

Introduction

In Nigeria, classroom teachers are facing large enrolment of students which makes heterogeneity and group management becoming increasingly more challenging. This could be one of the factors responsible for the adoption of teacher-centred teaching strategy. Teacher-centred approach is a one-way process in which the teacher directly presents information while students generally remain passive throughout a lesson. This approach could make schooling look tedious, suffused with anxiety and boredom, destructive of curiosity and imagination, and produce cramming machines (Nworgu, 2009; Gupta & Pasrija, 2012). In this strategy, teachers could only provide immediate feedback to group of students rather than individual. Peer tutoring is one of the strategies that can solve these problems (Enserque & Lafont, 2010).

Peer tutoring makes students active participants, giving them more responsibility and promoting their level of engagement in the task. Peer tutoring is an instructional strategy that encourages students' partnership, linking high achieving students with lower achieving or—through structured reading, discussion and information exchange among students during the lesson (Ezeugwu, 2009; Rohrbach, Ginsburg block, Fontuzzo & Miller; 2003). In a Peer tutoring program, one student teaches another in a school setting (Allen, 2011). Students are brought together with the goal of providing instruction and feedback to one another (Rink, 2005; & Lee, 2005). Such arrangements can be both uni-directional, typically when a more knowledgeable student assists another less knowledgeable student. Or, the arrangement can be bi-directional involving the whole class, often called class-wide peer tutoring (CWPT)-

CWPT is one of the most widely studied and most highly recommended strategies for promoting achievement among diverse groups of learners (Ayvazo & Ward 2009; Hodge 2001; Iserbyt, Elen & Behets 2010, Weidner & Popp, 2007). CWPT has been shown to

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greatly increase the level of active student responding while providing students with opportunities to receive more time on task, immediate and specific feedback, more practices in short periods of time, and positive social and academic supports (Maheady & Gard, 2010). CWPT provides a way for students to get one-on-one help while practicing and learning, and more importantly, students have guided opportunities to apply learning strategies to improve their performance. The benefits of CWPT have been found to last even when a student moves into a classroom where similar methods are not being utilized (Gordon, 2003, Golding, Lisa & Tennant, 2006).

CWPT is characterized by highly engaged, high-paced, and partner-regulated instructional interactions (Greenwood, Maheady, & Delquadri, 2002). Teachers often report that students improve academic skills, on-task behaviors, and social skills as a result of utilizing the CWPT method (Elbaum et al., 2000). Research indicates that students enjoy both the role of tutor and tutee, giving them a positive attitude toward learning. This outlook increases positive social interactions while reducing disruptive behaviors. Given the critical importance of behavior to children's school and later life success, the social and academic benefits of school interventions such as CWPT deserve close scrutiny.

The CWPT method can effectively assist the teacher by providing two important learning variables: many opportunities for students to respond to academic tasks, and frequent and immediate feedback (Golding, Lisa & Tennant, 2006). Research indicates that peer tutoring is an economically and educationally effective intervention for slow learners and high achievers that can benefit both the tutor and tutee, socially and educationally by motivating them to learn. It means that when peer tutoring is carefully guided by a teacher, the interaction among

individuals and groups in the classroom will deepen the understanding of the concepts among the students.

Slow learning is not a learning disability that can be classified as a diagnostic category. It is simply a term used to describe a student with the ability to acquire all necessary academic skills, but at a rate and depth below that of the average student. Slow learners lack concentration, have poor memory, imagination, and foresight; an inability to express ideas clearly through the medium of language (Bhatt, 2009). In order to grasp new concepts, a slow learner needs more time, more repetition, and often, more resources, external stimulation and encouragement from teachers to be successful. Reasoning skills are typically delayed, which makes new concepts difficult to grasp (Lowenstein, 2003; Muppudathi, 2014; Sugapriya & Ramachandran, 2011).

Research indicates that academically slow learners pose significant educational and behavioral difficulties in the schools because of their deficiencies in intellect and psychosocial skills (Anastasia, Elein, & Effi, 2006; Shaw, 2008). This is also well documented that slow learners do work at their ability level but below their grade level, which in turn leads to their adjustment problems in mainstream class rooms (Krishnakumar, Geeta, & Palat, 2006). Their deficit in skills (e.g. inadequate coping mechanisms, poor self-image, immature interpersonal relationships, troubled communications, and inappropriate social role ideology) make them vulnerable or at risk of several psychosocial problems (Khan, 2008). These problems could only be addressed by incorporating interventional teaching strategies in the inclusive classrooms for their accommodation and to enhance the rate of their adequate psychosocial development i.e., better adult and peer interactions, enhanced receptive and expressive communication, and modesty of self-concept, and social role by expressing logical reasoning and understanding of environmental demands (Anastasia, Elein, & Effi, 2006). For instance, Lata and Gaonka (2008) conducted a study on instructional strategies to accelerate science learning among slow

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learners in Dharwad city. The results indicated that the teaching through models for slow learners was found to be the most effective instructional strategy followed by charts, picture book, individual instruction and peer tutoring. Similarly, Malik, Rehman and Hanif (2012) carried out single-group pre-test and post-test design to see the effectiveness of academic interventions on developmental skills (adaptive, personal-social, communication, motor, and cognitive) of slow learners having borderline intelligence. Quantitative analyses revealed that academic interventions were highly effective in enhancing the developmental skills of slow learners' adaptive, communication, and cognitive developmental skills.

Ayvazo and Ward (2009) examined the effects of Class-wide Peer tutoring (CWPT), a variation of peer tutoring on the volleyball skills of four 6th grade middle school students from an intact class of 21 students. The findings provide further validation of CWPT as an effective strategy in physical education settings. There was increased engagement in the lesson and correct performances of girls during CWPT. In another study, Ward and Ayvazo (2006) assessed the effects of CWPT on the engagement and success level of kindergarten and first grade students with autism in an inclusion setting, throughout a 26-day catching unit. Ward and Ayvazo (2006) demonstrated that both engagement and success levels increased during CWPT.

Anthony (2007) examining the effect of a required school year long Character Education aⁿ: Class-Wide Peer Tutoring program (CE+CWPT) for students who scored at or be:t'R proficiency in one, two, or three of their reading fluency, reading comprehension, or writ-c

assessments at the beginning of their 5th-grade school year. On posttest-post= comparisons, there were no significant differences between the groups on reading fluency—s reading comprehension, and writing scores.

The CWPT experience improves self-concept and positive attitudes toward school as students take ownership of learning and become more responsible for completing assignments and controlling their behavior (Greenwood & Delquadri, 1995). Educators and students alike have been enthusiastic about the use of CWPT (Greenwood, Arreaga-Mayer, Utley, Gavin, & Terry, 2001).

Ezenwosu and Nworgu (2013) investigate the efficacy of peer tutoring and gender on student achievement in biology in Aguata Education zone of Anambra state, Nigeria. The results are mixed; others showed that students taught biology using peer tutoring performed significantly higher than those taught biology using the conventional lecture method. In a review of Peer Tutoring Ward and Lee (2005) found that students can be taught to observe and assess their peers with 70-96% accuracy completing simple measures to more complex game performance instruments.

The debate over gender differences has gained renewed attention in recent years as researchers attempt to understand the discrepancies that still exist in academia and the workforce. Gender is the societal meaning assigned to male and female with a particular role each should play. This is verifiable because, there is a general belief among Nigerians that males are superior to females in terms of physical physique, cognition, logical reasoning; even in academic achievement (Anigbogu, 2002). Many argue that females are more likely to have better verbal abilities than males and conversely, males are more likely to have mathematical skills than females (Skaalvik & Skaalvik, 2004). In support of this, Ezert's Nworgu (2013) revealed that male students slightly performed better than female when taught biology using peer tutoring strategy. On the contrary, Ozofor, (2001) found that females achieve better than males in mathematics. While, Scafield and Khanh (2010), Quest, Hyde, & Linn (2010) challenged the hypothesis that males, on average,

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higher mathematical abilities than females. Consequently, gender differentiations that exist in some science related subjects, which lead to variation in academic achievement of male and female students remain an issue of concern to researchers.

The slow learners in economics education should be identified and necessary remedial measures have to be taken for improvement in their performance. Hence, an alternative strategy for improving learning among slow learners seems to be most appropriate and the present study confirmed its effectiveness in improving the rate of learning science among slow learners.

Previous studies shown that CWPT had afforded the tutee more time to practice, to ask questions, and to learn the subject matter. These results, however, were obtained in regular and special education settings. Little is known about whether these effects are similar for instruction in economics education settings. It is on this premise that this study explored the effects of class-wide peer tutoring technique on the performance of slow learners in economics in Ilorin-South, Kwara State, Nigeria.

Research Questions

The following research questions were raised to guide the study:

- (i) Is there any improvement in the performance of students exposed to class-wide peer tutoring method in pre-test as compared to post-test?
- (ii) Is there any difference between male and female students' performance taught using the class-wide peer tutoring method?

Research Hypotheses

H_{01} . There is no significant difference in the pre-test and posttest scores of students taught economics with CWPT.

H_{02} . There is no significant difference in the performance of male and female students in the use of class-wide peer tutoring method.

Methodology

The study was a quasi-experimental design employed pre-test and post-test design. The population of this study is made up of all secondary schools in Ilorin metropolis. The accessible population was made up of one selected secondary school out of senior secondary schools in the area. One secondary school was purposively sampled. 12 slow learners (8 male and 4 female students) were purposely sampled from senior secondary school class two (SSSII). The selection was made based on the previous examination results in economics. The students in this category had comparable background with age ranges between 16 — 18.

The instrument used for data collection was Economics Achievement Tests (EAT). It consists of 20-item multiple-choice objective questions that covered two areas in Economics syllabus (banking in Nigerian sector, and industrialization). The EAT was divided into two sections: 10 questions for each of the topic. Each question has options A-D. Students responded to EAT by ticking the right option from A-D.

A letter of introduction was collected from the Department by the researcher to seek for the approval of the principal, the class teacher, the Economics teacher and all the staffs and students of the selected secondary school in gathering the data needed. Economic Achievement Test (EAT) was administered as a pre-test by class teacher.

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The class is divided into two competing teams, and pairs of students are formed within each team. The tutor presents the content stimulus (e.g. a word to be spelled, a maths' problem) to the tutee. The tutee responds both orally and in writing. The tutor evaluates the tutee's performance; provide corrective feedback, and awards points for the performance. Tutor and tutee roles are exchanged within each session points for procreation requires 30 minutes per session, each student in the class receives 10 minutes of tutoring and 5 to 10 minutes are used to add and post individual points. Content to be learned, teams and tutoring pairs are normally changed on a weekly basis. Teachers organize the academic content to be tutored into daily and weekly units and prepare materials to be used within the class-wide peer tutoring format. Teachers develop tests and administer them in a pre-test post-test sequence based on the unit of study. The result serves as feedback for the students and for monitoring learning. Post-test was administered after four-weeks of exposing students to Class Wide Peer Tutoring Method.

Results

The data generated from the administration of Economics Achievement Test (EAT) were analyzed using paired sample and independent t-test for hypotheses one and two respectively.

Hypothesis One: There is no significant difference in the pre-test and posttest scores of students taught economics with CWPT.

To test this hypothesis, a paired sampled t-test was used to test if there is a significant difference in the performance of students exposed to CWPT at pre-test and posttest. The result of the analysis is shown in Table 1.

Table 1: Paired sample t-test of students taught economics using CWPT

Paired Difference							
Source	df	Mean	SD	Standard	95% Interval	t-	Sig of Error Mean
Difference		value	(2 tailed)	variable			Lower
Upper							
Pre-test	11	-15.333	1.826	.527	-14.173	-16.493	-29.093 .000
Post-test							

Table 1 shows the paired sample t-test of slow learners taught economics using CWPT technique. From the table, it was found that the slow learners pre-test and posttest had mean scores of 15.333 and Standard Deviation of 1.826 with Standard Error Mean of 0.527. It can be deduced that significant difference was established between slow learners at pre-test and posttest; ($t_{cal} = 29.093$, $df = 11$, $p < 0.05$) in favour of posttest with an upper bound of 16.493. Hypothesis 1 was therefore, rejected. Therefore, there is significant difference between the pre-test score and posttest score of slow learners in favour of posttest of slow learners. This implies that slow learners performance better after exposing them to CWPT.

Hypothesis Two: There is no significant difference in the performance of male and female students in the use of class-wide peer tutoring method.

To test this hypothesis, independent sampled t-test was used to test if there is a significant difference in the performance of students exposed to CWPT at pre-test and posttest. The result of the analysis is shown in Table 2.

Table 2: t-test results of male and female students taught economics using CWPT

Gender	N	df	Mean	SD	t-value	Sig, 2tailed
Male	8		18.88	1.126		
Female	4	10	19.25	.957	.488 ^{ns}	.636

ns: Not Significant at 0.05.

Table 2 shows the independent sampled t-test results of male and female slow learners taught economics using CWPT. From the table, it was found that the male slow learners had mean score of 18.88, Standard Deviation of 1.126, while female slow learners had mean score of mean 19.25, Standard Deviation of 0.957. There is no significant difference between male and female slow learners taught using CWPT $\{t(12) = 0.488, p > 0.05\}$. On this basis, Hypothesis 2 was not rejected. This implies that CWPT strategy enhanced male and female slow learners' performance.

Discussion

The results from hypothesis one showed that there is a significant difference in the pre-test and post-test scores of students taught economics with CWPT. This result agreed with Ayvazo and Ward (2009) found that CWPT enhanced the performance of physical education students. Ward and Ayvazo (2006) reported that both engagement and success levels increased during CWPT. It also agreed with the findings of Greenwood, Arreaga-Mayer, Utley, Gavin and Terry (2001) who reported that educators and students alike have been enthusiastic about the use of CWPT. Similarly, the findings agree with the findings of Ezenwosu and Nworgu (2013) who reported that students taught biology using peer tutoring performed significantly higher than those taught biology using the conventional lecture method. It also agreed with the report of Ward and Lee (2005) who found that students can be taught to observe and assess their peers with 70-96% accuracy completing simple measures to more complex game performance instruments. However, Anthony (2007) reported that, there were no significant differences between the groups on reading fluency, reading comprehension, and writing scores on posttest-posttest comparisons of students exposed to Character Education and Class-Wide Peer Tutoring program (CE+CWPT).

The results from hypothesis two revealed no significant difference among students taught economics using CWPT and those taught without it. This study does not corroborate with the common belief that female students are more likely to have better verbal abilities than male students and conversely, male students are more likely to have better mathematical skills than female students (Skaalvik & Skaalvik, 2004). Similarly, it contradicts the findings of Ezenwosu and Nworgu (2013) who revealed that male students slightly performed better than female students when taught biology using peer tutoring strategy. On the contrary, Ozđor (2001) found that female students achieved better than male students in mathematics. While, Scafidi and Khanh (2010), Else-Quest, Hyde, and Linn (2010) found no significant difference between male female students in higher mathematical abilities.

Conclusion

The findings of the study confirmed that the Class-Wide Peer Tutoring (CWPT) was effective in enhancing the academic performance of slow learners. It was also found that male and female slow learners got maximum benefit of CWPT. The improvement in students' academic performance, on-task behaviors, and social skills was a result of utilizing the CWPT method. Students enjoy both the role of tutor and tutee, giving them immediate feedback which increased their positive social interactions while reducing disruptive behaviors.

Recommendations

The following recommendations were made based on the findings:

- (i) The use of class-wide peer tutoring should encouraged for teaching economics at senior secondary school level.

- (ii) The interaction and feedback should be given more emphasis during the process of teaching economics with CWPT in secondary schools.
- (iii) Periodic training and seminars should be organized for economics teachers in other to

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update their knowledge and to improve on the use of peer tutoring in their work.

- (iv) Government through the ministry of education should provide enabling learning environments for the teacher and slow learners.

Limitations

This study was limited to the students of a purposively selected secondary school in Iloin metropolis, Nigeria. Slow learners were purposively selected based on their previous examination results in economic. However, samples of male and female students were not proportionate. These aspects did not affect the results from this study but may limit the generalizability of the findings. This study therefore, provides basis for further exploration in the field of peer tutoring which requires a thorough research.

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