INFLUENCE OF TWO ASSESSMENT TECHNIQUES ON ATTITUDE TO AND ACHIEVEMENT IN ECONOMICS AMONG ADOLESCENTS IN ILORIN SOUTH LOCAL GOVERNMENT AREA OF KWARA STATE

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Abstract
The traditional approach to assessment simply enables the teachers to arrive at the performance scores of learners without availing them with knowledge of the standard or criteria for grading since the process leaves them passive. It is on this background that this study examined the influence of two assessment techniques on the attitude to and achievement in Economics among adolescents in Ilorin South Local Government Area of Kwara State. The quasi-experimental research design was employed. The Systematic random technique was used to select 300 participants consisting of 100 subjects for each of the three experimental groups in the study. Four hypotheses were raised to direct the study and were tested at 0.05 level of significance. The data for the study were collected using Economics Achievement Test (EAT) items and Economics Attitude Scale (EAS). The instruments had a reliability coefficient of 0.80 and 0.76 . The results disclosed that there is a significant difference in achievement in economics between students who were exposed to Self and Peer-assessment and those in control group. The result also maintained that there is a significant difference in the attitude to Economics among the students who were exposed to Self and Peer-assessment and those in Control groups. It was also found that, there is a significant relationship between the Self-assessment and Peer-assessment group in achievement to learning economics. It was recommended among others that there should be incorporation of rubrics into teaching-learning process and adoption of systematic formative evaluation process for proper integration of peer and self-assessment methods.

Keywords: Influence, Peer-assessment, Self-assessment, Attitude and Achievement.

Background to the Study
Assessment as a tool for performance evaluation is integral in the whole process of teaching and learning. It brings to light whether the standard set based on criteria put in place has been met or otherwise, thereby promoting effectiveness as well as arriving at quality decision making. However, traditional approach to assessment leaves much than what is desired as it is highly teacher-centered; this is corroborated by Asuani and Adeleye (2013) that in traditional method of assessment, students are seen as passive receivers of information in the classroom, the teachers serve as both personnel who give out instructions and as the judge who evaluate the student achievement. Similarly, Shams and Tavakoli (2014) asserted that only the teacher alone has the power to make decisions about what is learned and how it is assessed. This makes the learners to be ignorant of required standard for grading as contained in examiners rubrics; hence their inability to provide responses accordingly.
These non-adherences to rubrics and lack of test answering skills are among the major factors identified among others as the causes of weak performance of candidates in several subjects in examinations and particularly in Economics as reported by the chief examiners of the West African Examination Council. Ollennu (2014) asserted that many negative factors that accounted for poor performance by some students in some of the subjects included: lack of answering skills and understanding of questions, non-adherence to rubrics, poor handwriting, misunderstanding of demands of the questions, leading to deviation and the lack of understanding of technical among others and affirmed that to address the weakness and improve candidates’ performances, tutors need to help students to understand and follow the rubrics. Conversely, traditional approach to classroom assessment being adopted by the teachers fails to avail the learners with the skills applicable to solve these problems. In our usual classroom assessment, only the teachers have the knowledge of the scoring guides which are criteria for judging the quality of the responses given by a student in an examination. By this, we have methods of assessment which is not only negatively impacting attitude to learning but also promoting poor performance of students especially in external examinations. The attempts to alter this ugly state of affair have gained acute attention of scholars in the literatures with prescription of self and peer assessment techniques among others as alternative approaches to ameliorate the shortcomings inherent in traditional system of classroom assessment.

Ying and Liping (2016) opined that self-assessment involved students, guided by the teacher, who decides what the appropriate assessment criteria are, and then sees how well they have met these criteria. Self-assessment is defined as the ability of a student to judge his/her performance, to make decisions about one’s self and one’s abilities. It involves students judging the quality of their work, based on evidence and explicit criteria for the purpose of doing better work in the future. Blatchford (1997) in Brian and Rancy (2005) described self-assessment as a specific element of student self-concept, that is, academic achievement involve(s) judgments of one’s own attainment in relation to other children.

In the same vein, Hamid and Marziyeh (2015), opined that Self-assessment is an attractive alternative to traditional forms of assessment for the classroom teacher. It is a kind of metacognitive strategy which deserves special attention. Also, it helps students develop the characteristics of the good language learner, which involves the ability to assess their own performance and the ability to be self-critical. It also helps learners develop students’ independent learning skills through greater emphasis on encouraging learners to determine their own objectives and to monitor their progress. Those who use self-assessment argue that total reliance on teacher assessment results in students not assuming any responsibility for their own learning, and also it encourages dependency on the teacher.

According to Ying and Liping (2016), Peer assessment involved students making judgment about, or commenting upon each other’s work. Asuai and Adeleye (2013) also defined Peer Assessment as the systematic process of peers assessing each others’ work using instructional rubrics for grading. Peer-assessment' is an arrangement in which individuals consider the amount, level, value, worth, quality, or success of the products or outcomes of learning of peers of similar status. It is "the process of having the learner to critically reflect upon, and perhaps suggest grades for the learning of their peers", and being judged for the quality of the appraisals made. This process generates immediate support in the classroom, gains for both the assessor and the assessed, and being individualized and interactive are some benefits of peer-assessment. It is also upheld that peer-assessment encourages reflective learning through observing others' performances and becoming aware of performance criteria.
Falchikov (2005) in Shams and Tavakoli (2014), asserted that in peer assessment, “students use criteria and apply standards to the work of their peers in order to judge that work while in self-assessment students use criteria and apply standards to judge their own work”. This generally negates the traditional approach in which only the teacher has the power to make decision about the quality of the students’ responses in test.

The use of these assessments is considered to facilitate the learning process, enhances self-directed learning, and encourages learning strategies and the like. Similarly, self and peer assessment make students to become active learners by taking more responsibilities in learning; it as well inculcate skills to become realistic judges of their own performance, by enabling them to monitor their peer and own learning without relying only on their teachers for feedback. By and large, it is obvious from foregoing that Peer and Self-assessment are essentially powerful educational tools for improving learning.

Correspondently, Kathryn (2016), maintained that, with these two assessment techniques, students are encouraged to participate in a legitimized, elaborated, and systematic process that supports learning. The students take ownership of their learning. Participating in self-assessment helps prevent unfair judgments. She added that, students are also more highly motivated and engaged when they understand the criteria and standards. Through participation in this collaborative community, students are more cooperative and able to peer evaluate and support each other’s learning.

Furthermore, self-assessment has been found to have a profound impact on students’ performance in the classroom as it inculcates in learners two inter-related activities inherent in assessment process. First, there is a development of knowledge and an appreciation of the appropriate standards which may be applied to any given work. Students learn something and know what counts as good work. Second, there must be a capacity to make judgments about whether or not the work involved does or does not meet these set standards. With students participating in their own learning, and thereby understanding this knowledge, they are capable of then assessing if they met the standards of learning.

Moreover, Shams and Tavakoli (2014), opined that peer assessment leads to the development of self-awareness, as noticing the gap between one’s fellow students responses in given work can facilitate further learning and taking responsibility for it. Also, focusing on peers’ strength and weaknesses has the tendency to enhance students learning, raise their level of critical thinking. Zhi-Feng and Yi Lee (2013) added that, students made modifications to their work with the help of feedback from others after participating in peer assessment activities. Similarly, arguments in favour of self-assessment maintain that, it enables the learners to become skilled judges of own strength and weaknesses and to stay focused on their learning. All these indices serve and propel positive attitude towards learning.

Attitude is defined as tendency to react favorably or unfavorably towards a designated class of stimuli; it is a predisposition or well-established mental state which determines responses and reactions of a person towards an idea, event and the like. (Okoli, 2014; Anastasi, 1982; Silverman, 1978). The use of these methods of assessments promote positive attitude to learning and consequently impressive performance. More so, Singh (2011) defined as a mental state of readiness, organize to through experience which exerts a directive or dynamic influence on the responses on an individual to all objects and situations with which the individual is related.

In the same vein, the encyclopedia of social sciences described attitude as a comparatively enduring organization of interrelated beliefs which describe and evaluate the action with respect to an object or a situation, with each belief having cognitive effect and behavioral components. Each of these beliefs is a
predisposition that results in some preferential response towards the object or the situation. More importantly, the self-efficacy of the students is developed as they acquire skills and techniques in judging quality work through their exposures to the rubrics or the assessment benchmarks set by the teacher.

Furthermore, it builds learners self-confidence and personal assurance of success in academic work especially when these two assessment techniques are used among adolescents who are overly conscious of peer acceptance which is based on attaining certain behaviours established among the group. This is because according to Osarenren (2002), the main values of the peer culture among the adolescents are social participation, group loyalty, individual achievement and responsibility.

Importantly, adolescence as a transitional period of life in which a child moves from childhood to adulthood is significantly characterized by intense influences from peer group. It is a period of increasing influence of one’s peers and peer values and a diminishing role of one’s parents as a primary reference group. (Osarenren, 2002; Adams, 1975). This makes peer and self-assessment serve as stimuli for individual adolescent to unleash his or her potentials for higher academic achievement as group acceptance depends on meeting group status quo; since their responses be it in an assignment, test or an examination become obvious to one another.

In other words, the feedbacks obtained from this approach to assessment reveal the peers’ strength and weaknesses which would make each adolescents in the peer group to strive for excellence by seeking for improvement in the area of weaknesses. This essentially is reiterated in the studies of Augustine (2013) in Alade (2016) which affirmed the need to employ new method of teaching and assessment such as self and peer assessment in order to ensure improvement in the performance of the students in Economics as well as in other subjects. Based on this foregoing, it is obvious that the use of these two assessment techniques are loaded with potentials to impact positively on academic achievement of learners. In order to justify these theoretical postulations this study therefore seeks to examine the effects of two assessment techniques on attitude to and achievement in Economics among adolescents in Ilorin South Local Government Area of Kwara State.

**Statement of Problem**

The high extent of poor attitude of students to learning and continuous fall in academic performance of students especially in external examinations have constituted major concerns of stakeholders in the education sector. With the enormous investments of the government, the parents and the schools, towards providing sound education for the students, the learning outcomes which fail to correspond with the huge efforts, do not only breed people with inadequate ability for active participation in the socioeconomic development, but also creates challenges for them in attempt to further their studies in higher institutions of learning, thereby rendering the substantial resources being channeled to education a colossal waste.

While deviation from rubric, and deficient question answering skills are among the immediate causes of student’s failure in examinations among the remote causes is the traditional approach to assessment in the classroom which fail to acquaint the learners with skills to curtail these anomalies. It is therefore upon this basis that alternative methods are being explored, which will be used to check these challenges. Hence, this study investigates the effects of two assessments techniques (self and peer assessment) on students’ attitude to and achievement in Economics among adolescents in Ilorin South Local Government Area of Kwara State.
Purpose of Study
Based on the problem stated above, the broad purpose of this research work examined the effects of two assessment techniques on attitude to and achievement in Economics among adolescents. However, in connection with this broad purpose, this study specifically seeks to:

1. establish the extent to which self-assessment technique impacts academic achievement
2. find out the effect of peer assessment technique on academic achievement
3. find out the extent to which each self and peer assessment technique stimulates positive attitude to learning
4. find out the relationship between self and peer assessment technique with respect to academic achievement.

Hypotheses
The following hypotheses were formulated and tested at 0.05 level of significance to guide the study:

1. there is no significant difference in the academic achievement of students who are exposed to self-assessment and those in control group
2. there is no significant difference in the academic achievement of students who are exposed to peer assessment treatment and those in control group
3. there is no significant difference in the attitude to learning Economics of students who are exposed to self-assessment technique and those in peer-assessment group.
4. there is no significant relationship between the self-assessment group Achievement in Economics and those in Peer-assessment group.

Research Methodology
Research design
This research work is predicated on Pre-test and Posttest Quasi-experimental design as the study seeks to examine - the effects of two assessments techniques on student attitude to and achievement in Economics among adolescents in Ilorin South Local Government Area of Kwara State. The research design adopted for this study was quasi-experimental pre-test and post-test control group design Quasi-experimental design is a design in which experimental participants are assigned randomly from a common population to experimental and control groups. This type of design requires that participants be tested with the same instruments before and after treatment. To determine the effects of the treatment, the result of the participants in the treatment group will be compared with the scores of participants in control group.

Population
The target population of this study comprised of all the adolescents’ students in public Senior Secondary School three (SS3) in Ilorin South Local Government Area of Kwara State. The age bracket of these subjects ranges from 13 to 19 years. The choice of SS3 was necessitated because they are the category of student sitting for the next SSCE examination.

Sample and sampling techniques
The sample assigned for the study consists of three hundred respondents from SS III class among the secondary schools in the area of study. This includes one hundred participants for each experimental group. The sample space is obtained using systematic sampling technique from the three chosen schools in the area of the study. The schools in the area of study would be listed out and three schools would be randomly selected without replacement. The sampling technique for obtaining subjects for the study will be systematic sampling technique. This is to ensure equal chance of selection for every member of targeted population.
This sampling technique process will consist of nth numbered subjects obtained from attendance register of every school concerned. The nth number equals to number of targeted population from each school selected divided by number of sample for this study (i.e. 100). Each sample point is obtained until a total number of 100 is attained for each experimental group. The sample will be obtained from public schools in Ilorin South Local Government Area of Kwara State.

Instrumentation
This study employs two main instruments for data collection which are developed by the researcher. These include: 20-items Economics Attitude Scale (EAS) on a 4-appoints Likert scale to gather data on attitude to Economics of subjects in Treatment groups and the Control group. In the same vein, the study uses Economics Achievement Tests (EAT), which is a Completion-Item Questions combined with Multiple choice objective test for the purpose of obtaining data on effects of treatment with the Two Assessment Techniques on Learning Achievement in Economics. The validated multiple choice and completion-item standardized objective test complied and prepared by the researchers from past mathematics question papers of WAEC/NECO for seven years (2010-2016) based on a prepared Table of specification. It has a high stability co-efficient of 0.80 when tested during the pilot study at 0.05 level of significance. The items covered only the topics studied during the experimental period. The research instrument was validated using face, content and experts validity procedure.

Procedure for data collection
The actual studies spanned a period of 6-weeks. The Pre-test was carried out in the first week before the experimental treatments, whereby the Economics Attitude Scale (EAS) and Economics Achievement Tests (EAT) was administered to all the participants. The researcher actually visited the experimental schools and taught the students the subject matter content and the meaning of peer & self-assessment practice, which spread over four weeks with an average of two hours minimum per session plus extra remedial classes. The post treatment session was carried out the last week of the treatment session, making six weeks in all.

Treatment Stages
The treatment processes in this study passed through these three stages
1. The Pre-assessment stage
2. The instruction towards the study stage;
3. The Post-assessment

The Pre-assessment Stage
The participants in this study were pre-tested using the two instruments developed for the study which included: Economics Achievement Test (EAT) and Economics Attitude Scale (EAS). These were carried out to gather the subjects’ scores on performance in and attitude to Economics before actual treatments were performed on the experimental groups.

The Instruction towards the Study Stage
This was actual treatment phase. The subjects were given instruction based on their experimental group and instruction on the use of Rubrics in Economics assessment. Treatments on Experimental groups. The experimental groups in this study were the Peer assessment group and the Self-assessment group. With the intent to affirming the influence of these approaches to assessment practice on learning, the subjects were given treatment as outlined below:
Treatment of Peer-assessment Group:
Instruction on the use of Rubrics in Economics Assessment
Instruction on Peer-assessment Practice.

Treatment of Self-assessment Group:
Instruction on the use of Rubrics in Economics Assessment
Instruction on Self-assessment Practice

Post-assessment Stage
The participants in this study were post-tested using the two instruments developed for the study Economics Achievement Test (EAT) and Economics Attitude Scale (EAS were re-administered to the students both in the experimental groups and those in control group). The post-test scores and pre-test were analyzed using appropriate statistical tools.

Placebo Treatment for Control Group
The subjects in this group were not involved in any of the two assessments techniques used which were peer and self-assessment. The researcher used traditional method of assessment for the Control group. More so, the control group subjects were located at different environment to avoid experimental contamination.

Analysis of Respondents Demographic Data

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELF-ASSESSMENT GROUP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Female</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-16YRS</td>
<td>67</td>
<td>67</td>
</tr>
<tr>
<td>17YRS &amp; ABOVE</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>PEER-ASSESSMENT GROUP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Female</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-16YRS</td>
<td>71</td>
<td>71</td>
</tr>
<tr>
<td>17YRS &amp; ABOVE</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>CONTROL GROUP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Female</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-16YRS</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>17YRS &amp; ABOVE</td>
<td>35</td>
<td>35</td>
</tr>
</tbody>
</table>

The above given table illustrates the analyses of demographic information of respondents in each experimental group. In Self-assessment group, 30% were male while 70% were female; in the same group...
67% were within the ages of 14-16 years while 33% were within the ages of 17 years and above. In Peer-assessment group, 40% were male while 60% were female; also 71% had ages between 14-16 years and 29% had ages of 17 years and above. In Control group, 45% were male while 55% were female; in terms of age 65% were within the ages of 14-16 years while 35% were within the ages of 17 years and above.

Data Analyses and Results

**Ho1**: There is no significant difference in the academic achievement of students who are exposed to self-assessment and those in control group.

In order to test the above hypothesis, the initial scores (covariates) and the final scores from pre-test and post-test administration to the students in Self-assessment treatment group and those in control group were subjected to Analysis Covariates Test. The result obtained is presented in the Table 2 below.

**Table 2: ANCOVA Test of significant difference in Economics achievement of students who were exposed to self-assessment and those in control group**

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig. (P-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>5488.38</td>
<td>2</td>
<td>2744.19</td>
<td>109.11</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>2046.51</td>
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<td>2046.51</td>
<td>81.37</td>
<td>.000</td>
</tr>
<tr>
<td>Initial scores</td>
<td>975.88</td>
<td>1</td>
<td>975.88</td>
<td>38.80</td>
<td>.000</td>
</tr>
<tr>
<td>Techniques</td>
<td>4070.55</td>
<td>1</td>
<td>4070.55</td>
<td>161.84</td>
<td>.000</td>
</tr>
<tr>
<td>Error</td>
<td>4954.90</td>
<td>197</td>
<td>25.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>74812.00</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant at 0.05; Degree of freedom = 2 and 197

The ANCOVA results presented in Table 2 shows that for the Experimental condition, the F-value obtained was 161.84 as P-value (0.00) < 0.05, given 2 and 197 degrees of freedom at the .05 level of significance. This indicates that Self-Assessment Technique made impacts on Performance of students in Economics.

With this, the hypothesis one which maintains that there is no significant difference in achievement of students is rejected. We therefore conclude that Self-assessment training contributes by way of improvement on the academic achievement of students.

**Ho2**: There is no significant difference in the academic achievement of students who are exposed to Peer-assessment treatment and those in control group.

In order to test the above hypothesis, the initial scores (covariates) and the final scores from pre-test and post-test administration to the students in Peer assessment treatment group and those in control group were subjected to Analysis Covariates Test. The result obtained is presented in the Table 3 below.
Table 3: ANCOVA Test of significant difference in Economics achievement of students who were exposed to Peer assessment treatment and those in control group.

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig. (P-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>7634.10</td>
<td>2</td>
<td>3817.05</td>
<td>170.65</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>3481.82</td>
<td>1</td>
<td>3481.82</td>
<td>155.67</td>
<td>.000</td>
</tr>
<tr>
<td>Initial scores</td>
<td>313.60</td>
<td>1</td>
<td>313.60</td>
<td>14.02</td>
<td>.000</td>
</tr>
<tr>
<td>Techniques</td>
<td>5783.62</td>
<td>1</td>
<td>5783.62</td>
<td>258.57</td>
<td>.000</td>
</tr>
<tr>
<td>Error</td>
<td>4406.38</td>
<td>197</td>
<td>22.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>86076.00</td>
<td>200</td>
<td></td>
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</tr>
</tbody>
</table>

Significant at 0.05; degree of freedom = 2 and 197

The ANCOVA result in Table 3 above reveals that based on Experimental condition, the F-value was 258.57, P-value < 0.05 at 2 and 194 degree of freedom and 0.05 level of significant. Since the obtained P-value (0.00) is < 0.05, it affirms that Peer-Assessment Technique had impressive difference on students’ achievement in Economics. On this basis, the hypothesis two which states that, there is no significant difference in the academic achievement of students who are exposed to Peer-assessment treatment and those in control group is hereby rejected. Therefore, the use of peer-assessment technique has significant impact on learners’ academic achievement.

**Ho**: There is no significant difference in the attitude to learning Economics of students who are exposed to self-assessment technique and those in Peer-assessment group.

To test the above hypothesis, the initial scores (covariates) and the final scores generated from pre and post administration of Attitude scale to the students in the Self-assessment group and those in Peer-assessment group were subjected to Analysis of Covariates Test. The result obtained is presented in the Table 4 below.

Table 4: - ANCOVA Test of significant difference in the attitude to learning Economics of students who are exposed to self-assessment and those treated with peer assessment method.

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig. (P-value)</th>
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</thead>
<tbody>
<tr>
<td>Corrected Model</td>
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<td>365.790</td>
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<tr>
<td>Intercept</td>
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<td>38101.188</td>
<td>186.502</td>
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</tr>
<tr>
<td>Initial scores</td>
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<td>290.535</td>
<td>1.422</td>
<td>.234</td>
</tr>
<tr>
<td>Techniques</td>
<td>73.485</td>
<td>1</td>
<td>73.485</td>
<td>121.85</td>
<td>.000</td>
</tr>
<tr>
<td>Error</td>
<td>40245.815</td>
<td>197</td>
<td>204.293</td>
<td></td>
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</tr>
<tr>
<td>Total</td>
<td>686339.000</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant at 0.05; Degree of freedom = 2 and 197
The ANCOVA result in Table 4 above indicates that based on varied treatment conditions, the F-value was 121.85, with P – value < 0.05 at 2 and 197 degree of freedom and 0.05 level of significant. Since P –value obtained is < 0.05, it shows that, there is significant difference in application of Self-assessment and Peer-assessment technique to determine the attitude of student to Economics. The null hypothesis which states that, there is no significant difference in the Attitude of students to Economics based on self-assessment technique treatment and those in Peer-assessment group is rejected. Therefore, there is significant difference in the use of Self-assessment and Peer-assessment in students’ attitude to learning Economics.

**H04: There is no significant relationship between the self-assessment group Achievement in Economics and those in Peer-assessment group.**

To test the above hypothesis, the initial scores (covariates) and the final scores generated from pre and post administration of Economics Achievement Test to the students in the Self-assessment group and those in Peer-assessment group were separately subjected to coefficient of correlation Test. The result obtained is presented in the Table 5 below.

**Table 5: - Co-efficient of Correlation Test of Relationship between Achievements in Economics of students who are exposed to self-assessment technique and those treated with Peer-assessment technique.**

<table>
<thead>
<tr>
<th>ASSESSMENT TECHNIQUES</th>
<th>N</th>
<th>( \bar{x} )</th>
<th>SD</th>
<th>Df</th>
<th>r-critical</th>
<th>r-cal</th>
<th>Sig. P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELF-ASSESSMENT</td>
<td>100</td>
<td>16.09</td>
<td>4.88</td>
<td>98</td>
<td>0.2</td>
<td>0.39</td>
<td>0</td>
</tr>
<tr>
<td>PEER-ASSESSMENT</td>
<td>100</td>
<td>18.26</td>
<td>4.92</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POST-TEST</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SELF-ASSESSMENT</td>
<td>100</td>
<td>22.69</td>
<td>4.43</td>
<td>98</td>
<td>0.2</td>
<td>0.32</td>
<td>0</td>
</tr>
<tr>
<td>PEER-ASSESSMENT</td>
<td>100</td>
<td>25.29</td>
<td>2.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( N= 100; \text{Df} = 98; \text{p-value} = 0.000 < 0.005; \text{r-cal} = 0.32 > \text{r-tab} = 0.2; \text{r-cal} = 0.39 > \text{r-tab} = 0.2; \)

Though the pre-test r-calculated is > post-test r-calculated, (i.e. 0.39 > 0.32), the margin is minute, i.e. 0.07. The analysis based on the final scores in the tables above shows that, the r-calculated of 0.32 is > r-critical of 0.2 obtained at 98 degree of freedom, and p-value of 0.00 is < 0.05 level of significance, as a result of this, the null hypothesis which states that there is no significant relationship between the self-assessment group Achievement in Economics and those in Peer-assessment group is rejected. We therefore conclude that there is significant relationship in the performance of subjects in Economics between the two assessment methods.

**Summary of findings**

The following were the findings of the study.
1. There was a significant difference in the academic achievement of students who are exposed to self-assessment and those in control group.
2. There was a significant difference in the academic achievement of students who are exposed to Peer-assessment treatment and those in control group.
3. There was a significant difference in the attitude to learning Economics of students who are exposed to self-assessment technique and those in Peer-assessment group.
4. There was a significant relationship between the self-assessment group Achievement in Economics and those in Peer-assessment group.

Discussion of Findings
Result of hypothesis one showed that there was a significant difference in the Economics Achievement scores of students who were exposed to Self-Assessment Technique over those in Control group. This agreed with earlier findings of Kathryn (2015) who made submission that self-assessment enables students to participate in their own learning, thereby understanding lesson contents better, they are capable of then assessing if they met the standards of learning. In other words, classroom based assessment with learners’ involvement promotes learning and higher task performance are achieved by providing task oriented feedback to students.

In the same vein, Kathryn (2016) also added that students are encouraged to participate in a legitimized, elaborated, and systematic process that supports learning. The students take ownership of their learning. Participating in self-assessment helps prevent unfair judgments. Students are also more highly motivated and engaged when they understand the criteria and standards.

Results of hypothesis two, revealed a significant difference in academic achievement in Economics of students who were taught with Peer-assessment method from those in control group. This evidently supported the findings of Adeyemi (2015) who from a study concluded that peer assessment helps the students understand their learning progress through assessing peers and being assessed by peers, as students obtain valuable information about their learning progress through the peers’ feedback. This was also supported by Klein (2012) who pointed out that students build their learning through writing, talking and interacting with peers.

Result of hypothesis three, revealed that there was significant difference between Peer-assessment and Self-assessment in determining students’ attitude to learning Economics. This is in agreement with Rolheiser and Ross (2001) in Hotard (2010) who provided detailed description of the effects of self-assessment on student achievement. They opined that when students evaluate their performance positively, self-evaluations encourage students to set higher goals…and commit more personal resources or effort to them. This also aligned with view of Augustine (2013) when commenting on students’ attitude to the study of Economics in Nigerian secondary schools, concluded that with the use of a better method such as the Peer-assessment Strategy would improve students’ attitude to the learning of Economics, because the method enabled them to understand the contents of the subject better and led to the improvement of their academic achievement in the subject. aligned with view of Augustine (2013) when commenting on students’ attitude to the study of Economics in Nigerian secondary schools, concluded that with the use of a better method such as the Peer-assessment Strategy would improve students’ attitude to the learning of Economics, because the method enabled them to understand the contents of the subject better and led to the improvement of their academic achievement in the subject. The Pére knowsledge of being peer-assessed motivated the learners to disposed positive attitude to learning. Another plausible reason for significant difference between Peer-assessment and Self-assessment is obvious in the effort of adolescents to strive for excellence for the purpose of winning...
peer acceptance, developing constructive self-image, and self-confidence among the peers. In the same vein, Saito (2008) in Sham and Tavakoli (2014) affirms that, Peer-assessment seems to generate positive attitudes in students, although some students have concerns and worries, it leads to the development of self-awareness, noticing the gap between one’s and others’ perception, and facilitating further learning and responsibility for it. In addition, focusing on peers’ strengths and weaknesses can enhance students’ learning, raise their level of critical thinking and autonomy in learning.

Hypotheses four which focused on finding the relationship between the two assessment techniques in terms of achievement in learning. The results obtained indicated the relationship in achievement showed a positive and significant outcome. The plausible reasons for the effectiveness of peer-assessment over self-assessment was confirmed in Asuai and Adeleye (2013) who maintained that Peer Assessment was efficacious in enhancing students in learning because students were able to learn from each other as they grade each other’s work.

In conclusion, it is apparent from this study that Peer-assessment and Self-assessment proved to be more effective assessment strategy when compared with Traditional method of assessment in learning process. However, Peer-assessment was discovered to be more effective than Self-assessment technique as given in the above discussion.

Conclusions
This study has established and confirmed the positive roles which the two assessment techniques- Self-assessment and Peer-assessment play in promoting high achievement and learning aiding attitude among learners and taking evaluation process beyond assessment of learning to assessment for learning. Availing students with knowledge of rubrics provide them with background and detail understanding of the standard expected by the examiners. While both assessments foster development judgment skills in learners in terms of knowledge of nature and standard of responses expected in testing process, peer-assessment goes further to strengthen such skills and instill more objectivity in grading of peer’s work. More so, peer-assessment encourages team work and co-operative learning atmosphere, not only that, both methods promote active learning process, the learners become more participating in class, thereby enabling learners to take responsibility for their studies. The peer-assessment tends to produce and sustain high objectivity than self-assessment. However, peer-assessment provides avenue for healthy competition among learners. This is evidence as peers have to examine and grade their work among one another.

With these assessment techniques in practice, deeper approach to learning is encourage which enables students to demonstrate high level of understanding. By the time the students have the intrinsically motivation, they will become more confident and have a positive attitude towards their study, with their potential and actual achievement taking high pedestal. In general terms, self and peer assessment techniques have been convincingly confirmed to deliver the following outcomes:

- Feedback is faster, and it can be clearer than the teacher assessment; Students are very active recipient of knowledge but play a more active role in identifying, especially where they need to improve and monitoring their own progress.
- Students are encouraged to critically think what standards and criteria are, assess other students who can touch areas they would not normally reach.
- The teacher can associate with the process of learning rather than just the outcome; change the way of learning from the surface approach to deep approach; Add varieties to students’ learning experience and promote the student-centered approach in learning process, among others.
**Recommendations**

While the challenges with students in various standardized testing include but not limited to: lack of answering skills and understanding of questions, non-adherence to rubrics, poor handwriting, misunderstanding of demands of the questions, leading to deviation and the lack of understanding of technical among; the traditional approach to classroom assessment being adopted by the teachers fails to avail the learners with the skills applicable to solve these problems. As confirmed by this work as well as validated by relevant studies the ability of peer and self-assessment to ameliorate the shortcoming of conventional style of classroom assessment, the following recommendations are put forward towards appropriate implementation of these two assessment techniques in classroom assessment practice. These are:

1. adoption of systematic formative evaluation process for proper integration of peer and self-assessment methods
2. Incorporation of rubrics into teaching-learning process
3. early introduction of Peer and Self-assessment in learning process
4. infusion of peer and self-assessment into feedback discussion
5. training of students on process of peer and self-assessment practice
6. teachers need to develop skills in facilitating instructional process for effective peer and self-assessment practice and
7. provision of initial orientation to learners on rationale for peer and self-assessment.

In summary, the essence for exploring alternative assessment practice centers on taking assessment of learning to assessment for learning thereby ensuring that assessment process is contributing positively towards improvement of learning. The findings on influence of peer and self-assessment in this study as well as in relevant literatures provide basis to confirm the impacts of these assessment techniques to improve attitude of students to learning and achievement in Economics. Therefore, these recommendations are made to ensure these objectives are realized.
References


WAEC(2010-2016). SSCE Past Question in Economics.


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