional strategies utilized by teachers for instructional delivery will not only influence students' achievement and interest but also their retention of learning. Njoku (2006) described interest as an activity one enjoys and to which one devotes time. Students' interest in Business Studies could be generated by teachers' competence and teaching strategy for enhanced retention of learning. Interest as viewed by Xiang, Chen, and Bruene, (2005) is an emotionally oriented behavior trait, that determines a student's energy and enthusiasm in tackling educational programs or other activities. Jibril and Zayum, (2002), view interest as a kind of feeling that one has for something valuable and beneficial; it is important to note that both achievement and interest are facilitators of Business Studies learning, and as such it is necessary to retain such knowledge gained in Business Study class.

In today's classrooms, one of the most important factors is retention of the concepts that are taught to Business studies students. Without retention, there cannot be a successful transfer of knowledge from one subject area to another. If retention is not a top priority in the classroom, in the conventional method of teaching Business Studies, teachers spend most of the time reviewing and re-teaching concepts. (Majasan and Maccoby, 2003 and Messieis, 2006). They also explain that financial needs, family issues, and personal adjustment can impact Business studies students' retention. Academic factors such as curriculum design, academic advising can have a considerable impact on students and teaching method. (Mooney, 2000; Oczkus, 2003; Lipstan and Renniger,2006 and Mkpanong 2016). Towards the achievement of retention in Business Studies, adequate teaching methods must be put in place to replace conventional teaching. Reciprocal Peer Tutoring (RPT) may prove to be effective in improving students' retention in Business Studies. Retention of learning is the repeat performance of a task earlier acquired, elicited after some time (Danjuma 2014). Retention is the preservative factor of the mind (Mark,2014). Whatever touches consciousness leaves a trace or impression and is retained in the mind in form of an image. Okorie and Okoli (2014) established that students' achievement, interest, and retention in learning are determined by factors such as teachers' ability, motivation, interest, meaningfulness of subject matter, methods of instruction, and memory capacity of the learners.

Retention has to do with the ability to remember and apply previously learned behavior. Retention in the view of Obiunu, (2008) is the learning that lasts beyond the initial unit of the lesson and it is assessed with test administration two or more weeks after the information had been taught and tested. This means that a learner who can repeat an acquired piece of

knowledge and skill with less error over time is said to have retained the knowledge and skills taught to him or her. Retention in the view of Hanushek (2007) is measured with two tests, the post-test which was used immediately after instruction, and the delayed or retention test administered two or more weeks after the initial test or post-test to measure the acquired knowledge. Retention in the context of this study, means the ability of students to repeat an acquired knowledge, skills, and attitudes in Business Students overtime with less error through their responses to tests administered on them or practical application of acquired competence and this may be influenced by gender. Gender is a social construct involving differences between males and females, it is the societal role assignment on the male and female sexes. Another area that is of interest to the researcher is the influence of gender on students' academic achievement, interest, and retention in Business Studies learning has for a long time been a concern of many researchers. Amazu and Okoro (2015), sought to determine whether it is true that there is female superiority in Business Studies achievement or not. The results obtained are inconsistent. For instance, Maccoby, (2003) explained that female students were significantly better than their male counterparts and that there was a significant difference between male and female students in their interest in Business Studies learning. Similarly, Jubril and Zayum (2012), noted that there was a gender difference in student's performance with particular reference to typewriting. (Anagbogu and Ezehora 2007, Baker and Mausaiyat, 2004, Obi 2011 and Amazu and Okoro 2015). Some reported that boys achieved better (Laibedour, 2014) Following these inconsistencies, this work seeks to contribute evidence in resolving this controversy on gender as it affects Business Studies students' achievement. The findings of the study may reveal which gender achieves better. The study may in addition, further reveal which gender grouping have more interest and retention in Business Studies. The tacit assumption of the Northern senatorial district of Kwara State is that males are seen to be superior to females in everything counts, (Landu, 2014) The result of this study may agree or disagree with this assumption.

Gender refers to socially constructed roles and socially learned behaviours and expectations associated with males and females. (Okeke, 2007; and Offorma 2009. Offorma 2016). Women and men are biologically different. However, all cultures interpret and elaborate their inherent biological differences into a set of social exceptions about what behaviors and activities are appropriate for them and what rights, resources, and even power they possess, like race, ethnicity, and class. Gender is a social category that largely establishes a person's life chances, shaping one's participation in society. (Offorma 2009). Since reciprocal peer tutoring involves leading in turn, one wonders whether the socio-cultural influences that expose males to different problem-solving situations and place females in a subordinate position would affect the achievement of the different gender groups involved in reciprocal peer tutoring. All these researchers show that various views and reports abound on the issue of gender in

student's achievement interest and retention in Business Studies. However, the study seeks to eliminate the gender gulf in Business Studies in general and in a particular area of accounting, shorthand, and typewriting. Therefore, this study examined how the effect of Reciprocal peer tutoring strategy on male and female gender groupings would affect Business Studies students' achievement, interest, and retention. These were the forces that motivated this study

3. METHODOLOGY

The research design adopted for gathering information for this research work will be quasi-experimental design. This method will be most appropriate for this research work as it will enables the researcher to describe through the collection of analysis, and arriving at conclusions data. and recommendations based on the data collected from the respondents through the use of a questionnaire. Osuala, (2001) remarked that the survey method uncovers data, interprets synthesis, integrates these data, and points to implications and interrelationships between the variables.

Population for the Study

The population for this study comprises all 986 Junior Senior secondary school II students from the 21 Public Junior Secondary schools in Patigi Local Government Area of Kwara State. Junior secondary school II (JSS II) students in public schools in Patigi Local Government Area will be considered appropriate for this Study because they have had more basic understanding of Business Studies than students in JSS1 and are not preparing for Junior School Certificate Examination like the students in JSS3; So, an academic program of the schools will not in any way be disrupted. In addition, they are considered mature enough to be used for the test.

Sample and Sampling Technique

The sample for this study is 345 JSS II students of Business Studies in public secondary schools in Patigi Local Government Area of Kwara State. Through simple balloting also, Junior Secondary school, Patigi with 134 JSS II students, and Junior Secondary School Ndanaku with 35 JSS II Students were assigned to reciprocal peer tutoring instructional strategy(treatment) while JSS Islamiyah College with 131 JSS II Students and Community secondary school Lade JSS with 45 JSS II students were assigned to conventional Teaching method (control). The assignment of the secondary schools to the teaching strategies through simple balloting is to ensure that each of the schools has equal probability and opportunity of being assigned to reciprocal peer tutoring or conventional lecture (control) instructional strategy.

Instrument for Data Collection

Data for this Study was collected with the use of two instrument which include: the Business Studies Achievement Test (BSAT) and Business Studies Interest Inventory (BSII). The Business Studies Achievement Test (BSAT), contains 60 multiple-choice questions on Accounting, Shorthand, and Typewriting. Business Studies Interest Inventory (BSII) was a structured questionnaire that contains 20 items Constructed on a four-point scale graded as follows: Strongly Agree (SA) Agree (A) Disagree (D) Strongly Disagree (SD) weighted 4. 3, 2, and 1 respectively. The instrument was prepared in line with the test blueprint adopted for the study.

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Research Question

What is the interaction effect of reciprocal peer tutoring strategy and gender on the (a) mean achievement scores, (b) mean interest rating and (c) mean Retention of Business Studies students?

Experimental Group	Gender of Respondents	Achievement	Interest	Retention
Treatment Group		X SD N	X SD N	X SD N
	Male	71.70 12.37 43	70.50 16.92 43	73.93 16.66 43
	Female	64.92 19.40 45	60.60 20.03 45	62.52 20.66 45
	Total	64.23 17.30 88	62.51 18.31 88	64.84 18.51 88
Control Group	Male	46.13 16.38 42	40.93 9.27 42	37.73 8.60 42
	Female	38.79 23.38 44	39.57 11.53 44	36.71 11.83 44
	Toatal	42.44 16.31 86	38.26 9.56 86	34.58 10.40 86
Difference in Treatment and	Male	25.57	29.57	36.20
Control Group by Gender	Female	26.13	21.03	25.81

4. DISCUSSION

Data presented in the above Table appear to indicate the effect of interaction between reciprocal peer tutoring and gender on achievement scores, interest, and retention of students exposed to reciprocal peer tutoring strategy in Business Studies. The mean achievement scores across the two gender groups for the treatment and control groups differ. This difference for the males is 25.57. In this group, the males in the treatment group had a higher mean achievement score of 71.70 as against 46.17 for the males in the control group.

On the other hand, the difference between the mean achievement scores for the treatment and control groups among the female students is 26.13. Females in the treatment group had higher mean achievement score of 64.92 as against 38.79 for those in the control group. The mean interest rating of the two gender groups for the treatment and control group differ. This difference for the males is 29.57. In this group, the males in the treatment group had a higher mean interest rating of 70.50 as against 40.93 for males in the control group. On the other hand, the difference between the mean interest rating for the treatment and control groups among the female students is 21.03. Females in the treatment group had a higher mean interest rating of 60.60 as against 39.57 for those in the control group. The mean Retention of the two gender groups for the treatment and control group differ. This difference for the males is 36.20. In this group, the males in the treatment group had a higher mean interest rating of 73.93 as against the 37.73 for males in the control group. On the other hand, the difference between the mean interest rating for the treatment and control groups among the female students is 25.81. Females in the treatment group had a higher mean interest rating of 62.52 as against 36.71 for those in the control group.

5. CONCLUSION/RECOMMENDATION

Male and female students should be exposed to training in reciprocal peer tutoring strategy without discrimination since the evidence was that the use of the strategy significantly improves their achievement, interest, and Retention in Business Studies. Relevant governmental agencies Curriculum planners and professional bodies should sponsor further research on the effectiveness of reciprocal peer tutoring in other content areas not covered by this study.

REFERENCES

- 1. Ali A. Conducting research in education and social sciences. Enugu: Tashuula Network Ltd; 2006.
- Amazu NA, Okoro CC. Social status of parents and students' academic performance in Aba Educational Zone, Abia State. Adv Res. 2015;3(2):189-197.
- 3. Bamidele SA. Classroom management: Principles and practice. Ilorin: Bethesda Publishers; 2015.
- Becker, Maunsaiyat LK. Issues in emerging interactive technologies [Internet]. 2004 [cited 2014 Mar 24]. Available from: <u>http://www.techinteractive.html</u>
- Danladi GM. Competencies needed by the secondary school business teachers in Offa L.G.A of Kwara State [PhD thesis]. Department of Guidance and Counseling; 2013.

- 6. Denga DI. Educational measurement, continuous assessment, and psychological testing. Calabar: Rapid Educational Publishers; 1998.
- 7. Douglas JWE. The home in the school. London: Macgibbon Publishing Corporation; 2004.
- Douglas R. Qualities of a good teacher [Internet]. 2011 [cited 2015 Sep 2]. Available from: slingingthebull.com/sixteen-qualities
- Ezenwosu SU, Nworgu LN. Efficacy of peer tutoring and gender on students' achievement in biology. Int J Sci Eng Res. 2013;4(12):944-950.
- 10. Eze PN. Effects of peer assessment on students' achievement and interest in French [PhD thesis]. University of Nigeria, Nsukka; 2009.
- 11. Offorma GC. Curriculum implementation and instruction. Enugu: Uni World Educational Publishers (Nig.); 2006.
- 12. Offorma GC. Curriculum across language. University of Nigeria, Nsukka: Senate Ceremonials Committee; 2009.
- 13. Offorma GC. Curriculum implementation in distance learning. Curriculum Organization of Nigeria. Enugu: Family Circle Publications; 2009.
- Okeke EAC. Women and girls participation in science, technology, and mathematics education as facilitators. In: Badmus GA, Ocho LO, editors. Science, mathematics, and technology education in Nigeria. Lagos: Evearled Press; 1997. p. 25-42.
- Okeke EAC. Sex difference in the understanding of some important biology concepts. Niger J Educ. 2007;2(1):125-132.
- 16. Okorie O, Okoli BE. Perceived adequacy of business studies teachers for the implementation of upper basic education business studies curriculum in Nigeria. Br J Educ. 2014;2(5):13-21.
- 17. Ugo P. Effects of computer-assisted instructional technique on students' achievement in agricultural science in secondary schools in Bayelsa State, Nigeria [research manuscript]. Department of Vocational and Technology Education, Niger Delta University, Wilberforce Island, Bayelsa State, Nigeria; 2016.
- Ugwuja OG. Influence of family background on the academic achievement of senior secondary school students in Nsukka Educational Zone of Enugu State [Master's project]. University of Nigeria, Nsukka; 2010.

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