Pressure of Accountability and Portfolio Assessment among Secondary School Students in Ilorin, Nigeria

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Abstract

The pressure of accountability has made teachers to focus their instruction on preparing students for tests without considering learner's knowledge, skills and potentiality. The study examined the pressure of accountability and portfolio assessment among secondary school students in Ilorin, Nigeria. It considered the adoption of portfolio assessment to reduce the pressure of accountability by the teachers and students of Economics in senior secondary schools in Ilorin, Nigeria. A quasi-experimental research design was adopted for the study where two senior secondary schools were purposively selected. Two intact classes of ninety-nine (99) and eighty-one (81) students each constitute the experimental and control group respectively. A total of one hundred and eighty (180) Economics students were used as sample. The Instrument used in this study was self-constructed tagged Portfolio Assessment Assignment Exercise on Economics (PAAEE) along with twenty (20) Economics multiple choice items which was adopted from West African Senior Secondary School Certificate Examination (WASSCE). Analysis of Co-variance (ANCOVA) was used to analyze data generated. The findings revealed that portfolio assessment significantly increase students' performance and confidence compared with those students exposed to the conventional method of teaching. It was also revealed that there was no significant difference in the performance of male and female students in the assessment of achievement through portfolio and teacher made tests. Based on the findings, it

was recommended that teachers should be at liberty to adopt suitable method like portfolio assessment without any fear of accountability

Keywords: Accountability, Mastery, Pressure of Accountability, Portfolio assessment,

INTRODUCTION

Portfolio assessment has been seen as an alternative procedure for reducing the pressure of accountability among students and teachers. Portfolio contains a purposefully selected subset of students work over a period of time. It is the summary descriptions of accomplishment and official record and diary items of the learners. It is an assessment tool characterized by collection of student's work that is exhibited in the schools, to the parents and other stakeholders in education in this 21st century about the progress and achievement of the learners. Hala (2020) defined portfolio as a file or folder containing rarely of information that document a student's experience and accomplishment. Portfolio provides an excellent vehicle for consideration of process and the development of related skills and competency. In fact, students feel humble as they take bigger role in their learning and assessment processes. So, Portfolios help students to develop skill necessary for long-life learning.

Sulyman (2011) described portfolio as systematic, organized evidence which is used by the teacher and student to measure growth of knowledge, skills and attitudes. Portfolio goes beyond just a collection of test results, homework, and graph of students' performance or the products of the student activities. Babaee and Tikoduadua (2013) submitted that portfolio assessment prompts the construction of knowledge, authenticity and creativity which promote initiation, compassion, self-discipline and spontaneity in students. Portfolio assessment has become widely used in educational settings as a way to examine and measure progress, by documenting the process of learning or change as it occurs. Hamidnia, Ketabi, & Amirian (2020) and Muin, Hafidah& Daraini (2021) established that portfolio assessment in education aims at equipping learners with self-reflective capacity that are capable of monitoring, reviewing, and improving their academic performances individualistically.

Kharbach (2023) views portfolio assessment as a multifaceted educational tool which serves as scholarly lenses. It is a multidimensional system which provides teachers with a complete picture of a student's abilities and literacy development. Portfolios extend beyond test scores to include substantive descriptions or examples of what the student is doing and experiencing. Roman and Raoul (2016) observed that when portifolio is used in high stke test, the context should technically test devices and needs to meet the psychometric properties and standard of validity, reliability, objectivity and fairness. Some major portfolio types are; working portfolio, display portfolio and assessment portfolio. Sulyman, Abdulsalam-Nuhu and Abdulmumini (2022) affirmed that the intended learning outcome could be realized via instructional objective as well as periodic assessment with corrective feedback.

The goals and objectives of portfolio must be set prior and the contents must be negotiated by individual teacher and students rather than by the management and set of committee (Ahmed & Ahmed 2017). So, portfolio must not only reflect on teacher or school standard, but students' interest and learning styles would be incorporated. Sulyman (2011) re-emphasized that scholars and educators of schools are becoming more and more dissatisfied and frustrated with the use of standardized test as a method of assessment. Whang and Waters (2001), explained that the dissatisfaction with standardized test has been brought about because of our changing views of the reading process and how students learn. Sulyman (2011) maintained that standardized tests mostly not reflect on a student's reading ability but rather limited to a set of sub-skills. Sulyman (2011) remarked that the pressure of accountability reinvigorated teachers to focus their instruction on preparing students for tests. This often has little to do with how students learn or how effectively demonstrate the knowledge and skills they have acquired. Kumo & Abdulsalam-Nuhu, (2023) submitted that the school accountability accompanied by anxieties that teachers must take responsibility for improving students` performance on standardized tests have made educators to quest for new techniques to relate classroom and periodic assessments.

Adeyemi (2008) stated that educators have become increasingly convinced that rich descriptive information about the process and product of learning cannot be gathered by conventional teaching and assessment method. The idea of current knowledge implies that what a student knows is always changing and that instructional and assessment practices that are

holistic, student centered and performance based oriented should be adopted. Therefore, to document this expression of teaching and learning.Ahmed & Ahmed (2017) stated that authentic and child centered assessment are the basis of on-going quality improvement in educational setting. Marx (2001) agreed with this contention and suggested portfolio assessment as a viable means of individualized student centered evaluation. Sulyman (2011) affirmed that portfolio assessment has emerged as the vehicle by which students and teachers are organized, managed and analyzed life within and outside of the school. Sewell,

Marczak &Horn (2019) stated that "authentic assessment" or "performance assessment" in educational theory is the belief that children and adolescents should demonstrate, rather than tell about, what they know and can do. Sulyman (2021) in his study said that portfolio assessment has the potential to improve the complex task of students' assessment as well as contribute to more positive attitude toward educational process. Thus, Syafei, Mujiyanto, Yuliasri and Pratama (2021) reported that the application of portfolio assessment during the Covid-19 pandemic greatly influenced the performance of the students. Maintaining that the benefits of the portfolio assessment were felt while observing health protocols like keeping up social distancing and avoiding the crowds.

Li et al (2015) affirmed that the use of portfolio in evaluating student's achievement reflect a larger move away from standardized test towards "authentic" evaluation that stress the productive uses of knowledge rather than the reproduction of knowledge. Instead of showing that learners knew what has been taught, portfolio demonstrates that students can do what has been taught. Mahdy & Hassan (2018) stated that in implementing the authentic assessment, parents, teachers, administrators, students and other stake holders need to be provided with direct observable product and understandable evidence concerning the student's performance. Portfolio assessment as a rapidly growing supplement to formal testing. It captures and preserves useful information about the growth and development of individual student that could be easily obtained.

Roman & Roul (2016) added that portfolio assessment can help student to understand their strengths and weakness. Hala (2020) claimed that portfolio provides more information about students' progress and encourages student to be responsible for their own learning.

Sulyman (2021) described portfolio assessment as a means of motivating and promoting self – assessment and understanding. Kumo & Abdulsalam-Nuhu (2023) maintained that embedded assessment is a method used for measuring knowledge and ability where evaluations are part of the learning activity rather than happening after the information

Secondary school education could better meet students' need and accountability required via the use of portfolio assessment procedure. Portfolio assessment allows the students develop the ability of self-assessment and provide a corrective feedback to team members. Sulyman (2021) submitted that portfolio is an effective way of bringing assessment into harmony with instructional goals. Biglari, Izadpanah and Namaziandost (2021) revealed that portfolio assessment has a positive effect on Iranian EFL learner autonomy and writing skill on both upper-intermediate as well as advanced levels. Although, the method was more effective for advanced groups. So, portfolio assessment enhanced learners' autonomy as well as better opportunity to reflect upon their learning process, progress and development.

Since too much emphasis has been placed on the outcome of standardized test and the pressure on accountability makes teachers to concentrate on struggling to cover the syllabus without regard for assessing whether or not students understand what is taught, standardized test alone cannot fulfill the major purpose of assessment. Therefore, there should be instructional planning that will include diagnosis and remediation of student's problem while acceptable standard of performance must be reached as prerequisite for leaners' progress. Sulyman, Abdulsalam-Nuhu and Abdulmumini (2017) recommended that learners should be allowed to take control of their work for effective learning and self-discovery. Portfolio assessment allows a high degree of student's autonomy and choices that promotes student's confidence in the learning process. So, with inherent advantages of periodic feedback to students, teachers and parents making diagnostic remediation possible with the use of series of assessment, allaying fears of accountability associated with standardized and high stake testing. Therefore, portfolio assessment is seen as an assessment procedure that will reduce the problem of reproductive use of knowledge and pressure of accountability by both students and teachers of Economics at senior secondary level of education.

However, evidence has shown that the current standardized test measure performance on role learning task, instead of creating environment for students to reason, communicate and solve problem among themselves. So, the weaknesses of standardized tests led to the introduction of new trends in testing. The new trends in testing are dynamic assessment, computer-based adaptive testing and portfolio assessment. Studies such as Adeyemi (2008) investigated on portfolio assessment using teacher made test, Biglari, Izadpanah and Namaziandost (2021) considered the effect of portfolio assessment on Iranian students. Therefore, in this study, it becomes necessary to find out how portfolio assessment can solve or reduce the pressure of accountability on teachers teaching Economics in secondary schools. The conventional method of teaching is a teacher dominated approach where teachers find it difficult to give account of their teaching at the end of instruction or term. The teacher acts as the main repository of knowledge which student remains as the recipient, listening and sometimes taking down notes and asking few or no questions. Portfolio assessment cannot be said to be a new method of assessment per say but to many teachers, it is completely new. An opportunity to use new method of assessment is important to the improvement of Economics in Secondary School Education. So it is believed that the use of portfolio assessment may enhance students' performance as well as reducing the pressure of accountability on the part of the teacher.

PURPOSE OF THE STUDY

The purpose of the study is to investigate the

1. effect of portfolio assessment procedure on students' performance in Economics.
2. difference between the performance of male and female students in Economics.

RESEARCH QUESTIONS

1. What is the difference between performance of students exposed to portfolio assessment and traditional method of assessment in Economics?
2. What is the difference between the performance of male and female students exposed to portfolio assessment and traditional method of assessment in Economics?

HYPOTHESES

Based on the research questions, two hypotheses were formulated:

Ho_1: There is no significant effect between the performance of economics students in the use of portfolio assessment and conventional method of assessment.

$Ho:_2$There is no significant difference between the performance of male and female students in Economics using portfolio assessment method.

METHODOLOGY

The study adopted a quasi-experimental design. Two public secondary schools were purposively selected for the study. Two intact classes of ninety-nine (99) and eighty-one (81) students were used for the experimental and control groups respectively. A total of one hundred and eighty (180) students constitute the experimental and control groups. The experimental group was given series of assignment and students were free to interact among each other. The other group was the control group and conventional assessment was used where teacher gave test at the end of instruction. These tests were used as pre and posttest. Pretest was given prior to treatment and posttest was given to the two groups after treatment. The instrument used was Portfolio Assessment Assignment Exercise on Economics (PAAEE) designed by the researcher with twenty (20) multiple choice items adopted from West Africa Senior Secondary School Certificate Examination. The reliability of the instrument was estimated using Pearson product moment correlation statistics with coefficient of 0.85. Analysis of covariance was used to analyses the hypotheses.

THEORETICAL FRAMEWORK

The study adopted social constructivism model of learning by Vygotsky in 1987. He maintained that effective learning will take place when learners proactively construct the knowledge of the target language themselves through social interaction rather than being passive recipients. Vygotsky distinguished between two developmental levels: the level of actual which learner has already reached, and is the level at which the learner is capable of solving problems independently. The level of potential development (the "zone of proximal development") is the level of development that the learner is capable of reaching under the guidance of teachers or in collaboration with peers. The learner is capable of solving problems and understanding factual at this level that they are not capable of solving or understanding at their level of real development; the level of potential development is the level at which learning takes place. Portfolio assessment emphasized that learners are capable of performing tasks independently of teacher. It comprises

cognitive structures that are still in the process of maturing, but which can only mature under the guidance of or in collaboration with others.

Vance, Lowry and Eggett (2015) viewed accountability theory as how the supposed need to justify one's behaviours to another party causes one to consider and feel answerable for the process by which decisions and judgments have been reached. In turn, this perceived need to account for a decision-making process and outcome increases the chance that one will think deeply and systematically about one's procedural behaviors. Vance, Lowry, and Eggett (2015), a useful way to understand accountability is to distinguish between its virtue and as a mechanism. As a virtue, accountability is seen as a quality in which a person displays a willingness to accept responsibility, a desirable trait in public officials, government agencies, or firms while as a mechanism, it is seen as a process in which a person has a potential obligation to explain his or her actions to another party who has the right to pass judgment on the actions as well as to subject the person to potential consequences for his or her actions.

Vance et al. (2015) identified four core components of accountability theory and thus improve employees' handled accountability toward organizational system security without disruptive interventions or training. They are; identifiability, expectation of evaluation, awareness of monitoring, and social presence. Identifiability is a person's understanding that his yields could be linked to him and thus reveal his/her true identity. Expectation of evaluation is the belief that the performance of the teachers will be assessed by another superior official in the school. Awareness of monitoring is a user's state of active cognition that his/her system-related work is monitored. Social presence is the awareness of other users in the system (Vance, Lowry, and Eggett 2015).

Thus, collaborative learning methods require learners to develop teamwork skills and to see individual learning as essentially related to the success of group learning.

RESULTS

The score of students in the two groups were analyzed using mean and standard deviation to answer the research questions.

Research Question 1: What is the difference between performance of students exposed to

Portfolio assessment and traditional method of assessment in Economics?

Table 1: Descriptive Statistics of Students Exposed to Experimental and Control Groups

Group	Gender	X	SD	Number
Experimental	Male	31.4844	2.79451	64
	Female	31.6571	2.4844	35
	Total	31.5455	2.60405	99
Control	Male	28.4259	3.06287	54
	Female	27.0370	3.92704	27
	Total	27.9630	3.41484	81
Total	Male	30.0847	3.28575	118
	Female	29.6452	3.83725	62
	Total	29.9333	3.48115	180

Table 1 explained the mean and standard deviation of both the experimental and control groups. It indicated that experimental group with the mean of 31.55 is greater than the mean score of control group of 27.96. This signified that experimental group is favour.

Research Question 2: What is the difference between the performance of male and female students exposed to portfolio assessment and traditional method of assessment in Economics?

The result as shown in table 1 indicated that the mean score of male and female in experimental group were 31.48 and 31.66 respectively. While the mean score of male and female in control

group were 28.43 and 27.04 respectively. The implication was that performance of male and female in experimental group is favour.

HYPOTHESES TESTING

Analysis of Covariance (ANCOVA) analysis was used for the hypothesis testing for this study. The results of the analyses and discussion were stated below.

Ho_1: - There is no significant difference between performance of economics students when exposed to Portfolio Assessment Procedure and Conventional Method Assessment.

Table 2: Analysis of Covariance of Students' Scores Exposed to Portfolio Assessment and Conventional Method of Assessment

Source of Variation	Sum of Square	Df	Mean Square	F	Significance of F
Covariate (pretest)	9570.612	1	9570.900	1142.900	.000
Main effect (treatment)	579.894	1	574.894	69.250	.000
Explained	703.734	4	175.939		
Residual	1465.466	175	8.374		
Total	3169	179			

The result reveals that an $F(1,179) = 69.250$, $\alpha = 0.000$ for the main effect (treatment) was significant. This is because of F= 0.000less than the alpha level of 0.05. The result shows that portfolio assessment method produced significant difference on the post-test performance of the students exposed to treatment when the covariates effect (pre-test) was statistically controlled. So, the null hypothesis was rejected and restated as research hypothesis (H_1).So there is

significant difference between performance of students exposed to portfolio assessment method and conventional method of assessment.

Ho_2: There is no significant difference between performance of male and female Economics students in the use of portfolio assessment and conventional method of assessment.

Table 3: Analysis of Covariance on scores of Male and Female Students Exposed to Portfolio Assessment

Source of variation	Sum of Squares	Df	Mean Square	F	Significance of F
Covariate (pre-test)	Sum of Square	1	96.591	11.535	.001
Main Effect (Gender)	10.466	1	10.466	1.250	.265
Explained	703.734	4	175.939	21.010	
Residual	1465.466	175	8.374		
Total	2169.200	179			

An examination of table 3 reveal that an $F(1,179) = 1.250$, $\alpha = .265$ for the main effect (gender) was significant. This is because the significance of F= .265 is greater than the 0.05 alpha level. Therefore, the null hypothesis is accepted. So the result shows that the male students' performance did not significantly different from that of their female counterpart when both were taught using portfolio assessment method.

DISCUSSION

The result of the analysis Covariance on the Performance of students taught Economics using Portfolio Assessment and those taught with Conventional Method of Assessment indicated a significant effect in favour of the students in experimental group. Learning (2007) and Adeyemi (2008) in their studies confirmed that the use of portfolio assessment can enhance academic excellent and improved students' attainment and accomplishment in Mathematics, English, Language and Social Studies respectively. Syafei, Mujiyanto, Yuliasri and Pratama (2021) reported that application of portfolio assessment during the Covid-19 pandemic is positively influenced the performance of the students. The benefits of the portfolio assessment were felt while observing health protocols like keeping up social distancing and avoiding the crowds. The findings imply that portfolio assessment makes it easier for the students to study online while observing health protocol during the pandemic. It allows a fair, objective, transparent, and comprehensive assessment of the instructions.

So the performance of student using portfolio assessment performed significant well than the student taught with conventional assessment method. Similarly, the finding agreed with the studies of Nasrin and Mohammed (2002) that there was no significant different in the performance of male and female students in the assessment of achievement through portfolio and teacher made tests. So, it can be deduced from the finding that the use of portfolio assessment enhanced the performance of both male and female students. Therefore, there is no significant different between the performance of male and female students using portfolio assessment method.

Thus, it however, contradicts the conclusion of Li et al (2015) that there was no significant different between the final scores of students participating in portfolio assessment and conventional testing in college physics.

RECOMMENDATIONS AND CONCLUSION

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

- Portfolio assessment method should be used at all level of education.

- All topics in school curriculum should be taught such that potentials of learners are fixed out in order to ensure mastery and skill acquisition.
- Teachers should demonstrate practically the topic taught with the use of real object that will make learners have a sense of belonging.
- Instruction and assessment should be given hand in hand to ensure better performance of the learners.
- Students' problem must be diagnosed and correct feedback must be given to ensure mastery.
- More time should be allocated to the teaching of Economics in Senior Secondary Schools.

It is concluded that teachers should be allowed to adopt best assessment strategies for better output. Then, more studies should be conducted on portfolio assessment in another subject and at all levels of education.

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