



International Journal of Academia and Educational Research



Special Edition

4.6 Impact Factor

ISSN: 2713-4680

Volume 6, Issue 2

May 2020 - November 2022

arcnjournals@gmail.com

NATIONAL INNOVATION AND RESEARCH ACADEMIA



*NATIONAL INNOVATION AND RESEARCH ACADEMIA
(NIRA)*

International Journal of Academia and Educational Research

Special Edition

ISSN: 2713-4680. Volume 6, Issue 2. May 2020 to November 2022

Double Blind Peer Reviewed International Research Journal

<http://arcnjournals.org/nira>



*NATIONAL INNOVATION AND RESEARCH ACADEMIA
(NIRA)*

International Journal of Academia and Educational Research

Special Edition

ISSN: 2713-4680. Volume 6, Issue 2. May 2020 to November 2022

Double Blind Peer Reviewed International Research Journal

<http://arcnjournals.org/nira>

Send your articles to:

arcnjournals@gmail.com

journalsaccexgate@gmail.com

journals@arcnjournals.org

papers@accexgate.com

Published by:

© Africa Research Corps Network (ARC�)

172 Jose Marti Crescent, Abuja, Nigeria

Copyright © 2022 Africa Research Corps Network (ARC�)

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, or stored in any retrieval system of any nature, without prior written permission, except for permitted fair dealing under the law relating to copyright. Open Access authors retain the copyrights of their papers, and all open access articles are distributed under the terms of the Creative Commons Attribution license, which permits unrestricted use, distribution and reproduction in any medium, provided that the original work is properly cited and not distorted.

Disclaimer

The Journal and the Editorial Board do not bear responsibility for views expressed by the authors in this Journal. Any problem relating to the articles (i.e. plagiarism, grammatical errors, lexicon errors, spelling mistakes, publishing articles in more than one journal, etc.) is the sole responsibility of the authors and the Journal bears no responsibility for that. The use of general descriptive names, trade names, trademarks, and so forth in this publication, even if not specifically identified, does not imply that these names are not protected by the relevant laws and regulations. While the advice and information in this Journal are believed to be true and accurate on the date of it going to the press, neither the authors, the editors, nor the publisher can accept any legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

Submissions

Manuscripts adhering to author's guideline should be submitted for double-blind peer-review process to the Editorial Board. Manuscripts should be submitted electronically to arcnjournals@gmail.com.

Editorial Board

Editor

Prof. Paul A. Mount Kenya University, Kenya

Associate Editors

Prof. Tracy R. Lewis, Departments of Economics, Tumaini University Makumira, Tanzania

Prof. Jeff Gill, College of Statistics, University of Florida

Dr. Ndiyah, Faith, Catholic University of Cameroon, Cameroon

Dr. Abba Garba Gaya, Kano State University, Kano, Nigeria

Dr. Mostafa Salim, The British University, Egypt

Dr. Kopano M., Department of Economics and Statistics, Tshwane University of Technology Business School

Dr. Bertha Munpamtzholimbe, National University of Lesotho

Dr. Kenneth Heilman, Behavioral Neurologist, Jomo Kenyatta University of Agriculture and Technology, Kenya

s/n	Contents	Pages
1	Education without Test, OBILOR, Esezi Isaac, Ph.D.	1-10
2	Relationship between Study Habits and Academic Performance of Public Secondary School Students in Etche Local Government Area, Rivers State: Implication for Counselling, Maxwell Eremie and Jane Ngozi Achi	11-23
3	Professional Competencies Needed By Beginning Teacher Educators in Agricultural Education for Effective Job Performance in Imo State, Soronnadi, Austin Izuchukwu, Udie Elizabeth Akwenabeyo and Eje, Amuche Elo	24-34
4	Effects of Instructional Materials on the Teaching and Learning of Social Studies in Secondary Schools in Aba South Local Government Area of Abia State, Okechukwu Ijeoma Peace, Ikewete Valentino Ikechukwu and Doris Chukwu	35-43
5	Predicting the Intention to Utilize E-learning System: Perceived Usefulness, Perceived Ease of Use, Perceived Enjoyment, Facilitating Conditions, Subjective Norm and Attitude towards Use Based on Technology Acceptance Model: Perspective of University Lecturers in the Northeastern Nigeria, Kabu Madu and Ahmed Fauzi Bin Mohammed Ayub	44-53
6	Advocating Security Education Curriculum for Pre-basic Pupils, Dr. Vera Idaresit Akpan	54-61
7	Language Learning Strategies and Individual (Students') Characteristics in the Classroom, Mrs. Ihedioha Love N. Ph.D	62-72
8	Impacts of Legislation of Education Policy on Implementation in Private Tertiary Institutions in Sokoto State, Nigeria, MUSA, Bello, MUHAMMAD, Abida, HAMISU, Mukhtar and IBRAHIM, Yahaya	73-82
9	Self-Assessment as Correlate of Academic Achievement among Financial Accounting Students in Public Senior Secondary Schools in Rivers State, OBILOR, Esezi Isaac (Ph.D.)	83-93

Education without Test

OBILOR, Ezezi Isaac, Ph.D.

Department of Educational Foundations,
Faculty of Education, Rivers State
University Port Harcourt.

Abstract: This paper reviewed the effects of testing on education. It x-rayed the purposes of test, benefits of test, drawbacks of test, and the effects of test and testing on education. Without tests, schooling (in fact education) is meaningless. Test is what gives meaning to education. If every learner goes through a programme of study without being tested and they are awarded certificates or degrees, then people will simply stroll into and out of educational institutions without learning a thing. In this circumstance, it will be very difficult, if not impossible to know who has mastered the objectives of instruction and who has not. It is test that makes possible certification, classification of learners and programmes, and identification of strengths and weaknesses of learners and institutions. Testing identifies gaps in knowledge; causes students to learn more from the next learning episode; produces better organization of knowledge; improves understanding; and enhances the monitoring of the teaching-learning process. On the whole, without test education will not be meaningful. Thus, all educational programmes should be certified through appropriate testing. There should be no exceptions. The tests should be properly constructed with requisite psychometric properties of validity, reliability, usability, and appropriate difficulty, discrimination and distracter indices; tests should be administered in "examination ready environments" with proper sitting arrangements and adequate supervision; and the scoring and grading of these tests should be standardised for apt interpretation and general acceptability of the certificates and degrees therefrom.

Key words: Achievement, assessment, intelligence, knowledge, test, testing

Introduction

What is a Test and Why Test?

Test is an instrument or systematic procedures for measuring samples of behaviour by posing questions that will elicit the needed information or data. It is an instrument designed to measure level of excellence, ability, skill, mastery, or knowledge. A test is a set of tasks, questions, situations, intended to elicit particular types of behaviour; it is an

evaluation instrument used to measure skills, knowledge, intelligence, achievement, ability, aptitude, attitudes, interests, attention span, motivation, competence, and the like (Asuru, 2015).

Test is the most common method used in education for the assessment of learners. For instance, at the end of a given unit of study, week, month, term, semester, or year, a test is administered to the learners to find out how well the learners have mastered the learning objectives. Tests are usually given by teachers, schools, institutions, or states/regions. It may be administered verbally, on paper, or on computer. Tests vary in style, rigor or requirements. A test is used to find out if respondents (testees) have acquired the relevant skills or mastered some given instructional objectives. For instance, a test is needed to ascertain if a trainee tailor can put pieces of clothes together to make a dress; if a student can type accurately 80 words per minute; if a learner can solve simultaneously two equations in two unknowns. The purpose of a test, therefore, is to elicit samples of behaviour that indicate that the learner has mastered the given instructional objectives.

In all the levels of education, test is used to promote learning and bring about purposeful desirable changes in the behaviour of learners. Tests assist the teachers to know the extent of change in the desirable behaviour of learners and extent of the learners' mastery of the objectives in the programmes of study. Test may occur at the beginning of a unit of study, during the study, at the end of a unit of study, or whenever information about teaching and learning is useful. Test is used to find out what students know and can do; identify students' strengths and plan instructions which build on and extend the strengths of students; identify students' difficulties and plan instructions to meet the difficulties; monitor students' learning and provide feedback to students and parents; motivate students and provide incentives to study; and determine the knowledge, skills, and attitudes students have developed over a period of time.

Test is what gives meaning to education. If every learner goes through a programme of study without being tested and they are awarded certificates or degrees, then people will simply stroll into and out of educational institutions without learning a thing. In this circumstance, it will be very difficult, if not impossible to know who has mastered the objectives of instruction and who has not. Imagine the crisis that could be caused if medical doctors or pilots who strolled into and out of classrooms without mastering the objectives of instruction (no test to show whether or not they have mastered the objectives) are given patients to operate on, or planes to fly. Image the damage to the "tomorrow" of any nation whose teachers are not certified (not qualified) and they raise children and young adults as leaders. The destruction from a test-free education system will surely be colossal. This is why it is pertinent to properly understand what a test is and how to use test in education.

Functions of Tests in Education

A test is a very useful instrument in the teaching-learning process. As a matter of fact, it is test that gives meaning to teaching and learning. Some functions of test are outlined below:

1. Testing identifies gaps in knowledge: Taking a test permits students to assess what they know and what they do not know, so that they can concentrate study efforts on areas

in which their knowledge is deficient (Henry, Adam & Megan, 2011). Students may take a practice quiz, realize which questions or items they got wrong, and then spend more time studying the items they missed. When students receive opportunities to restudy materials after a test, they spend longer time on restudying items that were missed than those that were correctly retrieved. Teachers use the results from tests to know where students need assistance and where they teachers have to place more emphasis. Results from tests also enable teachers know where they are deficient and work towards amelioration. Conscientious teachers pay attention to how students performed on tests and use that knowledge to inform their teaching in the future. If many students fail a particular topic on the test, it may be a sign to spend more time covering that material next time or use a different approach to teach the material. Testing determines the adequacy or otherwise of instructional materials. A good teacher makes use of a variety of teaching aids for illustrations and demonstrations. Effective use of these instructional resources helps to improve students' understanding of the lesson. Topics which look abstract can be brought to concrete terms by the use of these teaching aids. Thus, testing helps in identifying gaps in knowledge both for the teachers and the learners and helps determine the most appropriate teaching aid to facilitate the learning of students.

2. Testing improves the awareness and understanding of one's own thought processes: Another function of testing is improvement of metacognitive accuracy relative to restudying. Testing informs students of what they know and what they do not know. Testing permits students to have better comparison of their knowledge with the standard or objectives. If students only study material repeatedly, they may think that their familiarity with the material means that they know it and can retrieve it when needed (Karpicke, Butler, & Roediger, 2009). This is not always true as such familiarity can be misleading, but testing reveals the true position. Therefore, instead of students simply restudying, teachers should administer quizzes, tests, and students can self-test to determine what material they know well and what material they do not know well. Thus testing helps teachers to monitor students' understanding of their own thought processes and knowledge. From students' feedback on tests, the teacher is able to know the direction of the students' thinking processes, what the students know and what they do not know and how to guide them and redirect those in the wrong direction.

3. Testing prevents interference from prior materials when learning new materials: Testing creates a release from proactive interference (Henry, Adam & Megan, 2011). Proactive interference occurs when sets of materials are learned in succession and the previously learned materials influence the retention of new materials in a negative manner. Thus, proactive interference refers to the poorer retention of material learned later, caused by prior learning. Elongated study sessions may therefore cause a build up of proactive interference. But when testing is done between study episodes, it causes a release from proactive interference and enables new learning to be more successful. Therefore, testing does not only help in the retrieval of learned materials but it also inhibits the negative interference on old materials on new materials. The implication of this is that tests are not only necessary but should be made regular to create appropriate release from proactive interference.

4. Frequent testing encourages or motivates students to study: Having frequent quizzes, tests, or assignments motivates students to study. Every teacher/student knows that many students procrastinate and often do not study until the night before an examination, implying that without tests, no study will take place until the final examination. A teacher who does not give quizzes, tests, and assignments can be likened to a Priest in the Church or Mosque who preaches the gospel to the congregation without subjecting them to any written or verbal test on the substance of the preaching. The effect is that a great percentage of the congregation may not pay attention. Thus whether members are sleeping or paying attention to the Priest is left to them and them alone. But in education, in the school system, the situation is different. In the school situation, the teachers need to verify their efforts and the efforts of the students as soon as possible and the tools used are quizzes, tests, assignments and end programme examinations. Tests should therefore be used regularly to motivate students to learn. When they study hard towards their weekly, terminal or end of the year promotion tests, their performance is enhanced and optimal achievement of instructional objectives obtained. This is so because receiving tests greatly slows down forgetting (Karpicke & Roediger, 2008). Without test, many of the students would be reluctant to make out time for private studies while some of them would be less likely to be attentive when the teacher is teaching, no matter how interesting and lively the teaching may be. Obviously, listening to a teacher who does not give tests is like listening to the preacher in the Church or Mosque: the result is lackadaisical attitude to learning by students with attendant poor mastery of instructional objectives and possible examination malpractice.

5. Testing produces better organization of knowledge: Testing improves the conceptual organization of practiced materials, especially on tests that are relatively open-ended (such as free recall in the lab or essay tests in the classroom). Testing leads to increased retention of taught materials and causes students to organize information better (Zaromb & Roediger, 2010). As students actively recall materials, they are more likely to notice important details which will enhance their present performance and improve transfer of knowledge to new contexts. Transfer may be defined as applying knowledge learned in one situation to a new situation. This exposes students to learn more during the next learning episode, during future study sessions. That is, when students take a test and then restudy the materials, they learn more from the presentation than they would if they restudied without taking a test. Testing also facilitates the retrieval of materials not tested while studying for a test or restudying the materials tested. Test does not only enhance retention of the individual items retrieved during the initial test, taking a test also produces retrieval-induced facilitation (Chan, McDermott & Roediger, 2006). In other words, testing also improves retention of non-tested but related materials.

Types of Test

Tests are used to measure intelligence, aptitude, interest, personality, attitude, achievement, and many more. While it is necessary to briefly highlight the meaning and uses of the various types of test indicated above, it must be borne in mind that the focus of this paper is on the test that gives meaning and life to education, which is the achievement test.

(a) Intelligence Test

Intelligence tests are psychological tests that are designed to measure a variety of mental functions, such as reasoning, comprehension, and judgment. The purpose of intelligence tests is to obtain an idea of a person's intellectual potential. The tests centre around a set of stimuli designed to yield a score based on the test maker's model of what makes up intelligence. Intelligence tests are often given as a part of a battery of tests. Intelligence tests come in many forms, and some tests use a single type of item or question. Most tests yield both an overall score and individual subtest scores. A measure of intelligence is called Intelligence Quotient (IQ). Regardless of design, all IQ tests attempt to measure the same general intelligence. Component tests are generally designed and selected because they are found to be predictive of later intellectual development, such as educational achievement. Intelligence Quotient also correlates with job performance, socioeconomic advancement, and "social pathologies".

Intelligence Quotient (IQ) is a measure of intelligence that takes into account a child's mental and chronological age and it is given by

$$\text{Intelligence Quotient (IQ)} = \frac{MA}{CA} \times 100$$

Where:

MA = Mental Age typically given by intelligence level found for people at a given chronological age represented by a test score.

CA = Chronological age, which is the actual age (in years) of the child taking the intelligence test.

People whose mental age is equal to their chronological age will always have an IQ of 100. If the chronological age exceeds mental age, the IQ is below (below 100). If the chronological age is less than the mental age, the IQ is above-average (above 100). Some of the well known and widely used tests of this category are, Stanford-Binet Intelligence Scale, Wechsler Intelligence Scale for Children, Wechsler Pre-School and Primary Scale of Intelligence and Wechsler Adult Intelligence Scale.

Intelligence tests aid in correctly placing the child in school. The pupil who enters one school system from another is a case in point. Such a pupil nearly always suffers a loss of time. The indefensible custom is to grade the newcomer down a little, because, forsooth, the textbooks he has studied may have differed somewhat from those he is about to take up, or because the school system from which he comes may be looked upon as inferior. The present treatment accorded such children, which so often does them injustice and injury, should be replaced by an intelligence test.

Intelligence tests are used for determining vocational fitness. Industrial concerns doubtless suffer enormous losses from the employment of persons whose mental abilities are not equal to the tasks they are expected to perform. The present methods of trying out new employees, transferring them to simpler and simpler jobs as their inefficiency becomes apparent, is wasteful and to a great extent unnecessary. A cheaper and more satisfactory method would be to employ a psychologist to examine applicants for positions using the intelligence test.

Intelligence tests are used in the study of the factors which influence mental development to help guard the child against influences which unfavourably affect mental development. Are any races intellectually inferior to others? Only intelligence tests can answer this question and grade the races in the right perspective. All other claims of one race being intellectually superior to another are farce without the use of intelligence test. In all fields of human endeavour, intelligence tests are playing ever-increasing roles. With the exception of moral character, there is nothing as significant for a child's future as his grade of intelligence. Even health itself is likely to have less influence in determining success in life. All classes of intellects, the weakest as well as the strongest, profit from intelligence tests. When the lessons from intelligence tests properly sink in, no body shall blame mentally defective workmen for their industrial inefficiency, punish weak-minded children because of their inability to learn, or imprison and hang mentally defective criminals because they lacked the intelligence to appreciate the ordinary codes of social conduct.

(b) Aptitude Test

Aptitude test measures specific abilities, such as clerical, perceptual, numerical, or spatial. It measures the potential of performance in a person. The Minnesota Clerical Test, which measures the perceptual speed and accuracy required to perform various clerical duties, is an example of an aptitude test. Other examples of widely used aptitude tests are Careerscope, Differential Aptitude Test, Wonderlic Test, Armed Services Vocational Aptitude Battery, and Bloomberg Aptitude Test.

Aptitude tests are used for instructional purposes to adapt students to courses, or curriculum to student groupings, or to design assignments for students who differ widely in ability in the same class. Aptitude test scores can help teachers form realistic expectations of students. Knowing something about the ability level of students in a given class can help a teacher identify which students are not learning as much as could be predicted on the basis of ability scores (Gronlund, 1985).

Aptitude test scores are useful in educational, personal and vocational guidance. In vocational guidance, the educational requirements of some jobs require considerable general ability. In vocational and personal guidance, the measurement of differential abilities may facilitate self-understanding. Students will be able to understand themselves as individuals and as members of a group. They can be helped to set realistic goals based on their abilities, strengths, and weaknesses (Gronlund, 1985).

The results from aptitude tests can be used to gain supplementary information for curricula planning and evaluation. An idea of the general ability level of a school is helpful in determining how much emphasis should be made on college preparatory programmes. Aptitude tests are used to help identify students for early admission to kindergarten or for acceleration at different grade levels. Aptitude test data is used for research, development, and employment. Using modern statistical tools researchers have found that ability tests do quite consistently predict subsequent job and job training performance (Mehrens & Lehmann, 1978).

(c) Interest Test

Interest tests are psychological tests to assess a person's interests and preferences. These tests are used primarily for career counselling. Interest tests include items about daily

activities from among which applicants select their preferences. The rationale is that if a person exhibits the same pattern of interests and preferences as people who are successful in a given occupation, then the chances are high that the person taking the test will find satisfaction in the occupation. A widely used interest test is the Strong Interest Inventory.

(d) Personality Test

A personality test is a method of assessing human personality constructs. Most personality assessment instruments are in fact introspective (i.e., subjective) self-report questionnaire measures or reports from life records such as rating scales. Attempts to construct actual performance tests of personality have been very limited. One exception however, was the Objective-Analytic Test Battery by Raymond Cattell in 1940s and 1950s, a performance test designed to quantitatively measure 10 factor-analytically discerned personality trait dimensions. Personality tests are used to measure the types and traits of the individual's personality. Personality tests diagnose personality disorders, like anxiety, depression, aggression and cognate personality dysfunctions, exceptional students, and many more. Studies of personality play outstanding roles in education by influencing social interactions in the classroom, teacher-student rapport, students' self-esteem, prosocial behaviour, motivation and classroom conduct, and cognitive performance (Matthews, Zeidner & Roberts 2006). It also predicts something about how a job applicant will act in some workplace situations. For instance, a person who is high in conscientiousness will ordinarily be less likely to commit crimes against the employer.

(e) Attitude Test

Attitude test assesses an individual's feelings about an event, person, or object. The individual's attitude towards the environment, other people or places is judged in this kind of test. In education, the right attitude enhances learning and academic performance. It is attitude that determines whether a child learns or not and to what extent. Thus, attitude test in education enables the teachers and counsellors help the child develop the right attitude for effective learning. Attitude scales are also used in marketing to determine individual and group preferences for brands, or items.

(f) Achievement Test

Achievement tests measure the degree to which an individual has mastered certain instructional objectives or specific learning outcomes. An achievement test is a test developed to measure skill or knowledge. Achievement tests assess the proficiency of students (Obilor, 2019). Proficiency is the amount of grade-appropriate knowledge and skills a student has acquired up to the point of testing. The most common types of achievement tests are the standardized test and the classroom (or teacher-made) test developed to measure skills and knowledge learned in a given grade level, usually through planned instruction, such as training or classroom instruction. Achievement test scores are often used in an educational system to determine the level of instruction for which a student is prepared. High achievement scores usually indicate a mastery of grade-level material, and the readiness for advanced instruction. Low achievement scores can indicate the need for remediation or repeating a course.

When writing achievement test items, writers usually begin with a list of content standards (either written by content specialists or based on state-created content

standards) which specify exactly what students are expected to learn in a given school year. The goal of item writers is to create test items that measure the most important skills and knowledge attained in a given grade-level. The number and type of test items written are determined by the grade-level content standards.

Achievement test is useful and used in many ways, which include that it helps the teacher to know whether the class is normal, average, above average or below average (Obilor, 2019). This knowledge enables the teacher to appreciate the level of language to use to deliver his instructions, what teaching method is appropriate and which teaching aids will serve the purpose of ensuring that the entire class benefits from his instructions. He formulates different strategies to cater for different levels of the class, those above average, normal, average and even those below average. Without a test the teacher would treat every member of the class the same way causing especially those below average to be frustrated and possibly drop out of school.

A well-designed achievement test used which covers the entire subject matter of instruction measures students' academic achievement in a given course. It assesses how much the specified instructional objectives for the course or programme have been achieved. The result of the test enables the teacher know areas that have been properly grasped, areas of difficulty, and areas that require special attention. The import is that the teacher uses the results of achievement tests to ensure that all willing members of the class achieve the instructional objectives specified for the course or programme.

Achievement tests help teachers and students know the efficacy of learning experiences. Learning is not done for its own sake but is aimed at preparing the learner for future challenges and opportunities, for good living and ability to be able to surmount obstacles and move on in spite of all odds in life (Obilor, 2019). Thus tests help students to optimise their learning in a given course or programme; tests also enable teachers to succeed even when students are not prepared to learn by redirecting their attention and making them realise the consequences of failing the course or programme. Tests further make students to do extra to learn in spite of teaching that is not adequate.

It diagnoses students learning difficulties and to suggest necessary remedial measures to ameliorate the situation. Through the use of formative and diagnostic tests, teachers uncover students' special difficulties and design lessons and teaching aids to take care of such difficulties. Tests enable teachers know the strengths, weaknesses, and existing knowledge level of students before and during instructions. Thus, test results enable teachers render guidance and counselling services to students by guiding them take measures to develop their competencies and potentials, thereby improving their learning and performance.

The most important uses of tests in education are classification and certification. Test results are used to grade learners and put them in classes, grades, or groups. They are used to rank learners, certificates and degrees. Very importantly tests are used to certify whether or not learners have mastered the objectives of the course or programme they have undertaken. This holds sway for teachers and for students. The certification of teachers through testing is a prerequisite for them to teach any learner. Imagine the level of disaster that would occur if someone who did not go through the "furnace" of education and was not certified "learned enough" goes to teach the students; and imagine that those he teaches without testing also leave and become teachers, doctors, engineers, and more. We shall have a world of doom, pain and unhappiness, to say the least.

Drawbacks of Tests

Tests have some drawbacks when they are not properly constructed. Such tests are not able to measure the different levels of learning outcomes. Some classroom tests do not cover comprehensively the topics taught. One of the qualities of a good test is that it should represent all the topics taught. Others lack clarity in the wordings: The items of these tests are often ambiguous, not precise, not clear, and most of the time carelessly worded. Most classroom tests fail item analysis test. They fail to discriminate properly and not designed according to difficulty levels.

Conclusion

There cannot be any education without tests. Test is a vital component of education. Any education without test is a total disaster: Certificates and degrees awarded will be worthless without test as even those who did not go through the “crucible of education” will also have certificates and degrees. It will be like pastors of one-man churches who did not write any tests to become priests and they rose from priests to pastors to bishops and to arch-bishops within two to three years. It is one of the reasons for the confusion in Christianity which needs correction: Having teachers who were not properly trained and certified through appropriate testing.

Proper education and testing should be applied in all spheres of life. It must be noted that in this paper, the tests referred to, are tests that have the requisite psychometric properties of validity, reliability, usability, and appropriate difficulty, discrimination and distracter indices; tests that are administered in “examination ready environment” with proper sitting arrangements and supervision.

Recommendations

All educational programmes should be certified through appropriate testing. There should be no exceptions. The tests should be properly constructed with requisite psychometric properties of validity, reliability, usability, and appropriate difficulty, discrimination and distracter indices; tests should be administered in “examination ready environment” with proper sitting arrangements and supervision. The scoring and grading of these tests should be standardised for apt interpretation and general acceptability of the certificates and degrees therefrom.

References

- Asuru, V. A. (2015). *Measurement and evaluation in education and psychology*. Port Harcourt: Minson Nigeria Limited.
- Chan, J. C. K., McDermott, K. B., & Roediger, H. L. (2006). Retrieval-induced facilitation: Initially nontested material can benefit from prior testing of related material. *Journal of Experimental Psychology: General*, 135, 553–571.
- Gronlund, N. E. (1985). *Measurement and evaluation in teaching* (6th ed). New York: Macmillan Publishers Limited.

- Henry, L. R.; Adam, L. P.; & Megan, A. S. (2011). Ten benefits of testing and their applications to educational practice. *Psychology of Learning and Motivation*, 55, 1 – 36.
- Karpicke, J. D.; & Roediger, H. L. (2008). The critical importance of retrieval for learning. *Science*, 319, 966–968.
- Karpicke, J. D.; Butler, A. C.; & Roediger, H. L. (2009). Metacognitive strategies in student learning: Do students practise retrieval when they study on their own? *Memory and Cognition*, 17, 471–479.
- Mehrens, W. A.; & Lehmann, I. J. (1987). *Measurement and evaluation in education and psychology*. New York: Bolt, Rinehart and Winston.
- Obilor, E. I. (2019). *Essentials of measurement and evaluation*. Port Harcourt: Samcos Publishers Ltd.
- Zaromb, F. M., & Roediger, H. L. (2010). The testing effect in free recall is associated with enhanced organizational processes. *Memory and Cognition*, 38, 995–1008.

Relationship between Study Habits and Academic Performance of Public Secondary School Students in Etche Local Government Area, Rivers State: Implication for Counselling

Maxwell Eremie and Jane Ngozi Achi

Department of Educational Foundations
Rivers State University, Port Harcourt,
Nigeria

Abstract: The study examined the relationship between study habit and academic performance of public secondary students in Etche Local Government Area, Rivers State. The statement of problem was clearly stated and the purpose was specifically highlighted. Three research questions were formulated to guide the study and three null hypotheses were tested. The literature was duly reviewed in line with the study variables. The correlation research design was adopted with a population of 540 public secondary school students, out of which 225 was drawn as the sample size from the target population, with the aid of Online Fluid Survey Sample Size Calculator. A self-structured questionnaire with 12 items was drafted and coded using modified 4 point Likert scale of strongly agree, agree, disagree and strongly disagree. The instrument was subjected to face and content validity and it yielded a reliability index of 0.65. The research questions were answered using mean and standard deviation, while the hypotheses were analyzed using Pearson Product Moment Correlation Coefficient with the aid of Statistical Package for Social Sciences at 0.05 level of significance. The results reveal that, there is a significant relationship study habit and academic performance, Therefore, recommended that every public school should at least employ one counselor that will guide students on how best to go by their study habit in school.

Key words: Relationship, Habit, Academic Performance, Implication Counseling.

INTRODUCTION

Education is a process in which and by which knowledge, characters and behaviour of human beings are shaped and molded. Learning is both a process and an outcome. As a process, it is part of living in the World, part of the way our bodies work. As an outcome, it

is a new understanding or appreciation of something. It is the most important invention of mankind, it has a very wide meaning and it is not possible to give it a precise meaning. Different philosophers and scholars have defined education according to their own ideas and philosophies. Education helps an individual to give his/her identity. It is not limited to four walls of the classroom, but also outside in the environment. Education begins from womb and ends with the death of an individual. An individual may have good Socio-economic Status, but when he/she does not have proper guidance for study habits, and then the proper education remains unexposed.

A habit is a routine of behaviour that is repeated regularly and tends to occur subconsciously (Butler & Hope, 1995). According to *Wood and Neal (2017)* habit, is defines as "the standpoint of psychology, [as] a more or less fixed way of thinking, willing, or feeling acquired through previous repetition of a mental experience." Habitual behaviour often goes unnoticed in persons exhibiting it, because a person does not need to engage in self-analysis when undertaking routine tasks. Habits are sometimes compulsory. When behaviours are repeated in a consistent context, there is an incremental increase in the link between the context and the action. This increases the automaticity of the behaviour in that context (*Wood & Neal, 2017*). Habit formation can be referred to as the process by whereby behavior, through regular repetition, becomes automatic or habitual. This is modelled as an increase in automaticity with a series of repetitions up to an asymptote (Lally, van Jaarsveld, Potts & Wardle, 2010).

It has been thought that there is relationship between a student's academic performance and their study habits (Febregat & Blanch, 2004). Fielden (2004) stated that a good study habits have good effects towards the academic performance of the student. Study habits, with proper environment, feedback and guidance help the individual to develop a balanced personality. In school, the teachers while at their home the parents should guide the student for his/her study habits. Thus, it is the duty of the teachers and parents to identify student's good study habits and guide them accordingly. The study habits and Socio-economic status of an individual go hand in hand. They may be regarded as the two faces of the same coin; they are proportional to each other. If either of these factors is absent or has been lacking, it leads to an incomplete personality development of an individual. The individual constantly evaluates himself/herself in relation to his/her society.

Counselling services are among the school educational services. It is believed that guidance and counselling services in school shall develop, assess and improve educational programmes; enhance teaching and improve the competence of the teacher and reduce cost for the children. Counselling and guidance can provide a good basis for a broader education for life. Hence, the Role of Guidance and Counselling in Effective Teaching and Learning in Schools for the Child Future Success.

Social Learning Theory by Albert Bandura (1977)

The social learning theory of Bandura emphasizes the importance of observing and modeling the behaviors, attitudes, and emotional reactions of others. Bandura (1977) states: "Learning can be extremely labourious, not to mention hazardous, if people had to rely solely on the impacts of their own actions to inform them what to do. Fortunately, most human behaviour is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this

coded information serves as a guide for action.” Social learning theory explains human behaviour in terms of continuous reciprocal interaction between cognitive, behavioral, and environmental influences.

The component processes underlying observational learning are:

- (1) Attention, including modeled events (distinctiveness, affective valence, complexity, prevalence, functional value) and observer characteristics (sensory capacities, arousal level, perceptual set, past reinforcement)
- (2) Retention, including symbolic coding, cognitive organization, symbolic \rehearsal, motor rehearsal)
- (3) Motor Reproduction, including physical capabilities, self-observation of reproduction, accuracy of feedback, and
- (4) Motivation, including external, vicarious and self reinforcement. Because it encompasses attention, memory and motivation, social learning theory spans both cognitive and behavioral frameworks. Bandura’s theory improves upon the strictly behavioral interpretation of modeling provided by Miller and Dollard (1941). Bandura’s work is related to the theories of Vygotsky and Lave which also emphasize the central role of social learning.

a). Concept of Study Habit

A habit (or wont as a humorous and formal term) is a routine of behaviour that is repeated regularly and tends to occur subconsciously. The concept of study habit according to Husain (2000) is broad, as it combines nearly all other sub-concepts such as study attitude, study methods and study skills. Attitude is a mental and natural state of readiness, organized through experience, exerting a direct influence on the individual’s response to all objects and situations with which is related. Attitude towards study has great contribution on academic achievement, and good study pattern. Successful learners adopt positive attitude towards study, and do not waste time or energy over what they have to do. If the learning experience is pleasant, the learner’s attitude and motivation is usually positive, and if the learning experience is not pleasant he tends to avoid it. Negative attitude towards study sometimes finds expression in comment such as “I study but cannot remember what I study” or “the lessons are too long”. Attitude serves as index on how we think and feel about people, objects and issues in our environment. Study attitude, according to Husain (2000) refers to the predispositions which students have developed towards private readings through a period of time. According to him, study attitude offers great possibilities for successful achievement in studies. Study method is the knowledge and application of effective study skills or techniques by students. Several study methods have been identified several effective study methods and skills that could be used by students based on the learning environment (Husain, 2000). Kelli (2009) posits that for students to succeed in their studies, they must be able to appropriately assimilate course content, digest it, reflect on it and be able to articulate the information in written and/or oral form. What is fundamental is the ability of a student to acquire effective study habits. Many students feel that the hours of study are the most important. However, students can study for hours on end and retain very little. The more appropriate question is how students should study more effectively. Developing good time management skills is very important. Students must realize that there is a time to be in class, a time for study, time for family, time to

socialize and time to just be alone.

The critical issue is recognition that there must be an appropriate balance. Students should also have vision. A clearly articulated picture of the future they intend to create for themselves is very important and contributes to students' success in school. This will promote a passion for what they wish to do. Passion is critical and leads to an intense interest, dedication and commitment to achieving career goals and objectives. Marc (2011) explains that students with learning problems, however, may still have generally inefficient and ineffective study habits and skills. Becoming aware of your learning habits or styles will help students to understand why they sometimes get frustrated with common study methods. He observes that good study habits are essential to educational success; as they contribute to a successful academic future. Good study habits lead to good grades while good grades lead to admissions to better colleges and universities, possibly with a scholarship thrown in. This in turn, will lead to a great career. Developing good study habits to Marc is very crucial for every student irrespective of his level of education. It boosts students' ability to be self-disciplined, self-directed and ultimately successful in their degree programs. The sooner a student starts practicing and developing good habits, the better chance he will have that he will continue with them. Procrastination can be overcome with proper study habits and improving one's study habits is the key to better studying.

b). Academic Performance

Academic performance is the measurement of student achievement across various academic subjects. Teachers and education officials typically measure achievement using classroom performance, graduation rates and results from standardized tests. Academic performance or "academic achievement" is the extent to which a student, teacher or institution has attained their short or long-term educational goals. Completion of educational benchmarks such as secondary school diplomas and bachelor's degrees represent academic achievement.

Academic achievement is commonly measured through examinations or continuous assessments but there is no general agreement on how it is best evaluated or which aspects are most important procedural knowledge such as skills or declarative knowledge such as facts (*Ward, Stoker, & Murray-Ward (1996)*). Furthermore, there are inconclusive results over which individual factors successfully predict academic performance, elements such as test anxiety, environment, motivation, and emotions require consideration when developing models of school achievement.

Method of Measurement

Individual differences in academic performance have been linked to differences in intelligence and personality (*von Stumm, Hell, & Chamorro-Premuzic, 2011*). Students with higher mental ability as demonstrated by IQ tests and those who are higher in conscientiousness (linked to effort and achievement motivation) tend to achieve highly in academic settings. A recent meta-analysis suggested that mental curiosity (as measured by typical intellectual engagement) has an important influence on academic achievement in addition to intelligence and conscientiousness (*von Stumm, Hell, & Chamorro-Premuzic, 2011*). Children's semi-structured home learning environment transitions into a more structured learning environment when children start first grade. Early academic achievement enhances later academic achievement (*Bossaert, Doumen, Buyse, & Verschueren, 2011*). Student performance is measured using grade point average (GPA), high school graduation rate, annual standardized tests and college entrance exams. A

student's GPA is typically measured on a scale of zero to four with higher GPAs representing higher grades in the classroom. Graduation rates are collected by state and federal education officials as a baseline measurement of secondary education performance.

c). Effective Reading

When studying, especially at higher levels, a great deal of time is spent reading. Academic reading should not be seen as a passive activity, but an active process that leads to the development of learning. Reading for learning requires a conscious effort to make links, understand opinions, research and apply what you learn to your studies. Creating a positive learning environment is essential for success in the classroom. Teachers should create a welcoming atmosphere where students feel safe and willing to share. Classrooms should represent the students equally and everyone should know each other's name. Teachers who use humor in the classroom also create more positive environments.

Structuring the physical environment of a classroom means strategically placing desks, students, decorations, and playing music. Desks arranged in a circle give the impression of sharing, while coupled desks work well as workstations. The colour of the walls and the decorations on the walls also send impressions. Light colours open up spaces and warm colours are welcoming. Classrooms should be a place where students feel respected and feel their contributions matter. No student should be singled out or secluded in the classroom. Every student should feel accepted, wanted and respected.

d). Note-Taking

Many different formats are used to structure information and make it easier to find and to understand later. The format of the initial record may often be informal and/or unstructured. One common format for such notes is shorthand, which can allow large amounts of information to be put on paper very quickly. Historically, note-taking was an analog process, written in notebooks, or other paper methods like Post-It notes. In the digital age, use of computers, tablet PCs and personal digital assistants (PDAs) is common. The note taker usually has to work fast, and different note-taking styles and techniques try to make the best use of time. The average rate of speech is 2–3 words per second (which is 120–180 words per minute), but the average handwriting speed is only 0.2–0.3 words per second (which is 12–18 words per minute) (Piolat, Olive, & Kellogg, 2015). Notes are commonly drawn from a transient source, such as an oral discussion at a meeting, or a lecture (notes of a meeting are usually called minutes), in which case the notes may be the only record of the event. Note-taking has been an important part of human history and scientific development. The Ancient Greeks developed hypomnema, personal records on important subjects. In the Renaissance and early modern period, students learned to take notes in schools, academies and universities, often producing beautiful volumes that served as reference works after they finished their studies (Eddy, 2018). Note-taking is a central aspect of a complex human behavior related to information management involving a range of underlying mental processes and their interactions with other cognitive functions. The person taking notes must acquire and filter the incoming sources, organize and restructure existing knowledge structures, comprehend and write down their explanation of the information, and ultimately store and integrate the freshly processed material. The result is a knowledge representation, and a memory storage (Piolat, Olive, & Kellogg, 2015).

e). Time Management

Time management is the process of planning and exercising conscious control of time spent on specific activities, especially to increase effectiveness, efficiency, and productivity. It involves a juggling act of various demands upon a person relating to work, social life, family, hobbies, personal interests and commitments with the finiteness of time. Using time effectively gives the person "choice" on spending/managing activities at their own time and expediency (Cottrell, 2013). Time management may be aided by a range of skills, tools, and techniques used to manage time when accomplishing specific tasks, projects, and goals complying with a due date. Initially, time management referred to just business or work activities, but eventually the term broadened to include personal activities as well. A time management system is a designed combination of processes, tools, techniques, and methods. Time management is usually a necessity in any project development as it determines the project completion time and scope. It is also important to understand that both technical and structural differences in time management exist due to variations in cultural concepts of time.

Summary of Related Literature

The study is concern with the manner and attitude by which students performed in both internal and external examination in Etche Local Government Area in Rivers State. Two theories were employed, but the study anchored on Bandura's learning theory. Social learning theory has been applied extensively to the understanding of aggression (Bandura, 1973) and psychological disorders, particularly in the context of behavior modification (Bandura, 1969). It is also the theoretical foundation for the technique of behavior modeling which is widely used in training programmes. In recent years, Bandura has focused his work on the concept of self-efficacy in a variety of contexts (Bandura, 1997). Other variables were duly conceptualized base on their importance in the study.

Statement of the Problem

In Nigeria, there are so many factors that influence the ability of students to cultivate effective and efficient study habit towards better academic performance. Such factors that are capable of influencing the academic performance of students are state of health, motivation, anxiety, effective reading, adequacy of infrastructures like textbooks and well equipped libraries. Some of these factors identified are intellectual ability, poor study habit, achievement motivation, lack of vocational goals, low self concept, low socio-economic status of the family, poor family structure and so on. The differential scholastic achievement of students in Nigeria has been and still a source of concern and research interest to educators, government and parents. This is so because of the great importance that education has on the national development of the country. All over the country, there is a consensus of opinion about the fallen standard of education in Nigeria.

In other words, to study effectively, one must read effectively, draw, compare, memorize and test himself over time. Parents and government are in total agreement that their huge investment on education is not yielding the desired dividend. Teachers also complain of student's low performance at both internal and external examination. This problem are attributed to ineffective reading, poor note taking habit, poor time management among students as well as other factors such poor funding of education by government and negligence by parents. It is against these constraints that the researcher

sees the subject matter as an empirical problem worthy of investigation.

Meanwhile, the best way to handle matters of this magnitude is by seeking the services of counsellors that will talk to students on how to plan their study habit. Counselling is a process by means of which the helper expresses care and concern towards the person with a problem, and facilitates that person's personal growth and brings about change through self-knowledge. It is a relationship between a concerned person and a person with a need. This relationship is usually person-to-person, although sometimes it may involve more than two people. It is designed to help people to understand and clarify their views, and learn how to reach their self-determined goals through meaningful, well-informed choices, and through the resolution of emotional or interpersonal problems. Hence, school counselors are expected to supervise, caution, and train the individual student on how best to plan their study habit in order to perform well in their academic career.

Purpose of the Study

This study focused on the relationship between study habit and academic performance of public secondary school student in Etche Local Government Area in Rivers State. Specifically, the study sought:

- 1.) To examine the relationship between effective reading and academic performance of public secondary school student in Etche Local Government Area, Rivers State.
- 2.) To examine the relationship between note taking and academic performance of public secondary school student in Etche Local Government Area, Rivers State.
- 3.) To determine the relationship between time management and academic performance of public secondary school students in Etche Local Government Area, Rivers State.

Research Questions

The study was guided by these research questions:

1. What is the relationship between study effective reading and academic performance of public secondary school students in Etche Local Government Area, Rivers State?
2. What is the relationship between notes taking academic performance of public secondary school student in Etche Local Government Area, Rivers State?
3. How does time management relate to academic performance in public secondary school students in Etche Local Government Area, Rivers State?

Hypotheses

The following null hypotheses were tested for this study at 0.05 level of significance

1. There is no significant relationship between effective reading and academic performance of public secondary school students in Etche Local Government Area, Rivers State.
2. There is no significant relationship between note taking and academic performance of public secondary school students in Etche Local Government Area, Rivers State.
3. There is no significant relationship between time management and academic performance in public secondary school in Etche Local Government Area, Rivers State.

Significance of the Study

The following are the significance of this study:

1. The finding from this study will educate the stakeholders in the education sector and the general public on the factors that can influence student's academic performance with special focus on study habit and factors that can reshape students study habit towards better academic performance.
2. This research will also serve as a resource base to other scholars and researchers interested in carrying out further research in this field subsequently, if applied will go to an extent to provide new explanation to the topic.

METHODOLOGY

The study which adopted correlation research design was carried out in Etche local government area in Rivers State, with a population of 540 out of which 225 was drawn as the sample size with the aid of Online Fluid Survey Sample Size Calculator (OFSSSC). While, the simple random sampling technique was used in selecting the respondents. A self-structured questionnaire with 12 items was use to elicit information from the respondents on how student study habit influence academic performance in public secondary schools in Etche LGA. The instrument was coded using modified four 4 point Likert scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD).The instrument was dully validated, and it yielded a reliability index of 0.65. To ensure precision in the use of instrument, the researcher employed the services of three researches assistant that assisted in the distribution and retrieval of the instrument back from the respondents. Out of the 225 copies that were distributed, only one copy got torn, while 224 were properly filled and retrieved. The research questions were answered using descriptive statistics. A decision rule was taken on a criterion mean value of (2.50). Above 2.50 were considered strongly agree or agree, while 2.49 below were considered disagree or strongly disagree. While the hypotheses were tested using Pearson Product Moment Correlation (PPMC) with the aid of Statistical Package for Social Sciences (SPSS) version 21 at 0.05 level of significance.

RESULTS AND DISCUSSION

Result presentation and discussion of findings.

Research Question 1: What is the relationship between study effective reading and academic performance of public secondary school students in Etche Local Government Area, Rivers State?

Table 1 below shows grand mean scores of 2.66 and 2.56 respectively, which are greater than the criterion mean value of 2.50. This indicates that, there is a strong relationship between effective reading and academic performance in public secondary schools in Etche LGA in River State.

Table 1: Mean Response on the Relationship between Effective Reading and Academic Performance.

S/N	Items	Male (10)			Female(18)		
		\bar{X}	SD	Remark	\bar{X}	SD	Remarks
1	Reading is the number one factor for better academic performance.	3.33	0.88	SA	3.67	1.02	SA
2	Whether a student read or not, he/she can still pass exams.	1.11	1.13	SD	1.63	0.89	D
3	A prepared student makes performs well in both internal and external exams.	3.11	0.80	SA	3.57	0.98	SA
4	Reading is every student's hobby.	3.09	1.10	SA	1.37	1.01	SD
Grand Mean		2.66	0.78	A	2.56	0.98	A

Source: Field Survey, 2020

Research Question 2: What is the relationship between notes taking academic performance of public secondary school student in Etche Local Government Area, Rivers State?

Table 2: Mean Response on the Relationship between Notes Taking and Academic Performance.

S/N	Items	Male Student(112)			Female Student(112)		
		\bar{X}	SD	Remark	\bar{X}	SD	Remark
5	The best thing that can happen to any student is to have a complete note on all the subjects.	3.16	0.82	SA	3.67	1.02	SA
6	Note taking is a key to students' success.	3.50	0.95	SA	3.50	0.95	SA
7	Note reminds student of previous term work.	2.50	0.71	A	3.28	0.86	SA
8	The essence of note taking is to dump it at home.	1.50	1.90	SD	1.67	0.88	D
Grand Mean		2.66	1.50	A	3.03	0.93	SA

Source: Field Survey, 2020

The Table 2 reveals that notes taking has a strong relationship with academic performance in public secondary schools in Etche LGA, with grand mean scores of 2.66 and 3.03; which are greater than the criterion mean value of 2.50.

Research Question 3: How does time management relate to academic performance in public secondary school students in Etche Local Government Area, Rivers State?

Table 3: Mean Response on how Time Management Relate to Academic Performance.

S/N	Items	Male Student (112)			Female Student (112)		
		\bar{X}	SD	Remark	\bar{X}	SD	Remark
9	Time management is the key to students' success.	3.75	1.06	SA	3.31	1.10	SA
10	Student who fails to manage their time does not do well in exams.	3.75	1.06	SA	3.80	1.09	SA
11	Timing is part of our school life.	2.50	0.71	A	2.50	0.71	A
12	Student who do not manage will always missed classes.	3.21	0.84	SA	3.20	0.84	SA
Grand Mean		3.30	0.92	SA	3.20	0.94	SA

Source: Field Survey, 2020

From the Table 3 above has means scores of 3.30 and 3.20 respectively, which are greater than the criterion mean of 2.50. This implies that time management influence academic performance in public secondary schools in Etche LGA in Rivers State.

Test of Hypotheses

Hypothesis 1: There is no significant relationship between effective reading and academic performance of public secondary school students in Etche Local Government Area, Rivers State.

Correlation

Table 4: PPMC Analysis of Hypothesis 1

Variables		Effective Reading (X)	Academic Performance (Y)
Effective Reading	Pearson Correlation	1	.215
	Sig. (2-tailed)		.183
	N	112	112
Academic Achievemnt	Pearson Correlation	.215	1
	Sig. (2-tailed)	.183	
	N	112	112

Source: SPSS Output, Version 21, 2020.

$P > 0.05$ significant

The table 4 above revealed that 0.215 is significant at P. This means that $P > 0.05$. This implies that, there is significant relationship between effective reading and academic

performance of public secondary school students in Etche LGA. Hence, the null hypothesis was failed to accept.

Hypothesis 2: There is no significant relationship between notes taking and academic performance of public secondary school students in Etche Local Government Area, Rivers State.

Correlations

Table 5: PPMC Analysis of Hypothesis 2

Variables		Notes Taking (X)	Academic Performance (Y)
Notes Taking	Pearson Correlation	1	.575**
	Sig. (2-tailed)		.000
	N	112	112
Academic Performance	Pearson Correlation	.575**	1
	Sig. (2-tailed)	.000	
	N	112	112

Source: SPSS Output, Version 21, 2020.

$P > 0.05$ significant

From the table 5 above, 0.575 is significant at P. This implies that, there is significant relationship between notes taking. Meanwhile, the null hypothesis was rejected.

Hypothesis 3: There is no significant relationship between time management and academic performance in public secondary school in Etche Local Government Area, Rivers State.

Correlations

Table 6: PPMC Analysis of Hypothesis 3

Variables		Time Management (X)	Academic Performance (Y)
Time Management	Pearson Correlation	1	.201
	Sig. (2-tailed)		.213
	N	112	112
Academic Performance	Pearson Correlation	.201	1
	Sig. (2-tailed)	.213	
	N	112	112

Source: SPSS Output, Version 21, 2020.

$P > 0.05$ significant

The Table 6 above shows that 0.201 is significant at P. This indicates that, there is a relationship between time management and academic performance. Hence, the null hypothesis was rejected.

Discussion of Findings

The study analysis revealed the extent to which effective reading, note-taking and time management can be of help to students' academic performance in both internal and

external examinations. Three hypotheses were all rejected following the fact that there is relationship between the aforementioned variables and academic performance.

IMPLICATION TO COUNSELLING

Meanwhile, the best way to handle matters of this magnitude is by employing the services of counsellors that will talk to students on how to plan their study habit. Counselling is a process by means of which the helper expresses care and concern towards the person with a problem, and facilitates that person's personal growth and brings about change through self-knowledge. It is a relationship between a concerned person and a person with a need. This relationship is usually person-to-person, although sometimes it may involve more than two people. It is designed to help people to understand and clarify their views, and learn how to reach their self-determined goals through meaningful, well-informed choices, and through the resolution of emotional or interpersonal problems.

CONCLUSION

Based on the study findings/analysis, it can be reasonably concluded that there is a relationship between effective reading and academic performance among public secondary school students in Etche LGA. So far, all hand must be on deck to unravel the mystery that had befallen secondary schools' students in both internal /external examinations. Meanwhile, counselling service is not an exceptional in this scenario. Therefore, the services of counselors should be employed to get rid of this menace (poor study habit) among public secondary school students in Etche LGA as well as Rivers State at large.

RECOMMENDATIONS

From the findings and conclusion reached in this study, the following recommendations are worth considering:

- 1) Government and the school community should try as much as possible to build both analogue and electronic library in all the public secondary schools in Etche LGA.
- 2) Parents should provide all the necessary materials that will enhance student in note taking.
- 3) Both teachers and parents should ensure that every student has a study time table.

REFERENCES

- Annie Ward; Howard W. Stoker; Mildred Murray-Ward (1996), *"Achievement and Ability Tests - Definition of the Domain"*, Educational Measurement
- Bandura, A. (1969). *Principles of Behavior Modification*. New York: Holt, Rinehart & Winston.
- Bandura, A. (1973). *Aggression: A Social Learning Analysis*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1977). *Social Learning Theory*. New York: General Learning Press.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
- Bossaert, G; S. Doumen; E. Buyse; K. & Verschueren. (2011). *"Predicting Students' Academic Achievement After the Transition to First Grade: A Two-Year Longitudinal Study"*. *Journal of Applied Developmental Psychology*. 32(2): 47–57.

- Butler, G. & Hope, T. (1995). *Managing your mind: The mental fitness guide*. Oxford Paperbacks.
- Eddy, Matthew Daniel (2018). "The nature of notebooks: How enlightenment schoolchildren transformed the tabula rasa". *Journal of British Studies*. 57 (2): 275–307. doi:10.1017/jbr.2017.239
- Fielden, K. (2004). Evaluating Critical Reflection for Post-graduate Students in Computing. Informing Science and Information Technology Education (Joint Conference 2005, Flagstaff, Arizona). Retrieved from <http://www.informingscience.org/Proceedings/InSITE2005/138f36Field.pdf>
- Husain, A. (2000). Developing Study Habits. Wikipedia, the free encyclopedia.
- Kelli, K. (2009). Developing Good Study Habits. Retrieved from monster.com.media/ads.11/3/2016.
- Marck (2011), The Importance of Good.
- Lally, P., van Jaarsveld, C. H. M., Potts, H. W. W., & Wardle, J. (2010). How are habits formed: Modelling habit formation in the real world. *European Journal of Social Psychology*. 40 (6), 998–1009.
- Miller, N. & Dollard, J. (1941). *Social Learning and Imitation*. New Haven, NJ: Yale University Press.
- Piolat, A., Olive, T. & Kellogg, R. T. (2015). Cognitive effort during note-taking. *Applied Cognitive Psychology*, 19, 291–312.
- von Stumm, S., Hell, B., & Chamorro-Premuzic, T. (2011). "The hungry mind: Intellectual curiosity is the third pillar of academic performance". *Perspectives on Psychological Science*. 6 (6): 574–588.
- Wood, W. & Neal, D. T. (2017). "A new look at habits and the habit-goal interface". *Psychological Review*. 114 (4): 843–863.

Professional Competencies Needed By Beginning Teacher Educators in Agricultural Education for Effective Job Performance in Imo State

**Soronnadi, Austin Izuchukwu¹,
Udie Elizabeth Akwenabeyo² and
Eje, Amuche Elom³**

¹Department of Agricultural and Home
Science Education, Michael Opkara
University of Agriculture, Umudike |
Email: petersideaus78@gmail.com |
Phone: 08184050682

²Department of Vocational Education,
University of Calabar, Calabar | Email:
udie266@gmail.com | Phone:
08036659481

³Department of Agricultural and Home
Science Education, Michael Opkara
University of Agriculture Umudike |
Email: ejeamuche@gmail.com | Phone:
08162654218

Abstract: The study focussed on professional competencies needed by beginning teacher educators in agricultural education for effective job performance in Imo State. Four research questions guided the study. Descriptive survey research design was adopted. The study was conducted in Imo state. The population was 50 made up of lecturers from 2 tertiary institutions in Imo State. The population was accessible and manageable therefore the entire population constituted the sample for the study. A thirty six (36) items structured questionnaire was developed from the literature and used for data collection. Three experts validated the instrument. Cronbach alpha reliability method was used in determining the internal consistency of the instrument. A reliability coefficient of .88 was obtained. Data were collected by the researcher with the help of 3 research assistants, all the copies of the questionnaire were retrieved and analysed. The data collected were analysed using mean and improvement needed index to determine the competencies needs of beginning teacher educators in agricultural education. The difference between the needed mean and performance mean i.e. (XN – XP) constituted the gap for which improvement was needed by beginning teacher educator of agricultural education. It was found, that beginning teacher educators of agricultural science need professional competencies in planning instructions, (8 competency items) implementing instructions, (10 competency items) evaluating instructions, (7 competency items) and professional roles and developments (11 competency items). It was therefore recommended that the identified professional competencies educators need be packaged into in-service training programmes to be utilized in training and retraining beginning teacher educators and old ones respectively.

Keywords: Professional competencies, beginning teacher educators, agricultural education and job performance.

INTRODUCTION

Agricultural education is a vocational course taught in Nigerian schools across all levels of education. Agricultural science is an embodiment of numerous, pure and applied sciences including botany, zoology, chemistry, genetics and many others. For the basic agricultural education objectives to be achieved in Nigeria, it is of utmost importance that the teaching and teachers of agriculture especially beginning teachers who are coming in to the profession of teaching newly be given due emphasis, to be sure that they acquire the right professional skills, knowledge, attitude and quality in general. Knowledge, skills and attitude of the labour force towards modern technology play a key role in increasing agricultural production. All the efforts will be fruitless until the quality of the labour force in agriculture and agro-allied industries are improved. Quality of the labour force means updated knowledge; improved skills and changed attitude graduates bring to the job (Muhammed, 1991). The major focus of tertiary agricultural education has been on the production of public sector employees. Also Students of agricultural faculties are all-too-often not there by choice. Frequently they are there by default after failing to enrol for medicine, veterinary science, business studies, and engineering among other popular programmes (Muir-Leresche & Scull-Carvalho, 2006). This has made the duty of teaching these students who clearly do not want to study agriculture education from the start more tedious on the teachers, hence the reason for adequate vetting of the professional competencies of beginning teacher educator of agricultural education to ensure they do not fail on the job, and produce a new generation of agriculturist who are willing to move the agricultural sector forward through active participation in commercial farming and the general agro-allied industry.

All teacher education programs attempt to prepare students to become effective agricultural teachers, who in turn prepare students as agriculturists. Obanewa (1994) saw a teacher as someone who has undergone the necessary and recommended training in a teacher preparatory programme and is charged with the full responsibility of managing the classroom. Olaitan and Mama, (2001) went further stating that, the teacher of agricultural science is educated and as such should exhibit the character of an educated person in all areas of life. The authors went further stating that a teacher must maintain high ethical standard while enjoying good relationship with colleagues and students as well as having absolute self-confident. Young (1990) identified some characteristics of an effective teacher to include the ability to plan and execute lessons, monitor student learning and behaviour, conduct interesting and focused lessons based on a variety of methods, and maintain rapport with students and peers. Suydam (2003) indicated that effective teachers let pupils know they are concerned about their achievement, offer encouragement, involve students through questions and discussion, minimize time wasting, allowing few distractions and interruptions, establish and follow simple, consistent rules, monitor pupils' behaviour carefully, move around the classroom, and give clear directions. Richardson and Arundell (2009) noted that an effective teacher gives a variety of examples, properly plans lessons, is knowledgeable in the subject matter, and knowledgeable of student learning. A teacher of agriculture must complete his preparation for his job and keep abreast of the changes in his work through professional improvement activities. A competent teacher should possess all the character listed above to be able to carry out his teaching duties professionally.

A profession in the opinion of Hornby (2006) is a type of job that needs special training or skills especially one that needs a high level of education; according to the

author, professional involves specified skills that relate to a particular job for the recognition of the individual in a profession. An agricultural teacher educator needs to possess both technical and professional competencies that are required in the teaching profession. These professional skills include; planning of instruction, implementing instruction, evaluating instruction and professional role and development. The responsibility of preparing future effective agriculture teachers resides with teacher educators at universities, colleges of education with agricultural education programs. It is their responsibility to develop coursework and design programs to effectively achieve this outcome. While doing this, teacher educators sometimes might rely on personal experiences since there is little or no research-based information on the characteristics of effective agriculture teachers (Miller, Kahler, & Rheault 2009).

Competencies in the submission of Encarta (2009) is the ability to do something well, measured against a standard, especially ability acquired through training or experience. Also International Labour Organization ILO (2003) opined that competency is the knowledge, capabilities and behaviour which someone exhibits in doing his job and which are factors in achieving the objectives pertinent to the teaching strategies. Competency in the context of this study is the knowledge, skills and attitudes which the teacher of agriculture needs for effective teaching of agricultural science. Whereas all these earmark a competent teacher, there is still the need to possess the special attributes of a professional as regards the roles of specific roles of an agricultural teacher.

In Imo state however, it is well understood that teachers of agricultural science depend mainly on textbooks as their teaching aid and lecture method in imparting instructions to students. Sometimes, the beginning teachers dictate as written in learning material such as Newsletters without interpreting the information to suit the context of discuss and ability of the students. In the view of Olaitan and Mama (2001), this implies that senior secondary school students graduate from school without acquiring the basic competencies that will enable them to fix themselves into the world of work of agriculture and to make a living. Teachers of agricultural science also impart information in agriculture to students in agricultural science by not utilizing the right facilities to be used for skill development while preparing students towards gainful employment in the future. A face to face interaction with teachers of agricultural science in some secondary schools also show that teachers do not possess these professional competencies in agriculture. They are expected to imbibe into students the skills, knowledge and attitude they require to be able to be gainfully employed after they leave school. To teach agricultural science successfully towards achieving the set out objectives of the subject matter, teachers as well as beginning teachers need improvement in their professional competencies. There have been no studies dealing with professional competencies needed by agriculture teachers in Imo state.

Agriculture teachers need training at both the pre-service and in-service levels. This study would help provide Information regarding different competencies needed by teachers and would help universities in the state design agriculture teacher preparation curricula. Such information is also needed for arranging in-service training programs.

STATEMENT OF PROBLEM

In Imo State, lack of professionally trained manpower in agricultural education is one of the major problems facing the agricultural development. Because of uneducated and unskilled

manpower, traditional methods are still used in agricultural activities. This gap can be bridged by making strong the formal and informal agricultural education programs. Secondary school agricultural programs do not just serve to prepare students for higher agricultural education, but should also help equip students with necessary knowledge and skills to enter into agricultural enterprise. Santo (2004) believed that keeping in view the facts and figures, vocational education is important for those who are not able to pursue a college education. According to the author, vocational education is essential in this regard. The author was of the opinion that vocational education is essential to the educational process at the secondary level. At its best, it offers students an important pathway to educational, economic and civic competence. When it is less than it should be, it must be improved, not abandoned, for the potential is there to offer to the young people who need to enter the work force, or who do not thrive under an academic approach to learning. It is, therefore, a necessity to strengthen the agricultural program at the middle and high school level, which is a priority of the Nigerian government.

Okatahi and Welton (2005) pointed that of all aspects of agricultural education and training, the teacher is the most important. Without good teachers, competent in their work and possessing those qualities which enable them to inspire and develop the latent capacities of their students, agricultural education as a whole cannot function effectively. This statement is as valid today as it was when it was initially stated and is relevant to agricultural education. The lack of these competent professionals handling the agricultural education sector in the State has hampered the production of competent agricultural graduates. There seem to be a gap between fresh agricultural educators and the actual competencies required for teaching agriculture, this is evidenced by the fact that young secondary school graduates couldn't demonstrate the skills and have shown little or no interest in embarking into agriculture as a means of sustainable income generation. This study therefore tends to bridge this gap by identifying the professional competencies needed by beginning teacher educators in agricultural education.

PURPOSE OF THE STUDY

The purpose of this study was to identify the professional competencies needed by beginning teacher educators in agricultural education for effective job performance in Imo State. Specifically the study seeks to identify professional competencies needed by beginning teacher educators;

1. in planning of instruction,
2. in implementing instruction,
3. in evaluating instruction and
4. their professional role and development

RESEARCH QUESTIONS

The following research questions were answered for the study

1. What are the professional competencies needed by beginning teacher educators in planning for instructions in agricultural education?
2. What are the professional competencies needed by beginning teacher educators in implementing instructions in agricultural education?
3. What are the professional competencies needed by beginning teacher educator in evaluating instructions in agricultural education?

4. What are the professional competencies needed by beginning teacher educators in their professional roles and developments in agricultural education?

METHODOLOGY

Descriptive survey research design was adopted for this study. The study was carried out in Imo state using a population of 50 lecturers in agriculture education department from 2 tertiary institutions in Imo state, Imo state university and Alvan Ikoku College of education. The population was manageable and therefore the entire population constituted the sample for the study. A thirty-six (36) items structured questionnaire developed from the literature reviewed was used for data collection. The questionnaire was divided into two categories of needed and performance. The needed category was assigned a four point response option of highly needed (HN), averagely needed (AN), slightly needed (SN) and not needed (NN), with a corresponding value of 4,3,2,1 respectively. The performance category was assigned a four point response option of high performance (HP), average performance (AP), low performance (LP) and no performance (NP), also with a corresponding value of 4, 3, 2, and 1 respectively. 3 experts validated the instruments; three of them were from the Department of agricultural Education Imo state university. Their suggestions were used to improve upon the final version of the questionnaire which yielded 36 out of 53 items. Cronbach alpha reliability method was adopted for determining the internal consistency of the instruments. A reliability coefficient of .88 was obtained, this means that the instrument was reliable. 36 copies of the questionnaire were administered to the respondents, through the help of 3 research assistants who were familiar with the area and were trained prior to their assignment. All the 36 copies of the questionnaire were retrieved after an interval of one week and analysed using weighted mean and Improvement Need Index (INI) to answer the research questions. To determine the performance gap of teachers of agricultural science, the following steps were taken.

1. The weighted mean of each item under the needed category XN was calculated.
2. The weighted mean of each item under the performance category XP was also calculated.
3. The difference between the two weighted means for each item (XN-XP) was determined.
 - Where the difference was zero (0) for each item, there was no need for competency improvement because the level at which the item was needed as indicated by the weighted mean was equal to the level at which the teachers perform that particular competency.
 - Where the difference was positive (+) for any item, there was need for competency because the level at which that item was needed was higher than the level at which the teachers perform the competency item.
 - Where the difference was negative (-) for any item there was no need for competency improvement because the level at which the competency item was needed was lower than the level at which the teachers perform the competency item, (Olaitan and Ndomi 2000).

RESULTS AND FINDINGS

The results of the study were obtained from the research questions answered, as shown below:

Research Question 1

What are the professional competencies needed by beginning teacher educators in instructional planning for effective job performance in agricultural education?

Table 1: Performance Gap Analysis of Mean Ratings of the Responses of Teachers on the Professional Competencies in instructional Planning.

S/N	Item Statement	XN	XP	(XN-XP)	Remarks
1.	Identify the topic to be taught during instruction	3.82	2.40	1.42	IN
2.	Determine the objective of the topic of instruction	3.48	2.01	1.47	IN
3.	Identify the materials to be use in the instruction	3.39	3.03	0.36	IN
4.	Select relevant materials for instruction	3.00	2.33	1.77	IN
5.	Develop your lesson	2.99	2.45	0.54	IN
6.	Determine the method of instruction	3.36	2.10	1.26	IN
7.	Determine instructional evaluation strategies	3.11	2.60	1.51	IN
8.	Identify records to keep on instruction and evaluation	3.86	2.14	1.72	IN

IN=improvement needed, XN= mean for needed, XP=mean for performance

The data in table one show that the performance gap values of all the eight (8) items ranged from 0.36 – 1.77 and were positive. This performance gap values also reveals that the beginning teacher educators of agricultural education needed competency improvement in all the eight professional competency items in instructional planning for effective job performance.

Research Question 2

What are the professional competencies needed by beginning teacher educators in instructional implementation for effective job performance in agricultural education.

Table 2: Performance Gap Analysis of Mean Ratings of the Responses on the Professional Competencies in Instructional Implementation.

S/N	Item Statement	XN	XP	(XN-XP)	Remarks
1.	Arrange the materials for the lesson in order of use	3.14	2.61	1.53	IN
2.	Introduce the objective of the lesson to the student	3.23	3.00	0.23	IN
3.	Determine students entry behaviour	3.11	2.60	0.51	IN
4.	Introduce the lesson	3.98	3.92	0.06	IN
5.	Deliver the lesson content step by step with appropriate method	3.11	2.20	0.91	IN
6.	Get student involved through activities	3.44	2.23	1.21	IN

7.	Use relevant materials at appropriate time	3.00	2.33	1.77	IN
8.	Organise practical as demanded by the topic either in groups or individually	3.24	2.84	0.40	IN
9.	Supervise students activities	3.36	2.14	1.22	IN
10.	Respond to students questions appropriately.	3.12	2.59	0.53	IN

IN=improvement needed, XN= mean for needed, XP=mean for performance

The data in table two revealed that the performance gap values of all the ten (10) items ranged from 0.06 – 1.77 and were positive. This performance gap values indicated that beginning teacher educators of agricultural education needed competency improvement in all the ten professional competency items in implementing instruction for effective job performance.

Research Question 3

What are the professional competencies needed by beginning teacher educators in instructional evaluation for effective job performance in agricultural education?

Table 3: Performance Gap Analysis of Mean Ratings of the Responses on the Professional Competencies in instructional Evaluation.

S/ N	Item Statement	XN	XP	(XN-XP)	Remarks
1.	Assess students understanding of Instructions	3.44	2.12	1.32	IN
2	Assess students mastery of competence	3.79	1.36	2.43	IN
3	Identify areas of improvement competency practice	3.83	2.17	1.66	IN
4	Determine quality output of student in an instruction	3.58	1.44	2.14	IN
5	Determine progressive growth or upliftment of students	3.23	2.79	0.44	IN
6	Keep students performance record	3.77	2.11	1.66	IN
7	Disseminate knowledge of result	2.98	2.01	0.97	IN

IN=improvement needed, XN= mean for needed, XP=mean for performance

The data in table three revealed that the performance gap values of all the seven (7) items ranged from 0.44 – 2.43 and were all positive. This performance gap values indicated that the teacher educators of agriculture needed competency improvement in all the seven professional competency items in instructional evaluating for effective job performance.

Research question 4

What are the professional competencies needed by beginning teacher educators in their professional roles and developments in agricultural education?

Table 4 Performance Gap Analysis of Mean Ratings of the Responses on the Competencies in professional role and development.

S/N	Item Statement	XN	XP	(XN-XP)	Remarks
1	Work effectively with department heads and/or other administrative personnel	3.88	2.75	1.13	IN
2	Acquire new occupational skills and information needed to keep pace with technological advancement in agriculture	3.78	2.70	1.08	IN
3	Is well organized; has excellent time management skills	3.82	1.62	2.20	IN
4	Maintain the ethical standards expected of a professional educator	3.68	2.72	0.96	IN
5	Exchange observational visits, innovations, and ideas with others in the profession	3.76	2.62	1.14	IN
6	Promote the attainment of the goals of the teaching profession	3.74	2.34	1.40	IN
7	Keep up-to-date through reading professional literature	3.68	2.50	1.18	IN
8	Use research findings regarding effectiveness of teaching methodology	3.70	2.60	1.10	IN
9	Identify current trends of the teaching profession	3.48	2.18	1.30	IN
10	Use the information contained in professional journals and literature in agricultural education	3.44	2.26	1.18	IN
11	Expand educational background and leadership potential by achieving advanced degrees	3.42	2.40	1.02	IN

*IN=improvement needed, XN= mean for needed, XP=mean for performance

The data in table three revealed that the performance gap values of all the seven (7) items ranged from 0.96 – 2.20 and were all positive. This performance gap values indicated that the teacher educators of agriculture needed competency improvement in all the eleven professional competency items in professional roles and development for effective job performance.

DISCUSSIONS OF FINDINGS

The results in table 1 (professional competencies needed by teacher educators in instructional planning) is in line with the findings of young (1990) as reviewed in the literature, he stated that an effective teacher must have the ability to plan and execute lessons, monitor students learning and behaviour, conduct interesting and focussed lesson based on the various teaching methods and maintain rapport with his students and peers.

The result in table 2 (professional competencies needed by professional teacher educators in instructional implementation) concurs with the submission of Richardson and Arundel (2009), here he noted that an effective teacher gives a variety of examples, properly plans lessons, is knowledgeable on the subject matter and students learning, complete preparations for his job and keep abreast of the changes in his work through professional improvement activities.

The result of the study in research question 3 is in keeping with Suydam (2003) who found that beginning teachers need competency improvement in assessing students

understanding of instructions, identifying areas of improvement competency practice, determining progressive growth or upliftment of students, keeping students' performance record, etc.

In Table 4, the result is also in line with the submissions of Luft and Thompson (1995), on professional roles and developments needed of a professional teacher, where he stated that an effective teacher should belong to professional teacher organisations, being self-confident and poised, have strong human relationship and personal attitudes. Producing effective agriculture teachers is the key to the long-term sustainability of agricultural education programs. Ineffective teachers are likely to become dissatisfied with teaching as a career and seek other employment opportunities (Bennett, Iverson, Rohs, Langone, & Edwards, 2002). The results of this study show that, to produce effective teachers the professional qualities identified in this study must either be taught to the students when they enter teacher education programs, or be developed.

CONCLUSION

Based on the findings of the study, it was concluded that beginning agricultural education teachers need professional competency in 36 items. (8 items in instructional planning, 10 items in instructional implementation, 7 items in instructional evaluation, 11 items in professional roles and development) The rejuvenation of the agricultural sector of any country is strongly connected to how strong the country's agricultural education programs are. Teachers of agricultural education can no longer be overlooked, as was the case over the years, so putting up a concise program for teacher educators for the training of future agricultural teachers is a step in the right direction if we are to produce work oriented graduates. One of the very important ways of training new teachers is through the pre-service teaching programs such as teaching practice.

Student teaching is a very important part of the pre-service teaching program. So selecting cooperating teachers, for these upcoming teachers should be done knowing the importance of the roles that awaits the student teachers, so only competent teachers should be made cooperating teachers to these student teachers. According to Edwards and Briers (2001), the characteristics of the cooperating teacher are important for the development of pre-service teachers. Selecting effective teachers to serve as cooperating teachers should aid teacher education program in developing effective teacher. Arguably, the professional competencies identified in this study are all what a teacher can teach.

RECOMMENDATION

Based on the results obtained from the analysis of the study, the researcher therefore recommends that:

1. Agriculture teacher education programs in the study area are evaluated to ensure that these competencies identified are included, as there could serve as a formula for developing effective agriculture teachers.
2. In-service agriculture teacher educators should be retrained based on the findings of this study and similar studies for the benefit of the next generation of agricultural teachers.
3. Pre-service evaluation programs should be organised to access the competency level of would be agricultural education teachers.

4. Additional coursework that emphasizes on the development of personal qualities be made available for pre-service teachers

REFERENCES

- Bennett, P.N., Iverson, M.J., Rohs, F.R., Langone, C.A., & Edwards, M.C. (2002). Job satisfaction of agriculture teachers in Georgia and selected variables indicating their risk of leaving the teaching profession. *Paper presented at the Southern Agricultural Education Research Conference*, Orlando, FL.
- Detwiler, W. L., and Shemick, J. K. (1979). A verification of industrial education teacher competencies by in-service vocational industrial education teachers and art teachers from the central region of Pennsylvania. *Vocational Technical Education Research Report*, Vol. 17, 1
- Encarta, (2009). Microsoft ® students 2009 DVD. Redmond W. A. Microsoft Cooperation 2008 Microsoft ® Encarta 2009.
- Foster, B.B. & Finley, E. (1995). The relationship of teacher knowledge and personal development of human relation skills in agricultural education. Paper presented at the Southern Agricultural Education Research Meeting. Wilmington, NC
- Fruehling, D. L. (1981). Critical ingredient for economic development. *Vocational Education*, 56 (4), 27-30.
- Hornby, (2006). *Oxford Advanced Dictionary* University Press. New York
- International Labour Organization, (2003). Inter – America Research and Documentation Centre. Learner, M (2008) learn the net (www.learnnet.com). Retrieved 01.03.18
- Luft, V.D. & Thompson, G.W. (1995). Factoring contributing to the effectiveness of agricultural education teachers: What students say. *The Agricultural Education Magazine*, 68(3), 23- 24.
- McLean, R.C. & Camp, W.G. (2000). An examination of selected pre-service agricultural teacher education programs in the United States. *Journal of Agricultural Education*, 41(2), 25-35.
- Miller, W.W., Kahler, A.A., & Rheault, K. (2009). Profile of the effective vocational agriculture teacher. *Journal of Agricultural Education*, 30(2), 33-40
- Muhammad U. M. (1991). Professional competencies needed by agricultural teachers in Hyderabad Division, Sindh, Pakistan.
- Muir-Leresche K, Scull-Carvalho S (2006). Improving approaches for effective teaching and learning: tertiary agricultural education. Nairobi: World Agroforestry Centre, p. 64.
- Obanewa, O. (ed) (1994) *An Introduction to the Teaching Profession in Nigeria*. Institute of Education, Edo State University
- Olaitan, S. O. & Mama R. O. (2001) *Principal and Practice of School Farm Management* Owerri – Nigeria. Cape Publishers
- Olaintan, S. O., Ali A., Eyo E. O. & Sowande K. G. (2000) *Research Skills in Education and Social Science*, Owerri Cape Publishers International Ltd
- Olaitan S. O. and Ndomi B. M. (2000) *Vocametrics: A high-tech Problem Solving Quantitative Text with Computer Skills*. Cape Publishers International Limited.
- Okatahi, S. S. and Welton, R. P. (1985)= Professional competencies needed by agricultural college teachers of Northern state in Nigeria. *Journal of American Association of Teacher Educators in Agriculture*, 26 (2), 24-30.

- Phipps, L.J. & Osborne, E.W. (1988). Handbook on agricultural education in public schools (5th ed.). Danville, IL: The Interstate.
- Richardson, A.G. & Arundell, A. (2009) Characteristics of the effective teacher as perceived by pupils and teachers: A Caribbean case study. (ERIC Document Reproduction Service No. ED 311 013).
- Santo, G. B. (1984). . Vocational Education implementation process. *Journal of Vocational education, Editorial*, 59 (7), 25.
- Suydam, M. (2003). Teaching effectiveness. *Arithmetic Teacher*, 31(2), 3.
- Young, M. (1990). Characteristics of high potential and at-risk teachers. *Action in Teacher Education*. 11(4),b 35-39.

Effects of Instructional Materials on the Teaching and Learning of Social Studies in Secondary Schools in Aba South Local Government Area of Abia State

**Okechukwu Ijeoma Peace¹,
Ikewete Valentino Ikechukwu²,
and Doris Chukwu³**

¹ & ²Teacher Education, National Institute for
Nigerian Languages Aba Abia State

³Department of Education, Administrative
Planning, Michael Okpara University of
Agriculture, Umudike, Abia State

Abstract: This study investigated the effect of instructional materials on the teaching and learning of social studies in secondary schools in Aba south Local Government Area of Abia State. The research was guided with three purposes, three research questions and hypothesis. Survey design was adopted and both students and teachers constituted the population for study. A sample of hundred subjects w'as drawn from five schools and was administered questionnaires. Data collected was analyzed using simple percentage (%) for research question and chi square for hypothesis. However, the three hypothesis were tested at 0.05 level of significance and were all rejected. The study revealed that selection of relevant instructional materials, availability and ability of the teacher to improve all had significant relationship with the teaching and learning of social studies in Aba South local Government Area. The research recommends among others that government and school heads should ensure the provision of instructional materials in secondary schools.

INTRODUCTION

Learning and teaching is the concern of trained teachers. Though learning is a complex process, it can however, be defined as a change in disposition, a relatively permanent change in behavior overtime and this is brought about by experience. Learning can occur as a result of newly acquired skill, knowledge, perception, facts, principles, new information at hand etc. (Adeyanju, 1997) Learning can be reinforced with instructional materials of different variety because they stimulate, motivate and as well as arrest learners' attention for a while during the instruction process. Instructional materials are learning aids and devices through which teaching and learning are done in schools. According to Akamobi, (1998) instructional materials are those materials used in classroom or workshops for instruction or demonstration purpose by students and teachers. Chauha (1973) saw them as actual equipment used as "hands on" process by learners in order to develop the degree

of skills sought by the course of requirement. Examples of instructional materials include aids, audio aids, audio-visual aids, real object and many others. The visual aids in form of wall charts illustrated picture, pictorial materials, textbooks etc. thus audio instructional materials refer to those that make use of the sense of hearing only like the radio, audio tape recorder etc. an audio visual instructional material therefore is a combination of devices which appeals to the sense of both hearing and seeing such as television, motion pictures and computers. From the above definitions of instructional materials, we may gather that social studies as an area of education deals with instructional problems and solutions through the use of various visual, audio and audio-visual materials and equipment. There is the problem of inadequate preparation of teachers to carry out reading instruction (Bello, 1980). This inadequacy translates in poor reading performance in social studies and by implication other subject areas. Students in our various secondary schools equally lack the basic textbooks and other important materials that will support them in the learning of social studies at that level. Teaching social studies without relevant instructional materials leads to poor performance in other subjects. Instructional materials facilitate teaching and learning activities and consequently, the attainment of the lesson objectives. However, this depends on the adequacy and appropriateness of materials selected. This in effect, means that learning resources are not selected haphazardly (Iiya, 1993). Indeed instructional materials to be used should be carefully selected by the teachers. Brunner, (1961) in Mustapha (2005) also emphasized that oral reports require visual aids and improvisation. Improvisation is the art of providing the alternative or next to real thing when the real thing is not available or difficult to come by. It is therefore important that teachers of social studies use teaching aids or improvise to make learning easy, enjoyable and permanent. They is therefore, great need for the teachers of social studies who want to be effective at their work to be able to use all available instructional materials as well as improvise where they are not readily available. The obvious facts remains that people remember those they have seen, touched and even played with. The primary task of teaching is to facilitate effective learning and understanding of the content materials (shoji, 2005). Instructional materials which appeal to all learners' understanding of the language phenomena should be encouraged for use in our schools.

STATEMENT OF PROBLEM

For quite some times now, the teaching of social studies has suffered in the hands of unresourceful and un-motivated teachers, especially at the secondary school level. Many teachers at this level feel that social studies lesson does not necessarily need to be accompanied by the uses of instructional materials. There has been general outcry of poor performance of learners in social studies in secondary school in the state. This poor performance stems from the mere fact that there are inadequate instructional materials or resources that will facilitate the teaching of the basic concept of social studies. Jiya, (1998), and Kojo (2006) have noted the above mentioned, The social studies learning therefore appear very abstract and difficult for the learners as they used their sense only. It has been observed the social studies teachers find a very herculean task to accompany their lesson with relevant instructional materials such as audio aids, visual aids, visual and audio-visual aids. This is perhaps due to lack of textbooks or resourcefulness or lack of innovativeness or gross incompetents of the teachers. Whichever is the case, this lack of instructional

materials constitutes a great deal of problem for effective teaching and learning of the subject.

PURPOSE OF STUDY

This study focuses primarily on the effect of instructional materials on the teaching and learning of social studies in secondary schools in Aba South Local Government Area of Abia State. Specifically, the study set out to achieve the following objectives.

1. To determine the effect of instructional material on students performing in social studies.
2. To find out to what extent instructional materials are available in teaching and learning of social studies.
3. To determine the possible way of improving the instructional materials that will facilitate the teaching and learning of social studies.

RESEARCH QUESTIONS

1. To what extent would the use of instructional material influence the students' performance in the teaching and learning of social studies?
2. To what extent are instructional materials available to students of social studies in Aba South Local Government Area of Abia State?
3. To what extent do teachers improvise instructional materials to facilitate the teaching and learning of Social Studies?

HYPOTHESES

In order to give answers to the research questions, the following null hypothesis were formulated.

1. There is no significant relationship between the use of instructional materials and the overall performance of student in the teaching and learning of Social Studies.
2. There is no significant relationship between the availability of instructional materials and effective implementation in the teaching and learning of Social Studies.
3. There is no significant relationship between the teaching and learning of Social Studies where there are no improvised teaching aids.

SIGNIFICANCE OF THE STUDY

The essence of any research endeavor is an addition to the academic satisfaction, to find solution to the numerous problems confronting man in his attempt to actualize himself in the context of the society. Instructional materials stimulate critical and creative thinking in learners which is an important cornerstone of the Social Studies philosophy. They also help the learners to develop the skill of analytical enquiry, motivate to produce their own materials and provide experiences that are not easily obtained within the classroom environment. The research will be of help to the younger generation researchers who wish

to conduct similar research in the field. It will serve as a material to curriculum planners, educational policy makers, writers of social studies textbook and teachers of social studies in various secondary schools. Finally, this research will be useful to government as findings of this study as well as recommendations could be used by the ministry of education as a framework to organize seminars and workshop to train secondary school teachers on how to teach social studies effectively.

SCOPE OF THE STUDY

The study confined to select secondary schools in Aba South Local Government Areas of Abia state. Specifically, the following areas will cover concept of instructional materials, types, importance, fundamentals, principles guiding the selection, utilization, teachers, perceptions regarding the provision of instructional materials and improvisation.

RESEARCH DESIGN

Ada (1994) defines research as a plan, structure and strategy of investigation in order to obtain answers to research question and control variances. The research design used for the purpose of this study is the survey method. This is because the researcher intends to find out the effects of instructional materials used in the teaching of social studies in secondary school in Aba South Local Government Area of Abia State and it is his intention to discover the relative incidence and interrelations of Sociological and psychological variables.

AREA OF STUDY

The study was carried out in Aba South Local Government Area of Abia State. The secondary schools selected for this study are within Aba South metropolis.

POPULATION OF THE STUDY

The population of the study consists of the teachers and students teaching and learning social studies in some selected schools in Aba South Local Government Area of Abia State. This is so because there are a number of secondary schools in Aba South Local Government but just a few were randomly selected.

SAMPLE AND SAMPLING

For this study, the sample size consists of 100 respondents comprising of 25 teachers and 75 students teaching and learning social studies from (5) selected secondary schools in Aba South Local Government Area of Abia State. Among all the schools in Aba South Local Government Area, five (5) were randomly selected and are listed below:

METHOD OF DATA COLLECTION

The method used for gathering of data for this study is the survey research method. It involves the use of questionnaires to obtain information from large sample of respondents selected from a certain population; teachers and students of selected Secondary School in Aba South Local Government Area of Abia State.

METHOD OF DATA ANALYSIS

The main analysis technique employed is the chi-square, it is used to test the hypotheses while simple percentage is used for the research questions.

RESULTS AND DISCUSSION

Research question 1: To what extend would the use of instructional materials influence a students' performance in the teaching and learning of social studies.

Table 1: Influence of instructional materials on student's performance on the teaching and learning of social studies

ITEM	TEACHER'S RESPONSE	PERCENTAGE	STUDENTS' RESPONSE	PERCENTAGE	TOTAL
SA	10	40	2	3	12
A	9	36	40	53	49
D	4	16	30	40	34
SD	2	8	3	4	5
TOTAL	25	100	75	100	100

From the result of Table 1, 40% teachers and 3% of students strongly agree that instructional materials have significant influence on the teaching and learning of social studies, 36% and 63% also agree, 16% and 45% disagree, while 8% and 4% strongly disagree. From the result the high percentage of both teachers and students indicate positive responses, hence instructional materials have significant influence on teaching and learning of social studies in Aba South Local Government Area of Abia state.

Research question 2: to what extends are instructional materials available to students of social studies in Aba South local government area Abia state.

Table 2: Availability of instructional materials in Aba South Local Government Area

ITEM	TEACHER'S RESPONSE	PERCENTAGE	STUDENTS' RESPONSE	PERCENTAGE	TOTAL
SA	2	8	6	8	7
A	1	4	13	17	14
D	5	20	21	28	26
SD	17	68	35	47	52
TOTAL	25	100	75	100	100

The result in table 2 reveals that 8% of students strongly agree that instructional materials are available in oju schools, 4% and 17% respectively also agree, 5% and 28% disagree while 68% and 47% strongly disagree with the research question. Hence the highest percentage disagree and indicate negative responses, it means instructional materials are not found in most secondary schools in Aba South.

Research question 3: to what extend do teachers improvise instructional materials to facilitate the teaching and learning of social studies?

Table 3. Improvisation of instructional materials

ITEM	TEACHER'S RESPONSE	PERCENTAGE	STUDENTS' RESPONSE	PERCENTAGE	TOTAL
SA	10	40	2	3	12
A	2	8	3	4	5
D	4	16	30	40	34
SD	9	36	40	53	49
TOTAL	25	100	75	100	100

The result from table 3 shows that 40% of teachers and 3% of students strongly agree that teachers improvise instructional materials to facilitate the teaching and learning of social studies, 8% and 48% also agree, 16% and 40% disagree while 36% and 53% strongly disagree with it. From the analysis, teachers show positive response while students show negative response. It may be that teachers want to protect their image but since students are at the receiving end, it is concluded that teachers do not necessarily improvise instructional materials to facilitate the teaching and learning of social studies.

TESTING OF HYPOTHESES

HYPOTHESIS 1: There is no significant relationship between the use of instructional materials and the overall performance of student in the teaching and learning of social studies.

Table 4: Chi-square test of relationship between the use of instructional and students performance in the teaching and learning of social studies

Cal X ²	Critical value	Df	Level Significance	of Decision
11.1	7.82	3	0.05	Rejected

Result from table 4 reveal that the calculated chi-square of 11.1 is greater than the critical value of 7.82 with 3 degree of freedom at 0.05 level of significance. Hence the null hypothesis which states that there is no significant relationship between the use of instructional material at the overall performance of students in the teaching and learning of social studies is rejected. Meaning that the use of instructional materials has significant relationship between the overall performances of the students in the teaching and learning of Social Studies.

Hypothesis 2: there is no significant relationship between availability of instructional materials and effective implementation in the teaching and learning of social studies.

Table 5. Chi-square test of relationship between the availability of instructional materials and effective teaching and learning of social studies

Cal X ²	Critical value	Df	Level of Significance	Decision
11.1	7.82	3	0.05	Rejected

Result from table 5 shows that the calculated chi-square value of 11.5 is greater than the critical value of 7.82 with 3 degree of freedom at 0.05 level of significant relationship between the availability of instructional materials and effective teaching and learning of social studies is rejected. Meaning that availability of instruction materials has significant relationship with effective teaching and learning of social studies.

Hypothesis: 3. there is no significant relationship in the teaching aids improvised by. the teacher.

Cal X ²	Critical value	Df	Level of Significance	Decision
13.4	7.82	3	0.05	Rejected

Result from Table 8 shows that the calculated chi-square of 13.4 is greater than the critical values of 7.82 with 3 degree of freedom at 0.05 level of significant. Hence the null-hypothesis which states that there is no significant relationship in the teaching and learning of social studies where there are no teaching aids improvised is rejected, meaning that there is significant relationship in the learning of social studies when teachers improvise where original ones are not available.

DISCUSSION OF FINDINGS

Based on the data presented, analyzed and interpreted, the researcher is able to come out with the followings findings. The first analysis reveals that the use of instructional materials has significant relationship between the overall performance of students in the teaching and learning of social studies'. This was evident because all the answers from the items indicate a negative response hence the highest percentage agrees that instructional materials affect students' performance. In testing the hypothesis, the chi-square calculated was greater than the chisquare critical, the null-hypothesis was rejected and alternative accepted. This result support the view of iiya (1993) which states that instructional materials increase the retention rate of learners, which, therefore makes learning more permanent. The second finding shows that the selection of relevant materials and their usage have significant relationship with the teaching and learning of social studies. The analysis from the research questions agrees with this response. Also the chi-square calculated was greater than the critical chi-square at 0.05 level of significance. These findings also agree with the views of Jiya (1993), which say the attainment of lesson objectives and the facilitation of teaching and learning process highly depend on the adequacy and appropriateness of instructional materials selected by the teacher. This however entails that instructional materials should be carefully selected by the teacher. The third findings reveal that the availability of instructional materials has significant relationship with effective teaching and learning of social studies. This is so because; the analysis from the research question indicates positive response. The chi-square calculated is also greater than the critical value; hence the null-hypothesis was rejected. The fourth and the last finding reveal that there is a significant relationship in the teaching and

learning of social studies when teachers improvise where original ones are not available. The analysis from the research agrees with this. Also the

calculated chi-square was higher than the critical value at 0.05 level of significance, hence the null hypothesis was rejected. This finding supports the view of Kole (2006), which says the involvement of teachers' learners in improvising material gives students and teachers the opportunity to concretize their creativity, resourcefulness and imaginative skills.

CONCLUSION

It is generally agreed that instructional material and their usage have profound influence on student academic performance and achievement. The research however set to find out the effect of instructional material on teaching and learning of social studies in Aba South Local Government Area of Abia state. From the result of the analysis, it is therefore concluded that the selection of relevant instructional material, available and the ability of teachers to improvise all had significant relationship between teaching and learning of social studies. It is in this regard that the researcher draws the attention of the teachers, proprietors, principals as well as government to take priority in the provision of instructional materials since they boost student performances.

RECOMMENDATIONS

Based on the finding of the study, the following recommendations have been made;

1. The government and the school heads should ensure that instructional materials are available in schools
2. In selecting instructional materials, the teachers should ensure that the material selected is commensurate to the topic and age level of the students.
3. Secondary schools administrators should encourage classroom teachers to improvise and use instructional materials in secondary schools.
4. Workshops, conferences, seminars, etc. should be organized on how to use instructional materials in secondary schools.

REFERENCES

- Adeyanju, i.L 1997. Production of chip instructional materials for the 6-3-3-4 system of education with emphasis on the first six years. Trend and Research in Educational Technology, pp.
- Akambi, K. 1988. Selection, utilization and evaluation of instruction. In I. Agun & I. Irnogie (Eds) Fundamental of Educational Technology, Ibadan: Y-Books, pp. 91-92.
- Bello, J.Y. 1980. Basic principles of teaching: chichester, John Wiley and Sons limited.
- Brunner, J'.S. 1961. "The act of discovery" Haverd educational Review.
- Chauha, S.S. 1973. Advance Educational psychology. New Delhi:UBS publisher distributors PVT Ltd.
- Jiya, R.R 1993. The use of communicative language teaching Materials for junior secondary

- schools in mina, Niger State. M.ed. (TESL) Thesis, Zaria, Almadu Bello University.
- Kolo, C.M.' 2006. Development and management of school Resources. Port-Harcourt: graphic publishers.
- Mustapha, F.E 2002. media method in instructions: in education technology approach. Kano: Rainbow Royale
- Slain, G. 1980. Educational psychology in a changing world. London: George Allen and Unwin.

Predicting the Intention to Utilize E-learning System: Perceived Usefulness, Perceived Ease of Use, Perceived Enjoyment, Facilitating Conditions, Subjective Norm and Attitude towards Use Based on Technology Acceptance Model: Perspective of University Lecturers in the Northeastern Nigeria

**Kabu Madu¹ and Ahmed Fauzi
Bin Mohammed Ayub²**

¹Department of Technical Education.
Ramat Polytechnic Maiduguri, Borno
State Nigeria.

²Department of Foundation Education,
Faculty of Education Studies, Universiti
Putra Malaysia.

gadzamamadukabu@gmail.com

Abstract: Learning technology is the use of technology to support the learning process – widely known as e-learning. In higher education, this term refers to educational web sites such as online courses. The acceptance of technology in the learning process depends on some crucial factors. This research paper investigated the relationship among several variables that are related to educational technology performance based on the technology acceptance model (TAM). The respondents were 230 Academic staff who are lecturers from six Universities in North-eastern Nigeria. Descriptive, SPSS and Structural Equation Modeling (SEM) were conducted to date. The results of the investigation showed that there was a positive relationship among variables correlated with the others. The SEM resulted that three of independent variables, had a significant positive effect on the intention of use and two non-significant.

Keywords: Perceived usefulness, perceived ease of use, Perceived Enjoyment, Facilitating Conditions, Subjective Norm and Attitude towards use.

1. Introduction

E-learning system is the use of technology mediated process to support the learning style widely in the learning environment. In university education, this term refers to educational net locations such as accessible online progressions. Nevertheless, handling online courses in terms of system development, approachable policy for users, and end-users' involvement are predictable as the most critical factors among lecturer's fulfilment and utilization. Moreover, according to AlHamad, (2020); Siron, Wibowo and Narmaditya (2020); Galib, Hammou and Steiger (2018), technology is not just a tool for delivering

information or conveying knowledge to students but also enhances learning process (Siron, Wibowo, & Narmaditya, (2020). Indicators of well-informed and confident lecturers, using e-learning system upsurges desired learning upshots, and can support learners in building understanding. Therefore, E-learning can be considered as an extensive arrangement of uses and procedures which integrate electronic learning, computer (PC) based knowledge, virtual learning environments, and computerized collaborations. Quite a bit of this is conveyed using the web, intranet/extranet (LAN/WAN), sound and tape, satellite communication, intelligent TV, and CD-ROM (Aparicio, *et. al.*, 2016). Arkorful *et al.* (2015) embrace E-learning and considers pre-packaging of crucial data so that every scholar will benefit from a personal access. This approach enables academic staff to focus on high level exercises at the delivery stage. As indicated by Ocholla *et al.* (2013) concur with caution that utilization of electronic data assets can be once in a while be faced with acts of plagiarism, specifically reference to written falsification of data through reordering. However, the success of the E-learning system will certainly be determined by lecturers' intense to work and utilize the system. Researchers have conceded out numerous studies in E-learning based on Technology Acceptance Model (TAM) and have functioned on the expansion of TAM model with other variables in diverse nations and settings (Hanif *et al.*, 2018, Sylvia & Abdurachman, 2018, Al-Adwan & Smedley, 2013).

For instance, according to Dias, *et al.*, (2018), in 2013, about 82% of European higher education institutions were accessible via online learning courses using technology, as a result of charitable increase to an educational support where different University institutions coexist with difference of teaching methods and pedagogical models (Gaebel, *et. al.*, 2014). Innovations have a vital role in the advancement of quality education by providing a different approach to improve information and knowledge content (Al Kurdi, Alshurideh & Salloum, 2020). Interactive and communicative technology may support the development of skills in students (called "21st Century Skills") such as decisive thinking and problem solving, communication, teamwork, and inventiveness as well as provides lecturers' and students' ICT skills (Chan and Holosko, 2016). Therefore, integrating technology into the classroom by lecturers provides them with the diversity of opportunities that help to guide learners to the greater idea and expand useful mutual projects amongst them (Al Kurdi, Alshurideh & Salloum, 2020 and Saadé, *et. al.*, 2012; Smaldino, 2011).

However, an important position that needs to be reached is the point of expansion, where the innovation is utilized everywhere. Thus, to create innovative perceptive in teaching (e.g., e-learning, studies management structure and online-learning) which were not known hitherto is essential (Folden, 2012; Wagner, *et. al.*, 2014). So far, universities in Nigeria has not been doing bad technologically speaking, they have succeeded in covering some miles in becoming technologically richer than they were before (Kuliya, & Usman, 2020). This is justified by looking at the rate with which people make use of e-learning in Nigeria in recent years. It is now obvious that it will just be a matter of time they will catch up with the educational standards set up by the developed countries, if the ministry of education will put it into consideration (Ifeoma, 2013). During the one of the convocation the Open Universities in Nigeria on 18th January 2014, the then Minister of Education, Barr. Nyesome Wike showed the concern of the ministry of education for every Nigerian

citizen to be educated by saying that ‘if everyone in Nigeria is educated, the fight against corruption will be easier’ and this I believe e-learning can help us to achieve in Nigeria (Thomas, Adeyanju, Popoola, & Odewale, 2017). This necessitates the lecturer’s policymakers and curriculum planners to put together new innovation with curriculum for more advancement in technology integration into education.

Therefore, investigating the lecturers’ perception towards to E-learning system (perceived usefulness and perceives ease of use) provided by the university as well as their efficacy and readiness towards their intention to utilize the e-learning system is the main objective of this study. Additionally, this study addresses the following research questions.

What are the levels of study constructs with respects to lecturers perception about e-learning system utilization?

Is there any predictive relationship between independents factors and dependent factor?

2. Theoretical Approach

To discourse why users accept or reject an IT system and how user acceptance is influenced by other external factors such as a lecturer's characteristic use of computer in E-learning, Davis (1989) developed technology acceptance model (TAM) that was used to achieve this purpose (Teo, Huang & Hoi, 2017). Hence, according to Davis, Bagozzi, and Warshaw, (1989) this helps the system engineers, designers, and end-users to get enhanced user acceptance of the system in the setting over the plan selections of the system.

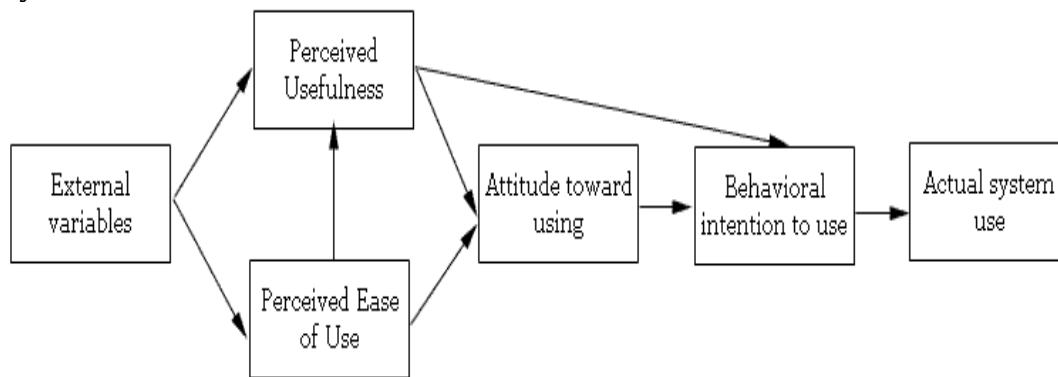


Figure 1: Technology Acceptance Model (TAM) by (Davis, 1989)

TAM is one of the most very much utilized and referred to (Alemi, 2018) adjustments of TRA and was first created by Davis in 1986 to explicitly clarify computer utilization behavior and model user acceptance of IS (Davis, Bagozzi, and Warshaw, 1989). Hat utilized TRA as a hypothetical reason for determining the temporal relationship linking two key convictions: perceived usefulness and perceived ease of use, and users’ attitudes, intentions and actual computer adoption behaviour (Davis, Bagozzi, and Warshaw, 1989). In this way, the two hypothetical segments "perceived helpfulness" and "perceived ease" are the establishment of the TAM model to decide a person's aim to utilize a framework, with the expectation to utilize filling in as an arbitrator of real framework use. In the model two factors affecting usage that is defined as perceived usefulness which is “the degree to

which a person believes that using a particular system would enhance his/her job. The Model contains vital variables of user motivation (i.e., perceived ease of use, perceived usefulness, and attitudes toward technology) and outcome variables (i.e., behavioral intentions, technology use). The variables of perceived usefulness (PU) and perceived ease of use (PEU) are considered crucial factors that directly or indirectly explain the consequences (NuriAbdalla, 2019). In investigating the factors that contribute to the utilization of E-learning among lecturers, we applied the extended TAM model in this study. In mandate for scholastic knowledge to be applied in adequate ways, lecturers are require to interact with that skill for curricular use. Other variables were significantly related to TAM vital factors. These variables showed the personal ability to accept the E-learning technology.

Similarly, Davis et al., (1989) in innovative TAM external constructs were not specific, this means that it accepts different mediating variables which include, perceived enjoyment, technology self-efficacy and facilitating conditions (Alharbi and Drew, 2014; Teo and Noyes, 2011). However, TAM established that the effects of external changes on BI is mediated by the two conducts and the system utilization, likewise, there are different component that may have direct influence on system utilization (Davis, 1989). As a matter of fact devoid of external variables it is not easy for researchers to get enough facts, in fussy situations (Venkatesh & Davis, 2000). In the last model, Davis et al. (1989) proscribed ATT utilizing, on the grounds that it does not mediate between, variably affected beliefs PU and PEU and BI to utilize. The last model considered BI as a mediating task to carry out in PU, PEU and actual system utilization (Davis, 1989). In fact, Tam original is very important in this study because the four constructs (PU, PEU, ATT, and BI) were considered imperative on the ground that Teo (2015) and Teo and Milutinovic (2015) conducted a study that found that contended that attitude has been established considerably to be influenced by both perceived usefulness and ease of use. Similarly, as indicated in TRA, point of view towards a conducts is considered by conducts intentions about expending of the conducts (Ajzen & Fishbein, 1980).

3. Method

3.1. Source of Data

Data was collected using a questionnaire survey at 6 universities in the North eastern Nigeria. The respondents were lecturers in the universities in the Faculty of Education and they might conduct their teaching in online, on-ground, or mixed mode.

3.2. Proposal Model

The study framework presented in the figure is proposed. The independent variables are perceived usefulness, perceived ease of use, perceived enjoyment facilitating conditions, subjective norm and attitude towards use. The dependent variable is the intention to use. The study was conducted with SEM analysis techniques.

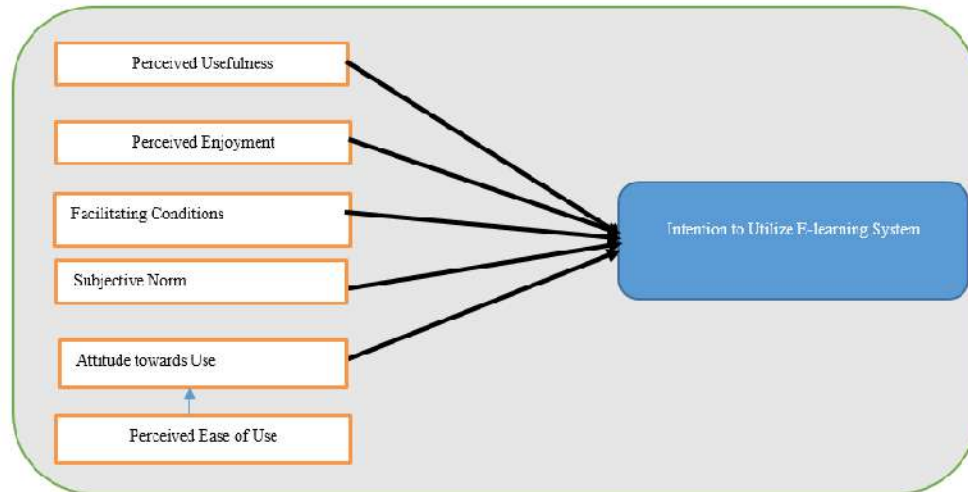


Figure 2: Model to be tested

4. Results

4.1. Reliability

Cronbach's alpha was used to evaluate the reliability of constructs. The alpha measured were Subjective Norm = .76, Perceived Enjoyment = .80, Facilitating Conditions = .79, Perceived Usefulness = .76, Perceived Ease of Use = .79, Attitude towards use = .84, Behavioural Intention = .82. These values are all more than the least of 0.6 requisite for constructs to be reliable. Table 1 shows the details

Table 1: Reliability

Variables	Number of Items	Cronbach's Alpha
Subjective Norm	6	.76
Perceived Enjoyment	6	.80
Facilitating Conditions	8	.79
Perceived Usefulness	7	.76
Perceived Ease of Use	9	.79
Attitude towards use	8	.84
Behavioural Intention	7	.82

4.2. Descriptive Statistics

Mean and standard deviations for all variables were determined as shown in table 2. The maximum mean 3.42 which is between a scale of 1 to 5, for Subjective Norm = 3.31, Perceived Enjoyment = 3.41, Facilitating Conditions = 3.12, Perceived Usefulness = 3.42,

Perceived Ease of Use = 3.23, Attitude towards use = 3.37, for dependent variable (Behavioural Intention = 3.29). This means that the whole lecturers indicated that were conversant to use e-learning system with having more positive attitude towards and perceived it enjoyable to utilize. Perceived usefulness and ease of use e-learning technology were moderately respectively which indicated lecturers perceived the university system to be useful and easy to use comprehensible. The last mean was facilitating conditions, that indicated university lecturers have little confident in the facilities provided to use the e-learning system. The result of the descriptive Statistics on table 2 shows the levels of perception of e-learning utilization among university lecturers.

Table 2: Descriptive Statistics

Levels								
Variables	Low		Moderate		High		Mean	SD
	Freq.	%	Freq.	%	Freq.	%		
PU	24	10.5	119	51.7	87	37.8	3.42	1.12
PEU	41	17.8	106	46.1	83	36.1	3.23	1.12
SN	15	6.5	160	69.6	55	23.9	3.31	1.01
FC	19	8.3	168	73.0	43	18.7	3.12	1.03
PE	14	6.1	128	55.7	88	38.3	3.41	1.02
ATT	28	12.2	85	37.0	117	50.9	3.37	1.09
BI	28	12.2	101	43.9	101	43.9	3.29	1.10

4.3. Predictive Relationship

To answer the second research question two, SEM analysis was used to assess the influence of independent variables on the dependent variable. Multicollinearity was checked that would cause a problem to contact the regression technique. If the variance inflation factors (VIFs) for the independent variables were greater than 10, the multicollinearity could unduly influence the results of the regression analysis as suggested by many researchers. The VIFs were less than 2 for all independent variables. The result of SEM regression analysis in table 4 showed a significant model at Sig-F=.000 at $P < .001$.

Table 3: Predictive relationship

	<i>B</i>	<i>S.E</i>	<i>C.R.</i>	<i>p</i>	<i>Hypothesis</i>
PE	.306	.075	4.076	***	Supported
FC	.198	.088	2.252	.024	Supported
SN	.150	.090	1.667	.016	Supported
PU	-.053	.079	-0.664	.057	Not supported
ATT	.383	.099	3.863	***	Supported
R-Square				.329	
Sig-F				.000	

* $p < .05$, ** $p < .01$

5. Discussion and Conclusion

In all lecturers perceived e-learning's usefulness more positively which have influenced their intent to use of e-learning and actual utilization. This result of responses may be seen by the fact that to adopting new technology is preferred than traditional (Venkatesh, et al., 2003). Furthermore, the analysis shows that lecturers from different universities, be it technology or science major, has significant effect on their view on the intent to utilization of e-learning, which validates the earlier theories. This means that lecturers from any of the North-eastern Nigerian universities value e-learning equally, regardless of their academic background or their teaching subject.

However, they indicated that they felt that today's technologies are overly complicated because less attention was paid on adequate facilities in the learning environment. Despite this they suggested that they must be seen to be receptive to technology in their jobs and for this reason an element of peer pressure may explain the lecturers' negative perception toward the intent to utilization of e-learning. It is suggested to have an equip system to overcome this problem of limited system use; most of the participants believe adequate equipment available in the system would be a motivating factor that North-eastern Nigeria should accept. In fact, useful and perceived enjoyed system and a positive attitudes in Nigerian universities will enhance mandatory use of e-learning system. Considering the most important measures that should be taken on board by the university to increase e-learning intent to utilization at the Nigerian universities.

Another analysis (regression analysis) was done to examine another relationship (predictive relationship) among the variables. The results revealed that perceived enjoyment, attitude towards use, facilitating conditions and subjective norm ($\beta = .306$, $P = .001$, $\beta = .383$, $P = .001$, $\beta = .198$, $P = .024$, $\beta = .150$, $P = .016$) respectively were found to be significant whereas the other two variables, perceived usefulness was not significant while attitude towards use plays a role of intermediary between behavioral intention to use e-learning utilization and perceived ease of use e-learning system among the university lecturers in Nigeria.. The intention of use can result from perceived enjoyable, subjective norm, facilitating conditions and positive attitude according to finding of this study. This means that university lecturer in Nigeria are more influenced by the enjoyment, effects of people around, availability of adequate facilities, easy to use and positive attitude towards using the system rather than of the usefulness of the system. The strong influence of these significant constructs indicates that university lecturers were more confident in utilizing e-learning technology (Sylvia & Abdurachman, 2018).

This indicates that lecturers accept a new information system which is crucial in shaping intent to utilization, enjoyably and positively than perceived usefulness. Hence, considering the attitude towards use influences the user intention the use of the information system seems important for utilization behavior (Davis et al., 1989; Calisir, et al., 2014; Ong, et al., 2004; Hwang, et. al., 2017). However, perceived usefulness has no more impact on lecturers which means usefulness of e-learning system is a normal issue and it has no lengthier undesirable influence on any person.

Information about the collaboration between, perceived enjoyments, subjective norm, facilitating conditions, perceived of usefulness, perceived ease of use and intention of using E-learning system is of interest to E-learning system engineers and makers in the universities in Nigeria. They can use these findings to enhance their understanding of what makes lecturers perform better while using E-learning system. To sum up, this study viewed that university lecturers would use the system if they find it to be enjoyable coupled with their positive attitudes of using technology in the E-learning environment.

Reference

- Ajzen, I., & Fishbein, M. Understanding attitudes and predicting social behaviour. *Englewood Cliffs NJ: 1980, Pren-tice Hall*.
- Al-Adwan, A., & Smedley, J. Exploring students' acceptance of e-learning using Technology Acceptance Model in Jordanian universities Amer Al-Adwan Applied Science University, Jordan. *International Journal of Education and Development Using Information and Communication Technology*, 2013, 9(2), 4-18.
- Alemi, A., Poole, B., Fischer, I., Dillon, J., Saurus, R. A., & Murphy, K. *An information-theoretic analysis of deep latent-variable models*. 2018.
- AlHamad, A. Q. M. (2020). Acceptance of E-learning among university students in UAE: A practical study. *International Journal of Electrical & Computer Engineering* (2088-8708), 10.
- Alharbi, S., & Drew, S. Using the technology acceptance model in understanding academics' behavioural intention to use learning management systems. *International Journal of Advanced Computer Science and Applications*, 2014, 5(1), 143-155.
- Al Kurdi, B., Alshurideh, M., & Salloum, S. A. (2020). Investigating a theoretical framework for e-learning technology acceptance. *International Journal of Electrical and Computer Engineering (IJECE)*, 10(6), 6484-6496.
- Aparicio, M., Bacao, F., & Oliveira, T. An e-learning theoretical framework. *Journal of Educational Technology & Society*, 2016. 19(1), 292-307.
- Arkorful, V., & Abaidoo, N. The role of e-learning, advantages and disadvantages of its adoption in higher education. *International Journal of Instructional Technology and Distance Learning*, 2015. 12(1), 29-42.
- Calisir, F., Altin Gumussoy, C., Bayraktaroglu, A. E., & Karaali, D. Predicting the intention to use a web-based learning system: Perceived content quality, anxiety, perceived system quality, image, and the technology acceptance model. *Human Factors and Ergonomics in Manufacturing & Service Industries*, 2014. 24(5), 515-531.
- Chan, C., & Holosko, M. J. A review of information and communication technology enhanced social work interventions. *Research on Social Work Practice*, 2016. 26(1), 88-100.
- Davis, F. D. Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology, *MIS Quarterly*, 1989. 13, pp. 319-340.
- Davis, F. D., Bagozzi, R. P., and Warshaw, P. R. User Acceptance of Computer Technology: A Comparison of Two Theoretical Models, *Management Science*, 1989. 35, pp. 982-1003.

- Dias, P., Aires, L., & Moreira, D. E-Learning Diversification in Higher Education: Conceptions of Participation. In *Climate Literacy and Innovations in Climate Change Education*, 2018. (pp. 291-306). Springer, Cham.
- Folden R. General Perspective in Learning Management Systems. In R. Babo & A. Azevedo (Eds.), *Higher Education Institutions and Learning Management Systems: Adoption and Standardization*, IGI Global. 2012. (pp 1-27).
- Gaebel, M., Kupriyanova, V., Morais, R., & Colucci, E. E-Learning in European Higher Education Institutions: Results of a Mapping Survey Conducted in October-December 2013. 2014. *European University Association*.
- Galib, M. H., Hammou, K. A., & Steiger, J. Predicting Consumer Behavior: An Extension of Technology Acceptance Model. *International Journal of Marketing Studies*, 2018. 10(3).
- Hanif, A., Jamal, F. Q., & Imran, M. Extending the Technology Acceptance Model for Use of eLearning Systems by Digital Learners. *IEEE Access*, 2018. 6, 73395-73404. <https://doi.org/10.1109/ACCESS.2018.2881384>
- Hwang, Y., Chung, J.-Y., Shin, D.-H., & Lee, Y. An empirical study on the integrative pre-implementation model of technology acceptance in a mandatory environment. *Behaviour & Information Technology*, 2017. 36(8), 861-874.
- Ifeoma, E. R., & Olusola Adu, E. The teachers and the use of ICT for professional development. 2013, Feb, In *International Conference on ICT for Africa*.
- Kuliya, M., & Usman, S. (2020). Perceptions of E-learning among undergraduates and academic staff of higher educational institutions in north-eastern Nigeria. *Education and Information Technologies*, 1-25.
- NuriAbdalla, S. A. Extend of TAM Model with Technology anxiety and Self-Efficacy to Accept Course websites at University Canada West. *International Journal of Information Technology and Language Studies*, 2019, 3(2).
- Ochola, J. E., Stachowiak, J. R., Achrazoglou, J. G., & Bills, D. B. Learning environments and rapidly evolving handheld technologies. 2013. *First Monday*, 18(4).
- Saadé, R. G., Morin, D., & Thomas, J. D. Critical thinking in E-learning environments. *Computers in Human Behavior*, 2012, 28(5), 1608-1617.
- Sánchez-Prieto, J. C., Fang, H., Teo, T., García-Peñalvo, F. J., & Olmos-Migueláñez, S. ICT acceptance among university teachers: 2018. *A Cross-Cultural comparison between China and Spain*.
- Siron, Y., Wibowo, A., & Narmaditya, B. S. (2020). Factors affecting the adoption of e-learning in Indonesia: Lesson from Covid-19. *Journal of Technology and Science Education*, 10(2), 282-295.
- Smaldino, J. New developments in classroom acoustics and amplification. *Audiology Today*, 2011. 23(1), 30-36.
- Sylvia, C., & Abdurachman, E. E-LEARNING ACCEPTANCE ANALYSIS USING TECHNOLOGY ACCEPTANCE MODEL (TAM) (CASE STUDY: STMIK MIKROSKIL). *Journal of Theoretical and Applied Information Technology*, 2018. 15, 19. Retrieved from www.jatit.org
- Teo, T. Comparing pre-service and in-service teachers' acceptance of technology: Assessment of measurement invariance and latent mean differences. *Computers & Education*, 2015, 83, 22-31.
- Teo, T., Huang, F., & Hoi, C. K. W. Explicating the influences that explain intention to use technology among English teachers in china. *Interactive Learning Environments. Advance online publication*. . 2017, doi:10.1080/10494820.2017.1341940

- Teo, T., Milutinović, V., & Zhou, M. Modelling Serbian pre-service teachers' attitudes towards computer use: A SEM and MIMIC approach. *Computers & Education*, 2016, 94, 77-88.
- Teo, T., & Noyes, J. An assessment of the influence of perceived enjoyment and attitude on the intention to use technology among pre-service teachers: A structural equation modeling approach. *Computers & Education*, 2011. 57(2), 1645-1653.
- Thomas, O., Adeyanju, J., Popoola, B. G., & Odewale, T. Competency Training Needs of Lecturers for Effective e-Learning Instructional Delivery in Teacher Education Programmes. In ICEL 2017-Proceedings of the 12th International Conference on e-Learning, 2017, June (p. 213). Academic Conferences and publishing limited.
- Venkatesh, V. . Davis, F.D. A theoretical extension of the technology acceptance model: four longitudinal field studies, *Management Science* 2000. 46 (2) 186–204.
- Venkatesh, V., Davis, M. M., & Davis, F. D. User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 2003. 27(3), 425-478.
- Wagner, A., Barbosa, J. L. V., & Barbosa, D. N. F. A model for profile management applied to ubiquitous learning environments. *Expert Systems with Applications*, 2014. 41(4), 2023-2034.

Advocating Security Education Curriculum for Pre-basic Pupils

Dr. Vera Idaresit Akpan

Department of Adult and Continuing
Education, Michael Okpara University of
Agriculture, Umudike, Abia State
E-mail: nwanidaresit@gmail.com

Abstract: The purpose of this study was to stress the need to include security education in the curriculum for pre-basic pupils. The Nigerian National Policy on Education stipulates security education as one of the curriculum content for basic education where teaching and learning of the subject is scheduled to commence from lower basic I (primary 1) to Upper basic III (Junior secondary 3). The one year pre-basic education for age bracket 5-6, is seen as the onset of formal education in Nigeria, therefore foundational issues like security should be laid bare before the child as soon as formal education begins. The study looked at the pre-basic school Curriculum, the need for security education curriculum for pre-basic pupils and recommended teaching methods for security education curriculum for pre-basic schools. In as much as security education is approved for basic pupils, the pre-basic child should not be left out because they are exposed to the same environment, besides, available records show that very young children are victims of insecurity in our land. Psychologist down through the ages (Eric Erickson, Sigmund Freud) accept that it is better to input right values into children while they are young than to correct them when they are adults. Some of the suggestions made in this study are that education policy makers should build in security education into pre-basic pupils curriculum, teachers should avail themselves of the teaching methods recommended for teaching security education to pupils of this age.

Keywords: Security Education, Curriculum, Pre-basic Pupils

Introduction

Life-threatening anti-social activities like human trafficking, sexual abuse, domestic violence, terrorism, armed robbery and murders, to mention but a few, are becoming recurrent headlines on news desk globally. These acts are carried out by more advantaged persons over the less advantaged irrespective of age and gender, rendering human communities unpredictable and insecure. Insecurity is a pandemic that not only inflicts pain, suffering and ultimate destruction to humanity but threatens the very existence of nations. It slows down development and ravages economies (Bruck & De Groot, 2013). This explains why security issues which have been of global concern in recent times. It is therefore imperative to use the weapons of education beginning from its very early stage to fight insecurity. Beginning from the pre-basic class to teach pupils security issues through the curriculum is not only commendable but necessary because insecurity dawns on very

little children as well as adults. It is rational to make the pre-basic pupil security conscious by arming them with the required knowledge of what it is all about and how to curb, handle or escape from it.

One common identity of insecurity is violence. Violence is expressed in arm robbery, rape, social unrest, attacks, killings and the use of force by any means to hurt. In Nigeria violence has been domestic, communal and gender related where the most vulnerable are the women and children (Adegoke & Oladeji 2008). Since education has always been a viable tool for transformation and empowerment, it should be used to push back the forces of insecurity until they are totally disarmed or eliminated. Security education which came as an inclusion into the basic education curriculum at a time like this is required for all pupils including those in pre-basic education. This is to ensure that as soon as formal education begins, security education should be integrated into what the child learns at school to seal off security loopholes created by the prevailing circumstances surrounding the child in his/her environment.

The Nigeria National Policy on Education does not include Security Education as a school subject in pre-basic school curriculum. Rather, it is meant for the nine-year basic programme (3-years lower basic, 3-years middle basic and 3-years upper basic) this excludes the 1-year pre-basic education (FRN, 2014). The need of security education in the curriculum is to create awareness and arm the child against all forms of threats in his/her environment. Good as this is, it will be better to begin the teaching of this subject from the pre-basic class which is a one year schooling before registering into lower basic one. The prospects of this are numerous and worthwhile.

This paper shall be discussing on advocating security education curriculum for pre-basic school under the following sub headings:

1. Pre-basic school Curriculum
2. Security education
3. The need for security education curriculum for pre-basic pupils
4. Teaching methods for security education curriculum for pre-basic schools

Pre-basic school Curriculum

The Federal Government of Nigeria defines pre-basic education as one year education given to children aged 5 prior to their entering lower-basic one (primary one). Basic Education is the education given to children aged 0-15 years. It comprises the Early Child Care and Development Education (ECCDE) for children aged 0-4 years, Pre-Basic Education for ages 5-6, Lower Basic Education (primary 1-3) for ages 6-9, Middle Basic Education (primary 4-6) for ages 9-12 and Upper Basic Education (Junior Secondary 1-3) for ages 12-15. In this arrangement, the Early Child Care and Development Education (ECCDE) for children aged 0-4 years is classified as informal whilst Pre-Basic Education for ages 5-6 is within formal education category (FRN, 2014).

The Objectives of pre-basic education (1-year Pre-Primary education) are: (a) Effect a smooth transition from the home of the school; (b) Prepare the child for the primary level of education; (c) Provide adequate care, supervision and security for the children while

their parents are at work; (d) Inculcate social, moral norms and values; (e) Inculcate in the child the spirit of enquiry and creativity through the exploration of nature, the environment, art, music and the use of toys, etc; (f) Develop a sense of co-operation and team-spirit; (g) Stimulate in the child good habits, including good health habits; and (h) Teach the rudiments of numbers; letters, colours, shapes, forms, etc, through play (FRN, 2014).

Unlike the other tiers of basic education where the objectives are stated alongside the school subjects that will serve as a means to achieving the objectives, the National Policy on Education does not clearly state school subjects that will lead to the achievement of the stated objectives for pre-basic education. It has been observed that schools formulate their own curriculum for this 1-year pre-basic programme based on their understanding of the objectives stated in the National Policy on Education. Since security issues are paramount to the development of any nation and the government of Nigeria has considered it needful to teach its rudiments alongside national values to basic education pupils, the pre-basic pupils should be included. This calls for the inclusion of security education curriculum for pre-basic pupils.

Security Education

In defining security education, let us look at both words on their merits. Carter (2002) defined security as a state of tranquillity in a society. He compartmentalized security into two components: the emotional security which is the individual and the community's feeling of the need for security, and the procedural security which is the regulatory efforts to achieve or restore security. Henry, Merten, Plunkett and Sands (2008), explained that security is the sense of assurance that is felt by the individual, either because of the absence of threats to his or her existence, or as a result of having the means to confront such threats as they arise. Cambridge Advanced Learners Dictionary defines the word 'security' as protection of a person, building, organization or country against threats such as crime or attacks. Security therefore connotes tranquillity, comfort, confidence, and the lack of threat, fear or any opposing condition. The accompanying word education is generally defined as the process of acquiring knowledge, skills, values, beliefs, and habits that effect a change in people's behaviour and improve their living conditions. Security education can therefore be seen as the process of exposing the pupils to knowledge, skills, values, beliefs, and habits that will protect them against crime, threats, attack from unfriendly persons or any condition or situation that may steal their peace or that of the society.

In Nigeria security education is taught and learnt as a sub-theme within a school subject named Religion and National Values. This subject comprises Christian Religious Studies/Islamic Studies, Social Studies and Security Education. It is also meant for basic education curriculum beginning from Lower Basic one (primary 1) to Junior Secondary three (JS 3) excluding the Pre-basic Education pupils. The crux of this paper is that if security education is meant for basic education curriculum it should be included in the pre-basic education curriculum also. Suffice it to say that most pre-basic schools have the following as subjects taught and learnt; Literacy, Numeracy, Social Norms, Nature talk, Health Habits, Writing, Creativity and Religious Studies. The need to consciously teach the pre-basic pupils security education cannot be over stated especially in these times. Al-

Edwan (2016) rightly observe that security is closely related to education and that the more moral values are instilled in the hearts of the students the more secured and stable the society becomes, so the school has to develop curricula to deal with the rapid changes, and continue its mission in the spread of security education. Al-Hoshan (2004) also emphasized the need for the development of security awareness through the teaching and learning of values and building positive attitudes on security through the curriculum.

The need for security education curriculum for pre-basic pupils

There is need for security education curriculum for pre-basic pupils have based on the following challenges:

- i. They are legible members of the society: The per-basic pupil does not live in isolation; he/she is exposed to the same hazards in the environment where the adult dwells. Therefore the need for security education curriculum for pre-basic pupils cannot be overstated. Security education is an instrument used to educate and fortify citizens against insecurity and other social ills in the society in order to give room for social and economic development. The pre-basic pupils need this fortification otherwise any gap at their instance may lead to a downward social and economic development. Al-Ayed (2009) opines that security education strengthens national identity by establishing the principle of social responsibility and the ability to compare and contrast ideas. Though the per-basic pupil may not be able to compare and contrast ideas, they will be able to decipher between the safe and secure from the unsafe and insecure for their good and the good of the society.
- ii. They are more vulnerable because of their age: Pre-basic pupils fall between the ages of 5 and 6 (FRN, 2014). The child at this age is very dependent and has a fragile nature that requires deliberate efforts by teachers and relevant others to assist him/her to develop acceptable social qualities as adults. For this age bracket, Akpan (2013) opined that interactions with the child should be done with caution so that experiences that could make the child develop socially unacceptable life styles that threaten the security of other citizens could be avoided. Renowned human psychologist (Jean Piaget, Sigmund Freud & Erik Erikson) explain that the pre-basic pupil is at the concrete operational level of development and so cannot rationalize based on reasons, this child is also at the level of despair not knowing why certain things are done but wishes to do what he/she is told in order to be loved. This can be very unsafe when unfriendly friends lurk around them. The knowledge of what/who is safe or secure and how to remain within safe limits will go a long way to helping them develop security consciousness.
- iii. Available Reports/statistics: According to United Nations International Children Education Fund (UNICEF, [2015]) six out of ten children in Nigeria experience emotional, physical or sexual abuse before the age of 18, with half experiencing physical violence. This includes children in pre-basic level of education. Tade and Udechukwu (2020) in a study the of characteristics of rapists and their victims gathered from selected Nigeria newspapers found out that rape victims were reported to be between 1 and 20 years of age. This points to the fact that very little

children of pre-basic school age can be raped where there is nothing done to ensure their security.

Below is a table showing different types of violence experienced by little children including those within the pre-basic education age bracket (3-5years).

Type of violence		Age of victim		Sex of victim	Source of information
1	kidnapping	6years		Male	Nwachukwu (2020)
2	Rape	(i) 4years	(ii) 9months	Female	Okey & Ogunbamoho (2020)
		(iii) 5months		Female	Ohu (2020)
				Female	Ojo (2020)
3	Child Trafficking	(i) 6years	(ii) Eight children	Male	Samson (2020)
				5 Males & 3 Females	Odogwu (2020)
4	Domestic violence				
5	Murder	(i) 3years	(ii) 6years	Female	Oji (2020)
				Male	

- iv. It is better to catch them young: security education is better given as a prophylaxis and not as a remediation. As children begin leaving the arms of their mother into the care of any other person it is better to also begin feeding the child with signals that will enable him/her know when insecurity lurks around and what they should do to avoid being hurt. This is safer than trying to heal the wounds of insecurity or giving some therapeutic counsel when the harm has been done. This means that security education is needed by pre-basic pupils and should be included in their curriculum

Teaching methods for security education curriculum for pre-basic schools

Teaching methods for security education curriculum comprises the principles and methods used by teachers to enable to pre-basic school pupils learn. They include classroom activities, experiences and preventive measures that are taught to help them avoid becoming victims or perpetrators of any form of insecure activity or crime as citizens of Nigeria. Al-Basheer (2005), assert that teaching methods for security education can boost students morale in overcoming security challenges. Some of these teaching methods are discussed below:

Story telling/re-telling: children love listening to stories; this is why right from very early times, values and traditions were passed to children from one generation to another through folklores, moonlight and fairy tales. Story telling is still captivating to children today and can be used to teach rudiments of safety to pre-basic pupils to make them security conscious. There are a lot of traditional folklores and animal stories that have bearings on safety and security consciousness. Teachers should avail themselves of these stories and others for the sake of teaching the pre-basic pupil security education. It is necessary to always outline the lessons portrayed in every story so that the pupils can

actually learn. It is good to allow the children re-tell the story after the teacher. Story re-telling is always an interesting time as children try to act the teacher.

Re-telling the story is a way of ensuring that the pupils got the exact story and can relay it to other children to still disseminate the story. It is necessary to ensure that emphasis is laid on the lessons learnt from the story and these lessons are re-echoed by all the pupils under the guidance of the teacher.

Case study: as the name implies, this method of teaching is about examining an already existing case for the purpose of learning indelible lessons from such. The teacher being a professional in pedagogy knows how to relate every teaching method to suit the characteristics of the learners, in this case the pre-basic pupil aged 5-6. The teacher has the responsibility of bringing down the lesson to the level of the pupils. This can be done by bringing up cases of insecurity around the community and make them see what really happened, what could have been done to avert it, possible solutions and what is expected of them as regards such issues. For instance, if there has been a case of kidnap, child sexual abuse or trafficking, this can be examined under the teacher's guidance. This should be done the aim of creating awareness, providing preventive bits and solutions to the problem.

Class Interaction/discussion: Discussion method: Omwirhiren (2015) defines discussion method as a method that utilizes guided interaction to highlight a particular subject matter with the aim of facilitating the students. Pre-basic pupils knowledge in security education can be facilitated by teacher-guided classroom interaction and discussion. The teacher guides the students through informed discussion on relevant security issues to dislodge ignorance and get the child's psychic armed against environmental security odds. While the teacher guides the discussion, pupils are asked questions to prompt their views on a given security problem.

Picture reading: children love pictures and amazingly they gain more understanding when pictures are attached to lessons. Teachers can therefore use the medium to teach security education to pre-basic pupils in order to secure the future. This is to confirm the assertions of Al-Edwan (2016) that the more moral values are instilled in the hearts of the students the more secured and stable the society becomes. Making pictures of current security situations as it affects the child and showing same to them through a structured curriculum is one simple way of presenting security education in the classroom to the pre-basic pupil. Here the teacher shows them the pictures based on the intended objectives and asks them to say what they have seen. From there a discussion and classroom interaction begins while the teacher guides to ensure that the predetermined aims and objectives for the lesson are achieved.

Electronic media: benefits of the use of video and television to teach younger learners cannot be over emphasized at any time. Teachers can use this instructional resource to make security situations real and then provoke the emotions of the pre-basic pupil to guard against unacceptable attitudes and lifestyles which promote insecurity.

Conclusion

Since security education has been slated for all basic pupils, the pre-basic pupils should not be exempted. Besides, available reports and statistics show that children within the pre-basic age bracket also suffer from insecurity challenges in the society more because they are very dependent and susceptible. It is now a matter of urgent importance to develop a curriculum for pre-basic pupils in order to have a balanced spread of security lessons at the basic education level to ensure a more security conscious and enlightened the society.

Recommendations

Recommendations made as a result of this study are that:

- Education policy makers should build in security education into pre-basic pupils curriculum.
- Teacher education curriculum for basic school teachers should include teaching methods for pre-basic pupils for effectiveness in lesson delivery at this level.
- Teachers should avail themselves of the teaching methods recommended for teaching security education to pupils of this age.

References

- Adegoke, T. G. & Oladeji, D. (2008). Community norms and cultural attitudes and belief factors influencing violence against women of reproductive age in Nigeria. *European Journal of Scientific Research* 20(1), 265-273.
- Al-Ayed, H. (2009). The use of the exercises of the national education subject in the security education: the civil society institutions as a model. The society and security seminar, King Fahed Security College in Reyadh, 6-10/5/2009: 29-59.
- Al-Basheer, K. (2005). *The societal institutions and their role in reinforcing security*. Reyadh: The Gulf Cooperation Council.
- Al-Edwan, Z. S. (2016). The Security Education Concepts in the Textbooks of the National and Civic Education of the Primary Stage in Jordan—An Analytical Study. *International Education Studies*, 9(9), 146-156.
- Bruck, T. & De Groot, O. J. (2013). The economic impact of violent conflict. *Defence and Peace Economics*, 24(6), 497-501.
- Carter, S. (2002). *The Impact of Parent/Family Involvement on Student Outcomes: An Annotated Bibliography from the past Decade*. Retrieved from www.directionservice.org/cadre/parent_family_involv.cfm
- Henry, C., Merten, S., Plunkett, S, & Sands, T. (2008). Neighbourhood parenting, and adolescent factors and academic achievement in Latino adolescents from immigrant families. *Family Relation*, 57, 579-590. <http://dx.doi.org/10.1111/j.1741-3729.2008.00524.x>

- NERDC (2013). THE Revised 9year-Basic Education Curriculum at a Glance. Lagos: nerdc Press.
www.nerdcnigeria.gov.ng
- Murugesan, V. (2019). Modern Teaching Techniques in Education. Retrieved online:
<https://www.researchgate.net/publication/331071559>
- Nwachukwu, C. (2020, September 11). Ambassador; p. 11
- Odogwu, O. (2020, September 16). Police recovers 8 trafficked children in Anambra State; p. 5
- Ohu, O. (2020, September 23). The Guardian; p.8
- Oji, C. (2020, October 6). Murdered by mother. Daily Sun; p. 6
- Ojo, Y. A. (2020, September 11). Raped by father. The Guardian p.12
- Okey, C. O. & Ogunbamoho, E. (2020, August 29). Child labour for years by Area boys in Lagos.
SaturdaySun; p. 4.
- Samson, Okey (2020, September 5). Evil Trade. SaturdaySun; p. 5
- Tade, O. & Udechukwu, C. (2020). Characterising rapist and their victims in selected Nigeria Newspapers. Intechopen, DOI: 10.5772/INTECHOPEN.91705
- UNICEF Nigeria, 10 September 2015 “Release of the findings of the Nigeria violence against children survey”
https://en.wikipedia.org/wiki/Child_sexual_abuse_in_Nigeria#cite_note-UNICEF10Sept2015-4

Language Learning Strategies and Individual (Students') Characteristics in the Classroom

Mrs. Ihedioha Love N. Ph.D

National Institute for Nigerian

Languages, Aba, Abia State, Nigeria

e-mail address: lovedioha@yahoo.com

Abstract: A precondition for the realization of the adaptive teaching and learning process in the school is the knowledge of the individual learning characteristics in the classroom contexts. Individual learning characteristics often relate to demographic information like age, gender, maturation, language, socio-economic status, cultural background and the specific needs of the learner group such as particular skills and abilities for or impaired to learning. The study was conducted with 124 public secondary school students in 4 schools in Aba metropolis. The study adopted a self-structured questionnaire instruments which included demographic questionnaire and Oxford's strategy inventory for language learning. The study used a descriptive survey research which aimed to examine the Language Learning Strategies (LLS) and individual characteristics in the classroom. The arithmetic mean and frequency was used in analyzing data collected from the participants. The findings revealed that the participants who were good at English mostly used cognitive strategies while memory strategy was used by the participants with less English proficiency.

Keywords: Language, Learning strategies, Individual characteristics

Introduction

Language Learning Strategies are terms referring to the processes and actions that are consciously deployed by language learners to help them learn or use a language more effectively (Shatz, 2014; Heath, 2015). Language learning strategy have been defined as thoughts and actions consciously chosen and operationally by learners to assist them in carrying out a multiplicity of tasks from the very outset of learning to the most advanced levels of target language performance (Cohen, 2011).

Heath (2015) states that the language learning strategies which incorporated strategies used for Language learning and Language use is sometimes used, though the line between the two is ill defined as moments of second language (L₂) use itself as a defining feature of culture and an unmistakable mark of personal identity, is essential for forming interpersonal relationships, understanding, social situations, extending experience,

reflecting on thought and action and contributing to a democratic society. Language is also a primary base of all communication and the primary instrument of thought in the classroom environment just like in the family and/or in the workplace. Language in the family is a tool for communication and interaction as well as in the workplace and in all human environs.

Classroom environment is an important determinant of student learning in an educational system. Students can learn better when they perceive the classroom environment more positively, thus environment is to educators, researchers, school administrators, parents and the society at large. Based on the Vygotsky's (1978) theory of social cognitive development, the classroom environment becomes the "culture" that determines students' learning development. In the classroom, students' learning development takes place when interactions between them and the teachers occur among them, with existence of friendship (high affiliation and learner support in the classroom), students' level of learning would be improved.

In the classroom also individual learner qualities such as general self-esteem and self-concept, long term interests, deep seated motivation traits, aptitudes (example, cognitive, social, artistic), cognitive styles, personality traits and long standing personal beliefs are part of the patterns of individual characteristics found among learners. Language Learning Strategies (LLS) use can help to improve self-esteem, remold self-concept in positive ways, strengthen aptitude and make cognitive styles more flexible, increase willingness to communicate and alter personal beliefs (Oxford, 2012).

Individual characteristics like age, gender, sexuality, religion, socio-economic status and education level, affect LLS use. Some demographics are more changeable than others (Oxford, 2012). Age changes un-increasingly acknowledged. With motivation, effort and learning strategies, learning can improve and education level might lead to higher socio-economic status.

Classroom contexts according to Abas (2015) are small cultures.

For a given learner, classroom contextual elements include task demands, assessments, materials, desks, books, "climate" (individual quality, physical and emotional safety) and the other students' actions and beliefs, all of which can influence a person's LLS use. All LLS use affects the classroom especially the teacher's actions after witnessing LLS use such as praise, mediation, classroom-climate efforts, and evaluation of learners (as strategies or not, capable or not motivated or not) (Abas, 2015).

Ushioda's (2009) person-context relation view is related to LLS use because it centers on the agency of the individual person as a thinking feeling human being with an identity, a personality, a unique history and background, a person with goals, motives and intensions. Ushioda (2009) brought attention to contexts, as did Dornyei, McIntyre and Henry (2005) and Mercer (2015; 2016).

Every human has personal characteristics that can contribute in the language learning acquisition in the classroom (Abas, 2015). These characteristics include age, gender,

intelligence, aptitude, maturation and attitude, personality, learning styles and environment. With regard to it, the present paper attempts to explore the theoretical framework of individual learning strategies and characteristics in the classroom.

Theoretical Framework

Individual Language Learning Strategies and Classroom Characteristics

Individual language learning strategies (LLS) and characteristics are prominent feature of second language acquisition (SLA), because a great deal of the variations in language outcomes is attributed to various learner characteristics such as age, gender, intelligence, aptitude and so on. However, scholars within the field distinguished various factors which as they believe influence second or foreign language acquisition. These individual learner characteristics play a central role.

Liao as cited in Eddy (2011) distinguished the following cognitive factors of L₂ acquisition as: intelligence, aptitude and language learning strategies. Lujan-Ortega (2000) proposes, age, aptitude/intelligence, motivation, learning/cognitive styles and personality. Skehan (2002) argues that in literature, four main areas are emphasized when considering individual characteristics in second foreign language learning as: Language aptitude, learning styles, motivation and learning strategies. He adds that according to Dewaele and Furnham (1999) personality is of certain importance. Bond (2002) in her research on a successful language learners, is more accurate in stating the factors that may help one's language learning and draws more detailed perspective such as: age, exposure to foreign language in infancy, immersion, intelligence, personality, attitude and motivation, relationship between first and target language, sensory style, learning strategies and other factors (such as mimicry and musical ability).

Language Learning Styles and Learning Strategies

The term learning styles has been used to describe an individual's natural habitual and preferred way of absorbing, processing and retaining new information and (Reid as cited in Abas, 2015). For others, it is referred to as "kinesthetic" learner physical action such as miming and role play. Learner style seem to help learning process and they are referred to as perceptually based learning style. Considerable research has also focused on distortion between different cognitive learning styles. Individuals also have been described as field independent or field dependent. For example, it was widely said that there was strong relationship between field independence and success in social language learning.

Language learning styles are also referred to as cognitive variations in learning a second language (L₂). It is also all about individual's preferred way of processing that is, of perceiving, conceptualizing, organizing and recalling information related to language learning. According to Cornett as cited in Zafar and Meanakshi (2014) language learning styles are the overall patterns that give general direction to learning behaviour. Brown (2000) states that unlike factors of age, aptitude, and motivation, its role in explaining why some L₂ learners are more successful than others have been well established, and it involves a complex (and as yet poorly understand) interaction with specific L₂ social and learning contexts. The following cognitive styles have been identified by Knowles as cited in Zafar and Meenakshi (2014) as:

- Concrete Learning Style;
- Communicative learning style; and,
- Authority- oriented learning style and;
- Concrete learning styles
- Concrete learning style

Learners with a concrete learning style use active and direct means of taking in and processing information. They are interested in and processing information. They are interested in information that has immediate value. They are curious, spontaneous and willing to take risks. They like variety and constant change of pace. They dislike routine learning and written work, and prefer verbal or visual experiences. They like to be entertaining and like to be physically involved in learning.

- **Analytical Learning Style**

Learners with an analytical style are independent, like to solve problems, and enjoy tracking down ideas and developing principles on their own. Such learners prefer a logical systematic presentation of new learning materials with opportunity for learners to follow up on their own. Analytical learners are serious, push themselves hard, and are vulnerable to failure.

- **Communicative Learning Style**

Learners with a communicative learning style prefer a social approach to learning. They need personal feedback and interaction and learn well from discussion and group activities. They thrive in a democratically run class.

- **Authority-Oriented Learning Style**

Learners with an authority-oriented learning style are said to be responsible and dependable, they like and need structure and sequential progression. They relate well to a traditional classroom. They prefer the teacher as an authority figure. They like to have instructions and to know exactly what they are doing; they are not comfortable with consensus-building discussion

Witkin as cited in Zafar and Meenakshi (2014) states that cognitive learning style is vital to language acquisition. The learning style is of two types: field independent (left brain dominance) and field dependent styles (right brain dominance). A learner with a field independent style is usually an independent and confident being who see parts and details from a whole. The rationale, logical and mathematical side of the student's mind is more active during the process of learning. Such a learner thrives in a class full of activities and exercises.

In the process of learning, be it a foreign or any other subject matter, certain ways must be used, so that the result the learner wishes for is achieved. Learning style is a "general approach to language learning" (Oxford, 1994). The ways the learner applies while studying are called learning strategies. According to Oxford (1990) learning strategies are "specific actions, behaviours, steps, or techniques students use often consciously to improve their progress in apprehending internalizing and using the L₂". Researchers have identified active strategies commonly employed by learners which help them learn more effectively (Naimen and Wesche as cited in Eddy, 2014). These include for example, repeating silently what is heard, thinking through one's own answer and comparing (it) to the one given, memorizing, dialogues, identifying oneself with one's foreign language

identity, seeking opportunities for communication in the target language and finding ways to widen the scope for social interactions. With regard to preferred learning activities, a learning style of an individual can be identified. According to Strakova (2004), learning styles are general approaches we use to learn a new language. These are the same styles we use in learning other subjects. The most general new points differentiates between analytical (field independent) students who concentrate grammatical details but feel less safe in communicative activities. They tend to learn the rules and principles of a language and do not like improvisation or taking guesses if an unfamiliar language situation occurs. Another one is called global (field dependent) students who are sociable, like interaction and communication. They are not compensation strategies to avoid blocks in communication.

However, based on sensory preference of an individual learner, styles can be identified as:

- **Visual:** Students who prefer to use their sight to receive information.
- **Auditory:** Students who prefer to use their learning to receive information.
- **Kinaesthetic:** Students who need active movement and involvement to learn;
- **Tactile:** Students who like handling objects and use their touch to receive information.

Hence, another classification divides students who innovative analytical, common sense and dynamic learners (adapted from Svoboda and Hrenhovik, 2006; Strakova, 2004). While acquiring a foreign language learning strategies can be of significant importance. According to Oxford (1990) language strategies include:

- allowing learners to become more self-directed;
- expand the role of language teachers;
- are problem-oriented;
- improve many aspects, not just the cognitive;
- can be taught;
- are flexible
- are influenced by a variety of factors

Specifically according to Oxford (1990), they are especially important for language learning because they are tools for active, self-directed involvement, which is essential for developing communicative competences in individuals.

Method

Research Question

The study seeks to discover responses to the research question:

- What are the most and least used language learning strategies of students learning foreign/second language (L₂) in the senior public secondary schools in Aba Municipals of Abia State.

Design of the study

Research setting:

This research was carried out at senior secondary schools in Aba Municipality of Abia State, Nigeria.

Research Participants

124 participants were drawn from four thousand two hundred and seventy two (4272) students from five different secondary schools out of ten senior secondary schools in Aba Municipals. They were all non-native speaker of English Language with different English language proficiency levels.

Instrumentation

A self-designed questionnaire was employed in the study which included two major parts. The first part was about demographic data of the research participants, their age, genders, name of school and present class. The second part is the strategy inventory for language learning (SILL) version of speakers of other languages learning English. Oxford (1990), was used for gathering a foundation of language learning strategies that students apply in their learning process. Here the independent variables include age, gender and the self-rated English proficiency. The dependent variables are the mean scores of the entire strategy inventory for language learning (SILL) items and the mean scores of the different language learning categories: memory, meta cognitive, cognitive, compensation, affective and social.

Data Analysis Procedures

Data was analyzed through descriptive statistics, by using frequencies and mean statistics to respond to the research question. To conduct the demographic data analyses, individual students, and self-rated language proficiency and to examine the overall strategy use in strategy category, the most and least used strategy items, Oxford's assessment criteria were used to examine the mean scores of frequency of strategy use. Mean scores ranged from 1.0 – 2.4 were considered as low use of strategy, while the range of 2.5 and above were rated medium use and the range of 3 and above were rated as high use.

Results

Research Question

What are the most and least used language learning strategies amongst L₂ students in the secondary schools in Aba Municipals of Abia State.

Table 1: Frequency of Overall categories of strategy use

S/N	Language Learning Strategies	SA	A	D	SD	Total	\bar{x}	Use
1	Memory strategies	216	150	24	8	398	3.20	high
2	Cognitive strategies	160	174	28	12	374	3.01	high
3	Compensation strategies	72	84	142	7	304	2.45	Low
4	Metacognitive strategies	180	162	38	6	386	3.11	High
5	Affective strategies	160	150	40	14	364	2.93	medium
6	Social strategies	256	90	40	10	396	3.19	high

As indicated in table 1, the frequency of the overall strategy use ranged from high to medium and low. The research participants in general used the six language strategies to their learning process at high level. With regard to the frequency of use each of the six strategies, the high used language strategies included memory (M = 3.20; social (M = 3.19); meta-cognitive strategies (M = 3.11; Cognitive (M = 3.01) and affective strategies (M = 2.93) was at high level respectively while compensation strategies was used at a low level.

High range strategy use was found in four of the six strategies in the study. from the scale of strategy use from the most use to the least used, the results showed that the most frequently used strategy categories were: if I do not understand anything in English in the classroom, I ask another person to say it again ($M = 3.20$); followed by: I pay attention when someone is speaking English Language ($M = 3.19$); and to understand something unfamiliar in English words, I make guesses (3.11) respectively. The least frequent use of strategy use categories were: write notes, messages, reports or letters in English Language ($M = 2.93$); and ($M = 2.45$).

Table 2: The most frequently used strategies in the classroom

s/n	Rank	Items	Strategy	\bar{x}	use
7	1 st	Memory	I write notes, reports and messages in English language	3.20	High
8	2 nd	Cognitive	I make summaries of information that I read in English Language	3.01	High
9	3 rd	Compensation	I plan my schedule so that I will have enough time to study English Language everyday	3.11	High
10	4 th	Metacognitive	i ask for help when i cannot help understand spoken words from fellow students who speak English Language more than me	3.19	High
11	5 th	Affective	I give myself a reward when I do well in both oral and written English in the class	2.98	Medium
12	6 th	Social	When I can't think of a word during conversation, I use gestures	2.93	Medium

As indicated in table 2, the most frequently preferred strategy included strategies 1st to the 6th ranked respectively. Four of which were in high use respectively and the most being the memory strategies (I write notes, letters, reports and messages in English Language and so on).

Table 3: Lest frequently used strategies in the classroom

s/n	Rank	Items	Strategy	\bar{x}
13	1	Cognitive	I write notes, reports and messages in English language	2.29
14	2	Memory	I use flashcards to remember new English words	2.35
15	3	Memory	I Review English lessons often	2.37
16	4	Affective	i give myself a reward when I do well in English Language	2.45
17	5	Social	I ask for help from well spoken English students	2.35
18	6	Metacognitive	I plan my schedule so as to have enough time to study English Language	2.29
19	7	Cognitive	I try to find patterns in English Language	2.37
20	8	Cognitive	I read for pleasure in English Language	2.29

As indicated in table 3, the least frequently used strategies items 13, 14, 15, 16, 17, 18, 19, 20, respectively, all of which were used in a low range. The top least strategy item was in the affective strategy category. I give myself a reward when I do well in English Language.

Discussion

Individual students reported high, medium and low use of the six language strategy categories. The mean score ($M = 3.19$), suggested that the participants used learning strategies at a moderate level. The mean score ($M = 3.19$) suggested that the participants used learning strategies at a high level. The present study findings corroborated with previous research works conducted with English as a second language (ESL) which demonstrate that students' used language learning strategy at a high frequency (Green and Oxford, 1995; Oxford and Burry-Stock, 1995) and that of Kittawee, Sorangthaporn, Engchuan and Thanathito, 2011; and Pringorom (2008.) Although according to Mongkol (2016), in his study of EFL learning contexts showed that in most of the similar research, participants could not define language learning strategy or even know that they applied LLS to their learning process, but seemed to understand the functions of LLS.

In this study also, cognitive strategy category was used more by participants followed by memory and metacognitive strategy categories respectively. Even though cognitive strategies were found to be the least used strategies, the mean score indicated relative value of language learning strategy use level. However this result did not indicate that the participants do not know about cognitive strategies. Lee (2006) observed that the more students know about language learning strategies, the more they are likely to apply the strategies when learning L_2 . Rao as cited in Mangkol (2015) noted in his study that students seem to use different learning strategies from those of ESL learners and that ESL learners are more likely to learn English for survival and to maximize their accessibility to authentic learning materials. However, in this present study, participants learn English language without being exposed to English speaking environments and without any opportunity of communicating with the native English speakers except their English teachers who are also non-English natives. The result therefore showed that the students use learning strategies at different levels and with different categories in their classroom process.

The present study demonstrated that the mean scores of memory strategies categories ($M = 3.20$), and social strategies ($M = 3.19$) are almost equal. Both learning strategies in the present study were used at a high level. Mangkol in his study noted that Language learners found that L_2 learners are less likely to express their opinions in front of the public; they are quite shy and keep silent in English classes. According to him, most of his L_2 learners were afraid of communicating in English. They avoided losing face to avoid making errors while speaking English language in the class process. But this is quite contradictory to the present study. The participants indicated that they usually motivate themselves to speak English language. Some of the participants indicated that in speaking English with errors is far better than not speaking at all in the classroom and that avoiding the use of English language brings negative results towards the language learning and making the learning process unsuccessful. This shows that teachers has a lot of jobs to do while teaching L_2 in the classroom because of the student individual characteristics and encourage them to

speak out the new language. This shows that the more the students are helped to manage their negative feelings about using the new language the more success they will achieve their goals of learning the new language.

In this study also, meta-cognitive strategies ranked 3rd in the learning process. The strategy really helped the students to concentrate on learning and planning their learning for more benefits. About the least used strategy in table 3, the result showed that first two favored strategies were in cognitive and memory strategy categories. The cognitive strategy which were found to be the least frequently used were: I write notes, messages, letters in English language (M = 2.29) as the memory strategy items least preferred. However, all the least strategy items were rated in a low level range. The current study corroborated with some of the previous research study. In his study Yang (2010) with Korean English foreign learners (EFL), noted that writing notes, messages, letters and reports matters in English, make summaries of information that I hear or read in English language, and use flashcard to remember new English words were the least frequently used strategies. Actually this shows that many students may apply the use of flashcards for retaining their new learnt technology in their classroom learning process.

Conclusion

However, the study has limitations, one of which was that the participants were drawn from non-native learning environment from public senior secondary schools in Aba metropolis of Abia State. So the generation from the results are so limited to a similar population inclusive of other private and other public secondary school students in the state. The second limitation is the research instrument which was a self-structured questionnaire designed by the researcher including the strategy inventory for language learning questionnaire (SILL). The findings however may not provide profound learning strategy according to Lee and Oyelson (2006) who claimed that the self-reported data can "effect general interference, a desire to give the right answer or to please the teacher and so on". The study also relied primarily on the responses from the participants which may not manifest actual language learning behaviours.

Recommendations

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

1. That teachers of English language at the secondary level should consider the preferred language strategies while engaging the students' in the classroom contexts activities by providing them activities that would correspond to their favoured learning strategies so as to realize the best from both the teachers and the students.
2. Curriculum planners/developers should incorporate the findings in their strategic plan and implement these language learning strategies preferred by students in the current study like: cognitive, memory, meta-cognitive and affective and social strategies in their plans
3. Second language (L₂) students should be provided with authentic learning environments such as language laboratory to enable them face new language objectively.

References

- Abas, S. (2015). Individual Characteristics in second language acquisition. Faculty of Applied Linguistics Program. State University of Yogyakarta. *Media neliti.com>publications*.
- Bond, K. (2002). Profile of a successful language learner. <http://www.Tulus.net/linguisticissues/successful.html>
- Brown, H.D (2000). Principles of language learning and teaching, eaglewood Cliffs, N.J Prentice Hall, Inc.
- Cohen, A. (2011). Strategies in learning and using a second language (2nd ed.) Longman data: *text/html/: charset=utf-8,6 --- Wikipedia language learning strategies*.
- Dornyei, Z., Macintyre, D.P. and Henry, A (eds) (2015). Motivational dynamics in language learning. Bristol: Multilingual matters
- Danvaelle, J. and Furnham, A (1999). Extraversion: the unloved variable .in applied linguistic research. *Language learning* 49.3
- Eddy, E. (2011). On the involvement of cognitive process in the acquisition of English Grammar by Slovak Learners. Pros <http://pulib.sk>
- Heath, R (2015). Researching on language strategies in P.B. Phakiti, ACK (eds). Research methods in applied linguistics Bloomsbury.
- Kittawee, P., Soranasthaporn, S. Engchuan, K and Thanathiti, T (2011). The relationship between the use of language learning strategies, the levels of language anxiety and English ability of MBA students (online) retrieved from <http://www.academia.edu/8621531htm>
- Lee, H. (2000). A relationship between English language learning strategies and achievement. *The Journal of English language teaching*, 12, 247, - 270
- Lee, H. and Oxelson, E (2006). Its not my job, K-12 teacher attitudes towards students heritage language maintenance. *Bilingual research Journal*, 30 (2), 453-477.
- Lugan-Ortega, V. (2000). Individual differences, strategic performance and achievement in second language learners of Spanish. *Studies Linguistua*. 54. (2). 280-288
- Mercer, B (2015). Learners Agency and engagement. Retrieving you can wanting to and knowing how to Humanizing language teaching, 17(4), accessed 15 August, 2016.
- Mongkol, C. (2016). Individual learner differences and language learning strategies. Contemporary educational research-journal, 7 (2); 57-72. Retrieved from https://www.academia.edu/34991744/individual_learning_differe---PDF
- Oxford, R.L. (1990). Language Learning strategies: what every teacher should know. New York: Newsburg House Publishers
- Oxford, R.L (2002). Language learning styles and strategies. An overview, Oxford: GALA
- Oxford, H.R and Burry, Stock, J.A (1995). Assessing the use of language learning strategies worldwide with the ESL/EFL version of the strategy inventory for language learning (SILL) system, 2111-23.
- Oxford, H.L. (2012). Individual differences in Routledge Encyclopedia of Second Language acquisition, edited by P. Robsin, 302-8, 2nd ed. London:
- Pringorom, P. (2008). The study of language learning strategies used by first and second year students at Bangkok University, (online) retrieved from <http://www.briach/knowledge> centre/paper july doc 2009/pdf/preawpan pdf

- Shatz, I (2014). Parameters for assessing the effectiveness of language learning strategies (PDF) Journal of language and cultural education 2(3): 96-103. Retrieved from html: charset = utf - 8;6--- Wikipedia language learning strategies
- Strakova, Z (2004). Introduction to teaching English as a foreign language Presov
- Svoboda, A, and Hrenhovik, T (2006). An ABC of theoretical and applied linguistics Opara: Silesian University
- Skehan, P. (2002). Individual differences in second and foreign language learning. http://www.lang.itsn.ac.uk/resources/good_practice.aspx?resourceid=91
- Ushioda, E (2009). A person context relational view of emergent motivation, self and identity. In E. Ushiodo, 215-28. Bristol: Multi-lingual matters.
- Vygotsky, S. (1978). Mind in society. The development of higher psychological process: London: Harvard University Press
- Yang, N (2010). The relationship between EFL learner beliefs and learning strategies use system. 27 (3), 575-535
- Zafar, S and Meeanakshi, K (2014). Individual learner differences and second language acquisition: A review school of social sciences and languages. VTT University. Vellore- 632014, TN. India. Email: Kmeerakshi e vit.ac.in

Impacts of Legislation of Education Policy on Implementation in Private Tertiary Institutions in Sokoto State, Nigeria

MUSA, Bello¹, MUHAMMAD, Abida², HAMISU, Mukhtar³, and IBRAHIM, Yahaya⁴

bmusa35@gmail.com,

hamisumukhtar828@gmail.com,

abidahmuhammad@gmail.com

^{1,2,4} Sokoto State University, Sokoto,
Sokoto State, Nigeria

³Shaikh Abubakar Gummi College of
Advanced Studies, Gummi, Zamfara State,
Nigeria

Abstract: This study surveyed the impacts of the legislation of education policy on implementation in private tertiary institutions in Sokoto State, Nigeria. The research was descriptive survey research. A total of 550 members of staff from private tertiary institutions and the Department of Quality Assurance, Ministry of Education, Sokoto State serve as the population of the study. Multistage sampling techniques were used in selecting the sample size of 232. The instrument was a modified questionnaire tagged, 'Legislation of Education Policy on Implementation (LEPIQ).' It was validated by experts in education management from Shehu Shagari College of Education and Halliru Binji Polytechnic, Sokoto State. The reliability test was obtained using the Pearson Product Moment Correlation Coefficient (PPMCC) with $r = 0.72$. The data was collected through the distribution of questions by the researchers. The data collected were analysed through descriptive and inferential statistics to answer research questions and test the null hypothesis respectively. The study found a significant relationship between the legislation of education policy and implementation in private tertiary institutions in Sokoto State. It recommended that the management of private tertiary institutions should provide educational facilities, staffing, and infrastructures for the achievement of the stated policy objectives.

Keywords: Legislation, Implementation, Education Policy, Tertiary Institutions

Introduction

The legislation denotes regulation. It was conceived as a series of rules and regulations that regulate the exchange of goods and services in society (Moran & Wood in Davidovitch, 2011). It is a managerial concept of coordinating an organization under an agreeable term. In education, legislation deals with the effects of transforming knowledge into a “commodity” (Marginson, 2009). This is interpreted in terms of supervision, mediation, and control of educational institutions. The protection focuses mainly on two factors- access and funding. Access is mainly to increase the number of student enrollment and funding deals with the financing of education institutions.

The major duties of implementing the educational policy are teaching, research, and community service. These are believed to develop the individual in hard and soft skills. In tertiary education, students are expected to develop the ability and acquire the necessary skills, to think critically, solve the problem, make a decision, follow a grounded debate logically, master a course effectively to defend it and prove and analogize information. This is the reason that school is seen as an agent of innovation. Formally, the role of schools was to fully equip students with intellectual and practical skills and make the students capable of formulating, reflecting, and also being innovative in their day-to-day activities. These are believed to transform society be a better place for mankind.

Implementation from an education point of view means “delivery” (Barber, 2008), “enactment” (Bell & Stevenson, 2015), “realization” (Brennan, Kemner, Donaldson, & Brownson, 2015), or educational change (Fullan, 2015). In context, it is simply understood to be to put into action. Prince *et. al.*, (2021) conceive implementation as an act of executing a plan, a policy, or an assignment. The conception indicated for the implementation to take place; something must have been planned. Education policy implementation is the process of executing an education plan. It connotes the process of converting education policy into an identified objective.

This study was informed by System Theory. This is a theory that views an organization as a system composed of five parts (Agabi, 2002). These parts are inputs, the transformation process, outputs, feedback, and the systems’ environment. The inputs are the human, material, and non-tangible resources (like the norms, rules, and tradition) needed for the operation of the system. These inputs pass through some technical processes (like classroom instructions and control activities) and behavioural changes (transformation process) (Chineze & Olele, 2011). The feedback implies the reactions (positive or otherwise) of the environment to the outputs or services from the system. Such feedback lays the foundation for determining the subsequent input, transformation process, and hence output from the system. The system environment is the social, political, and economic forces around the system, which ultimately determines the focus, capabilities, and inhibitions of the system (Chineze & Olele, 2011).

There are several empirical studies conducted on the topic. For example, Amaje (2012) investigated the impact of public policy on the education sector in Nigeria, a case study of Kogi State from 1992 to 2011. Ex-post-facto research design was used for the study. The study found that Kogi State Government need to provide finance and facility for the implementation of the education policy to meet up with both national and global expectations. The study concluded that public policy contributed less than expected to the education sector in Kogi State due to lapses in humans, materials, money, and mind/culture.

Nweke, Ibn Abdullahi, Chukwu, Vita-Agundu, Madu, and Ezurike (2021) carried out a study and assessed the implementation of education policies in Universities in Enugu State, Nigeria. They used descriptive survey research. the population of the study was 440 members of staff of tertiary institutions in Enugu State. The instrument used was the "Assessment of Implementation of Educational Policies Questionnaire (AIEPQ)." It was validated by experts from the Department of Educational Foundations and the Department of Science Education of the University of Nigeria, Nsukka. The reliability of the instrument was 0.86. Mean and standard deviation was used in answering research questions. The study found that there was poor implementation of education policy, and the institutions lacked instructional materials and basic tools for practical teaching. The study recommended among others that instructional materials should be provided for the effective implementation of education policy in the country.

Okafor (2016) conducted a study on the implementation and challenges of Nigerian educational policy in rural grade 1-12 public schools. The study is qualitative educational ethnographic research using phone interviews to collect data. The data were transcribed and coded. The study found that the Nigerian education policy has a lot of challenges that continue to hamper effective implementation. The participants agreed that there are several gaps and lapses in the implementation of the education policy which need to be addressed. The study concluded that the successful implementation of the Nigerian education policy is largely dependent on the stakeholders.

Statement of the Problems

The legislated education policy mandated governmental agencies such as the National University Commission (NUC), the National Commission for Colleges of Education (NCCE), and the National Board for Technical Education (NBTE) to conduct routine supervision of the respective institutions to ensure implementation compliance. Yet, studies lamented the poor implementation of education policy all over the country (Ogburo, 2008). For example, Denga (2000) stated that the implementation of education policy in Nigeria is challenged by the problem of a dearth of facilities, inadequate supervision, shortage of personnel, lack of funds, incoherent implementation, and drop-out rates. This shows that the state of education at all levels in Nigeria is in deplorable conditions. Ogboru (2008) captured this problem when he stated that whenever the subject of education is raised in Nigeria, the features of thoughts that are ready before hands are; falling in standard, weakening of facilities, examination misconducts, unproductive graduates, etc. before any other thing else. Since Sokoto State is one of the states affected, this study chose private tertiary institutions to study what and how their actions and inactions have individually and collectively contributed to the implementation of education policy in their respective institutions.

Research Objectives

1. To measure the impacts of legislation education policy on the implementation process in private tertiary institutions in Sokoto State, Nigeria.
2. To analyze the factors responsible for the poor implementation of education policy in private tertiary institutions in Sokoto state, Nigeria.

Research Questions

1. What are the impacts of legislation of education policy on the implementation process in private tertiary institutions in Sokoto State, Nigeria?

2. What are the factors affecting the implementation of educational policies in private tertiary institutions in Sokoto State, Nigeria?

Null Hypotheses

H₀: There is no significant relationship between the legislation of education policy and the implementation of the policy in private tertiary institutions in Sokoto State, Nigeria.

Methodology

This study is descriptive survey research. The population of this study is 550 members of staff from private tertiary institutions and the Department of Quality Assurance, Ministry of Education Sokoto State serves as the population of the study. From the Research Advisor, a sample of 232 was estimated at a 5% Confidence Interval. To obtain the sample, a multistage sampling technique was employed. First, a stratified sampling technique was used to sample respondents from their respective institutions: Universities, Colleges of Education, Polytechnics, Other tertiary institutions, and Staff of the Department of Quality Assurance of the Ministry of Education in Sokoto State. Second, a proportionate sampling technique was used to select respondents to participate in the study, and third, a simple random sampling technique was used in selecting individual respondents.

Table 1: Sample of the Study

S/N	Private Tertiary Institutions	Population	Sample
1	Universities in Sokoto State	00	00
2	Colleges of Education in Sokoto state	86	36
3	Polytechnics in Sokoto state	00	00
4	Other Registered Tertiary Institutions in Sokoto State	338	143
5	The staff of the Quality Assurance in Sokoto State	126	53
Total		550	232

Source: Field Survey, 2022

Research Instruments

The instrument for data collection was a modified questionnaire tagged, 'Legislation of Education Policy on Implementation (LEPIQ).' It is a 4-point Likert scale: strongly agree (4), agree (3), disagree (2), and strongly disagree (1). The number of responses was multiplied by the number of weights and added together and then divided by the number of respondents to obtain the weighty mean. The decision for acceptance (agree) or rejection (disagree) is based on a criterion mean of 2.5. An item with a score of 2.5 and above is accepted and any item with a mean less than 2.5 has disagreed. For data analysis, mean statistics was used to analyze data on the research questions while a Pearson Product Moment Correlation coefficient was used in testing the two null hypotheses.

The instrument was validated by a panel of two senior lecturers with Ph. D. qualifications in the Department of Education, Shehu Shagari College of Education, Sokoto and three members of staff from the Halliru Binji Polytechnic, Sokoto. The copies of the developed questionnaires were submitted to each of them to study the instrument and certify if the questions are enough to measure the variables under study in terms of content coverage, criterion measure, language, construct, and face of the instrument. They are to study the instrument and certify the relevance of the test, to ensure the items are capable of eliciting desired responses to measure the set of objectives of the study, to ensure items are clear and to avoid ambiguity.

The reliability of the instruments was obtained via test-retest. Pilot testing was conducted with 44 tertiary institutions lecturers, educational administrators, and quality assurance staff of the Ministry of education, Sokoto State. The questionnaires were circulated and collected. After two weeks intervals, it was then redistributed and recollected. The two opinions were collated and compared using Pearson Moment Correlation Coefficient. A reliability index of $r = 0.72$ was obtained.

Method of Data Collection

This study used a questionnaire to survey the impacts of the legislation and implementation of the education policy on tertiary education in Sokoto State, Nigeria. In collecting the data from the respondents, the researchers and the trained research assistants distributed questionnaires to the respondents after obtaining their consent. The questionnaires were used to record the opinion of the respondents on the variables for analysis.

Method of Data Analysis

The data collected from the respondents were carefully checked and cross-checked by the researchers. The careful distribution of the survey questionnaires was managed by the researchers and the trained research assistants. In analyzing the bio-data, the data collected was presented in a tabular form, and responses were calculated in percentages and followed by detailed interpretation. Also, descriptive statistics such as mean and grand mean was used to analyze the research questions while the chi-square test of significance was used to test the two null hypotheses at a 0.05 level of significance. The test contingency table was used to measure if there is the existence of a significant association between the variables under the study. Hence, hypothesis that was greater than 5% or $p = > 0.05$ was rejected, while hypothesis with less than 5% i.e., $p = < 0.05\%$ was retained.

Results

Research Questions 1: What are the impacts of legislation of education policy on the implementation process in private tertiary institutions in Sokoto State, Nigeria?

Table 2: Implementation of Tertiary Education Policy

Table 2: Implementation of Tertiary Education Policy										
S/N	ITEM STATEMENT	RESPONSE								
		SA	A	SD	SA	SUM	Mean	SD	Decision	
1.	The curriculum content of private tertiary institutions is comprehensively implemented	100	13	90	29	648	2.79	1.13	Agreed	
2.	There are current and relevant instructional materials available for the implementation of courses in private tertiary institutions	45	50	107	30	574	2.47	0.94	Disagreed	
3.	The learning materials are adequately provided and used	45	50	107	30	680	2.93	0.98	Agreed	
4.	The lecturers are qualified, always available, and competent to deliver the	100	20	108	4	648	2.79	1.08	Agreed	

	services.									
5.	The lecturers are well-trained, motivated, and committed to their duties	92	25	90	25	694	2.99	1.01	Agreed	
6.	There are adequate facilities and a conducive learning environment	108	24	90	10	744	3.21	1.01	Agreed	
7.	Students are committed and can persevere in the academic activities of the institutions	130	39	44	19	655	2.82	1.01	Agreed	
8.	Students cooperate in health, sport, and rules on campus	90	24	105	13	682	2.94	1.01	Agreed	
9.	Parents have a positive attitude to the education of their children	100	30	90	12	770	3.32	1.04	Agreed	
10.	There is a link between tertiary institutions and employers of labour	150	30	28	24	735	3.17	1.00	Agreed	

Source: Field Survey, 2022

Table 2 showed the response of the respondents on the impacts of the legislation of the tertiary institutions on the implementation of tertiary education policy in private tertiary institutions. The respondents agreed on all but one item on the questionnaire. The respondents agreed on item 22, 24, 25, 26, 27, 28, 29, 30, and 31. The means are 2.79, 2.93, 2.79, 2.99, 3.21, 2.82, 2.94, 3.32, and 3.17 respectively. This indicated that their mean is above the criterion mean of 2.5. Thus, the respondents agreed that legislation of tertiary institutions policy can impacts private tertiary institutions on the provision of a comprehensive curriculum, state the criteria for the qualification of the teaching staff, motivation and retraining, students' commitment to their academic standards, and establishing links between the institutions and employers of labour. However, the mean of the respondents on item 23 is 2.47 which is below the criterion mean of 2.5. Here, the respondents showed disagreement on the provision of adequate and up-to-date teaching and learning materials in private tertiary institutions.

Research Question 4: What are the factors affecting the implementation of education policy in private tertiary institutions in Sokoto State, Nigeria?

Table 3: Factors Responsible for Non-implementation of Education policies in Private Tertiary Institutions

S/N	ITEM STATEMENT	RESPONSE								
		SA	A	SD	SA	SUM	Mean	SD	Decision	
11.	Low instructional resources in private tertiary institutions affect the proper implementation of the educational policy	100	13	90	29	648	2.79	1.13	Agreed	
12.	Insufficient teaching staff	45	50	107	30	574	2.47	0.94	Disagreed	

	limits the implementation of the tertiary education policy in private tertiary institutions								
13.	Inadequate workshops affect the proper implementation of the policy in tertiary institutions	138	40	20	34	746	3.22	1.10	Agreed
14.	Insufficient laboratories and libraries affect the implementation of the tertiary education policy in tertiary institutions	138	60	20	14	762	3.28	0.97	Agreed
15.	Inadequate and effective guidance and counseling services in private affect the implementation of the policy	130	60	20	22	742	3.20	0.86	Agreed
16.	Poor remuneration of lecturers can affect the quality of instructional delivery in private tertiary institution	100	92	26	14	726	3.13	1.03	Agreed
17.	There are insufficient funds to run the educational programs	121	40	51	20	756	3.26	1.05	Agreed
18.	Corruption in academia affects the implementation of policy in private tertiary institutions	135	52	15	30	769	3.31	0.99	Agreed
19.	There are poor internal quality assurance services in private tertiary institutions	140	50	20	23	765	3.30	1.00	Agreed

Source: Field Survey, 2022

Table 3 showed the response of the respondents on the factors for the poor implementation of the tertiary education policy in private tertiary institutions. The means of the respondents ranged between 3.39 and 2.95. This indicated that the mean is above the criterion mean of 2.5. Thus, the respondents agree with all nine items on poor implementation. The respondents revealed that there was a low provision of teaching and learning facilities, the staff was not efficient, workshops were not adequately organized and attended by the academic staff, insufficient libraries and laboratories, and poor remunerations for the lecturers.

Testing Null Hypotheses

H₀: There is no significant relationship between the legislation of tertiary education policies and the quality of educational institutions in Sokoto State, Nigeria.

Table 4: Association between the legislation of education policy and the implementation in private tertiary institutions in Sokoto State, Nigeria.

Variable	N	Mean	SD	Df	r-Cal	P-value	Decision
Legislation of Tertiary Education Policy	232	3.44	0.83	230	0.87	0.001	Ho Rejected
Implementation of Tertiary Education Policy	232	3.18	0.91				

Source: Field Survey, 2022

From table 4, it can be seen that the relationship between the legislation of tertiary institutions and the implementation of the tertiary education policy in the private tertiary institutions is higher with a calculated R-value of 0.89 against a p-value of 0.001 at 230 degrees of freedom. Therefore, the hypothesis is rejected. This indicates that legislation of tertiary institutions has a significant relationship with the implementation of tertiary education policies in private tertiary institutions in Sokoto State.

Summary of Findings

- The legislation of tertiary institutions policy has a positive impact on the implementation of the policy of private tertiary institutions in Sokoto State. This is through the issuance of guidelines for staffing, facility, and institutional resources. Ensuring that their graduates attend National Youth Service Corp and linking the graduate with the employer of labour.
- The study found that there are factors that affect the implementation of the tertiary education policy in private tertiary institutions in Sokoto State. They are low instructional resources, inadequate workshops, insufficient laboratories, poor remunerations, and corruption in academia.

Discussion of Findings

The finding from research question one showed that the legislation of tertiary institutions policy has a positive impact on the implementation of the policy of private tertiary institutions in Sokoto State. This is through the issuance of guidelines for staffing, facility, and institutional resources. Ensuring that their graduates attend National Youth Service Corp and linking the graduate with the employer of labour. This finding is contrary to the findings of Amaje, (2012), Nweke et. al. (2021), Okafor (2016), and Prince et. al. (2021) that the government's effort toward implementation of educational policy yielded little or no dividend result due to improper implementation of policies caused by lack of basic amenities for practical teaching as well as lack of instructional materials to facilitate the effective learning process.

The finding from research question four that study found that there are factors that affect the implementation of the tertiary education policy in private tertiary institutions in Sokoto State. They are low instructional resources, inadequate workshops, insufficient laboratories, poor remunerations, and corruption in academia. This finding is contrary to the findings of Amaje, (2012), Nweke et. al. (2021), and Prince et. al. (2021) that the government's effort toward implementation of the educational policy faced numerous problems. These are the problem of poor planning as a result of political instability and poor remuneration of lecturers, among others, which are harmful to the implementation of educational policy. The findings also confirmed the findings of Okafor (2016) that the Nigerian education policy is ridden with extensive challenges that continue to hamper

effective implementation. Although the policy is good in writing, the implementation process is difficult due to the apparent lack of political willpower to realize the set objectives. However, there are several gaps and lapses in the implementation of the education policy, especially in remote areas.

Conclusion

In conclusion, the study found that the education policy is being implemented in private tertiary institutions in Sokoto State but with problems. However, some institutions are yet to implement all the educational policies in their institutions as a result of certain factors. Inadequate funding, poor managerial practice, and insufficient funds are among the factors responsible for the non-implementation of the policy. Therefore, there are a lot of follow-up activities to be conducted in such institutions for the proper monitoring of the implementation of the policy by relevant governmental agencies to achieve predetermined policy objectives.

Recommendations

The following recommendations are made based on the finding of the study:

1. The management of private tertiary institutions should ensure strict compliance with the education policy guidelines for the proper implementation of the policies in the country.
2. The management of private tertiary institutions should make ensure that the challenges of the implementation of the education policy are properly addressed for the production of quality products in society.

Recommendations for Further Research

Based on the findings and limitations of the study, the following are recommended for further research:

- i. Similar study should be replicated in other states for the country to have a clear picture of the legislation and implementation of education policies in private tertiary institutions.
- ii. There is a need for the researchers to conduct a similar study in public tertiary institutions in the state.

References

- Agabi, O. G. (2002). The Classroom Management System. In Agabi, O. G. & Okorie, N.C. Eds. (2002). *Classroom Management*. Bori: Fredsbary Printers and Publishers.1-12.
- Amaje, S. (2012). The impact of public policy on the education sector in Nigeria: a study of Kogi State, 1992-2011. *A project report submitted to the Department of Political Science, University of Nigeria, Nsukka*, in partial fulfilment of the requirement for the award of Master of Science (M. Sc) degree in Political Science (Public Administration), Unpublished.
- Barber, E. (2008). How to measure the “value” in value chains. *International Journal of Physical Distribution & Logistics Management*, 38(9), 685-698.

- Bell, L., & Stevenson, H. (2015). Towards an analysis of the policies that shape public education: Setting the context for school leadership. *Management in Education*, 29(4), 146-150.
- Brennan, L. K., Kemner, A. L., Donaldson, K., & Brownson, R. C. (2015). Evaluating the implementation and impact of policy, practice, and environmental changes to prevent childhood obesity in 49 diverse communities. *Journal of Public Health Management and Practice*, 21, 121-S134.
- Chineze, U. & Olele, C. O (2011). Academic Accountability, Quality and Assessment of Higher Education in Nigeria. *Makerere Journal of Higher Education*, 3(2), X-XX. DOI:<http://dx.doi.org/10.4314/majohe.v3i2.1>
- Davidovitch, N. (2011). Legislation and social policy in the higher education system. *Asian Social Science*, 7(12), 125-135.
- Denga, D. I. (2000). Evolving a new education culture: The universal basic education focus. *International Journal of Research in Basic and Life-Long Education*. 1(1), 1-6.
- Marginson, S. (2009). Open-source knowledge and university rankings, *Thesis Eleven*, 96, London: SAGE Publications.
- Nweke, P. O., Ibn Abdullahi. M., Chukwu, C. J., Vita-Agundu, U. C. & Madu, C. V. & Ezurike, C. A. (2021). Assessment of the Implementation of Educational Policies in Universities in Enugu State, Nigeria, *Journal of Critical Reviews*, 8(2), 624-630.
- Ogboru, I. (2008). Educational policy and standards in Nigeria: Perspectives, challenges and strategies by department of arts and social sciences education. Unpublished seminar paper, Faculty of education, University of Jos, October 26-30.
- Okafor, F. (2016). The implementation and challenges of Nigerian Educational Policy in Rural Grade 1-12 public schools, Project submitted in partial fulfillment of the requirements for the degree of Masters in Education in multi-disciplinary leadership, University of Northern British Columbia, Unpublished.
- Prince, O. N., Abdullahi, M., Chukwu, C. J., Calista, V. U., Madu, C. V., & Ezurike, C. A. (2021). Assessment of the Implementation of Educational Policies in Universities in Enugu State, Nigeria. *Journal of critical reviews*, 8(02), 624-630.

Self-Assessment as Correlate of Academic Achievement among Financial Accounting Students in Public Senior Secondary Schools in Rivers State

OBILOR, Ezezi Isaac (Ph.D.)

Department of Educational Foundations,
Faculty of Education, Rivers State University
Nkpolu-Oroworukwo, P.M.B 5080, Port
Harcourt.

isaac.obilor@ust.edu.ng

IKPA, Augustine Ikechukwu (Ph.D.)

Department of Educational Psychology,
Guidance and Counselling
Faculty of Education

Ignatius Ajuru University of Education
Rumuolumeni, Port Harcourt.

ikpaikechukwu@gmail.com

Abstract: This study investigated self-assessment as correlate of academic achievement among financial accounting students in public senior secondary schools in Rivers State. Four research questions were posed, while four hypotheses guided the study. This study adopted the correlational survey research design. From a population of 851 selected students in public senior secondary schools in Rivers State, 30% of the population (255 students) was sampled using the purposive sampling technique in selection of the students. A self-structured questionnaire titled "Self-Assessment and Academic Achievement Questionnaire" (SAAQ) with a four point rating scale, was used in generating data for the study. The instrument was validated by an expert in the field of Measurement and Evaluation, who established and proved that the instrument is valid and reliable, while a reliability coefficient index of 0.79 was obtained using the Pearson's Product Moment Correlation. The Pearson's Product Moment Correlation was used in answering the stated research questions and in testing the formulated null hypotheses at 0.05 level significance. The study found that there is a significant relationship between there is a significant relationship between formative self-assessment, summative self-assessment and academic achievement among financial accounting students in public senior secondary schools in Rivers State. Given the above, it was therefore recommended that schools should allow for and ensure effective adoption and invigoration of formative self-assessment and that proliferation of summative self-assessment should be integrated in the school curriculum to enhance learning and improve academic achievement of students.

Keywords: Self-Assessment, Academic Achievement, Financial Accounting, Senior Secondary Schools.

Introduction

Assessment is the formal act or process of developing an opinion of value. It is an integral part of the learning process which should play an important role in the educational model (Yunlok, 2014). It comprises of all activities to help learners recall what has been impacted to them, for example, tests, assignments, demonstration, illustration, and others on large

scale or classroom level. It helps to engage students, clarify roles, promote learners, diversify the scope of evaluation, and many more.

Narael and Abullah (2016) defined assessment as the knowledge gained which is assessed and marked by a teacher and/or educational goals set by students and teachers to be achieved over a specified duration. It also entails the outcome of education and extent to which a student, teacher or institution has achieved educational goals. In the opinion of Yunlok (2014), assessment is a measure of knowledge and skills that students have mastered in a subject or a course. It is basically a measure of how well students have performed in the various assessment items set for them based on some educational criteria determined by professional educators. Through students' achievement in the assessment items such as essays, tests, viva, and examinations, students' achievement are determined in ranking as to the educational standards that they have reached - pass, credit, distinction, high distinction and so on. A self-assessor with less skill at assessment but more time in which to do it than the teacher can produce an assessment of equal reliability and validity to that of a teacher.

Self-assessment is a learning tool for secondary school students for better conceptual understanding of additive and subtractive colour mixing (Noona, 2005). It provides a structured learning process for students to critique and provide feedback to each other on their work. It helps students develop lifelong skills in assessing and providing feedback to others and thus equip them with skills to self-assessment and improve their own work. Self-assessment involves students taking responsibility in assessing the work of their peers against set assessment criteria. This makes self-assessment an important component of assessment for learning (formative peer assessment) rather than simply a means of measuring performance (summative peer assessment). For successful self-assessment the teacher must: have clear assessment criteria (give crystal clear procedure), develop their assessment criteria with students, use anonymous examples of work, vary the work to assess, model responses, allow time to respond, and provide feedback on the assessment.

Orsmond (2015) asserted that engaging students in self-assessment can help them in learning to evaluate their own learning and in interpreting assessment criteria. Further benefits might also include increasing feedback to students; reducing marking loads for staff; giving students a sense of ownership of assessment process; encouraging critical analysis of students' work, so students see beyond a mark/grade. He concluded that very obvious challenges are met when there is lack of ability to evaluate students, some do not take the assessment seriously, or fear discrimination. In education, self-assessment has been used at an increasing rate in recent decades, as a tool for students' appraisal (Gielen, Dochy, Onghena, Struyven & Smeets, 2011), as it represents a system for learning built around the learner which focuses on the full integration of the student in the process of collaborative learning with peers under the supervision of the teacher (Thomas, Martin & Pleasants, 2011). Self-assessment may be therapeutic while other fields may have work integrated assessment, dynamic assessment, synoptic assessment, criterion-referenced assessment, Ipsative C, and others (Ndupuechi, 2019).

Self-assessment could be formative (assessment for learning) or summative (assessment of learning) (Ketonen, 2020) yet valid, reliable, equitable, explicit, transparent, support learning process and efficient. Formative self-assessment is an essential part of teaching

and learning. It does not add to the final marks given for the unit; instead, it improves learning through given advice. Also, it points out what is good about the work and what is not? Similarly, it also affects what the students and teacher will plan in the future for learning. In formative self-assessment, a collaborative learning technique, students evaluate their peers' work and have their own work evaluated by peers. Often used as a learning tool, formative self-assessment gives students feedback on the quality of their work, with ideas and strategies for improvement. At the same time, evaluating peers' work can enhance the evaluators' own learning and self-confidence. It personalizes the learning experience, potentially motivating continued learning. When used in grading, it can give the instructor needed information on students' performance. Especially for large online classes, it may allow inclusion of assignments where students' creative work could not be graded reliably through automation or efficiently by teaching staff (Lladó, Soley, Roura-Pascual & Moreno, 2014). The intent of formative self-assessment is to help students help each other plan their learning, identify their strengths and weaknesses, target areas for remedial action, and develop meta-cognitive and other personal and professional skills.

Summative assessment, on the other hand, shows the amount of learners' success in meeting the assessment. Also, it contributes to the final marks given for the unit. These are conducted at the end of units. In addition, it provides data for selection for the next level. It can also provide information that has formative value (Andrade, Hadi & Du, 2017). Summative self-assessment is an assessment method where students assess each other on the basis of their observed performance by the conclusion of the task or assignment which requires teamwork skills to be employed (Sambell, McDowell & Montgomery, 2013). Depending on its purpose, the assessment may comprise a mark, comments, or both. However, it usually involves observing, reading, or interacting with peers in completion of the group work assessment task. The goal of a summative self-assessment is to evaluate student learning at the end of an instructional unit by comparing it against some standard or benchmark. It is typically heavily weighted high stake with high point value administered at the end of an instructional unit as in midterm exam, end-of-term exam, cumulative work over an extended period such as final project or creative portfolio, end-of-unit or chapter tests, etc. It evaluates what students learn, covers complete content areas, assigns grade to students' understanding, and emphasizes the product of student learning. It can also provide information that has formative value. Summative self-assessment yield benefits as one of the main modification of the unilateral power that instructors keep during the assessment process (Tan & Keat, 2015). If students do not have access to the process of summative assessment, their involvement in the power basis of education will be merely peripheral. Nevertheless, Tan (2018), argued that the participation of students in summative self-assessment only increases their power when the result of such self-assessment has priority over the instructor's assessment and improves their academic achievement.

Academic achievement is measured by ability to move on to higher grades while intelligence is ability to adapt to new information being presented in previous grades. Based on the report of the Center for Research and Development Academic Achievement (CRIRES) (2015), academic performance is a construct to measure students' achievement, knowledge and skills. That means assessment can be estimated for any student by the home environment, learning skills, academic interaction and study habits. Students can

achieve high assessment through learning skills. Students' self-assessment is affected by learning skills, parental background, peer influence, teachers' quality and learning infrastructure. Academic achievement is almost entirely measured with grades (by subjects or assignment) and Grade Point Average (GPA). The accomplishment of learning objectives and the acquisition of skills and competences can be measured at a subject, programme (e.g. Senior School Certificate Examination) and institutional level.

In the view of Morrall (2019), assessment mirrors the old adage: "publish or perish." Students' self-assessment is the gradual, measurable grading of achievement as evident in grades earned, GPA, High school diploma, Bachelors' Degree and further. Malik (2018) viewed assessment as the measurement of students' achievement across various academic subjects. Teachers and education officials typically measure achievement using classroom performance, graduation rates and results from standardized tests. Academic achievement is the extent to which a student, teacher or institution has attained their short or long-term educational goals. Completion of educational benchmarks such as secondary school diplomas and bachelor's degrees represent academic achievement.

Nicol, Thomson and Breslin (2014) identified that teaching staff are often reluctant to relinquish complete control over the feedback and assessment process, despite considerable evidence of deep student dissatisfaction with teacher-led feedback practices. Thus, there are great opportunities and advantages, in terms of understanding and engagement, to learners providing feedback on and assessing each other's work. Using and/or developing assessment criteria takes students deeper into their learning and allows for feedback and reflection on learning and the sharing of what new meaning appears. Further, if self-learning and collaboration are to be emphasized in a course or module, then assessment activities need to align with this and promote it. Self-assessment should be both appropriate and credible. In self-assessment, students make decisions about each other's work and decide what constitutes 'good work'. This can be done anonymously, randomly, individually or in a group and is an active area of research (Strijbos & Sluijsmans, 2010). Self-assessment and the learning that emerges from it fit into social constructivist models of education (Carlile & Jordan, 2015). Therefore, the traditional individualistic concept of assessment needs to be re-addressed if student cooperation and collaboration are to be fostered. Furthermore, self-assessment can dramatically reduce the marking load on academic staff and allow them to devote more time to other aspects of teaching and learning. It can also free up time to enable them to manage the peer assessment process itself more effectively.

Statement of the Problem

Assessment of Financial Accounting as a subject in senior secondary schools should be comprehensive, objective, systematic, cumulative and guidance-oriented. Progressive and unbiased method of evaluating learners' achievement from instruction as well as their general developments physically, mentally, socially, morally, and culturally can generally be realised through self-assessment. However, many teachers fear that self-assessment is too resource intensive, time consuming, and an added task for which they are not appreciated. The aforementioned subject basically, has suffered much misunderstanding and unacceptance from secondary school students for many years because of unilateral teachers' grading, general misconception of its importance, little or no incentive for the few

available Financial Accounting teachers, poor students' performance in the subject among others (Ndupuechi, 2019). There is need for good performance by students in the subject matter. Therefore, it is imperative to encourage students offering Financial Accounting in secondary schools and teachers teaching the subject so as to improve in the teaching and learning process in public senior secondary schools in Rivers State and mitigate the challenges in the subject. Given the above, this study investigated self-assessment as correlate of academic achievement among financial accounting students in public senior secondary schools in Rivers State.

Purpose of the Study

The purpose of this study basically is to investigate self-assessment as correlate of academic achievement among Financial Accounting students in public senior secondary schools in Rivers State. In specific terms, the study sought to:

1. Assess the relationship between formative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State.
2. Examine the relationship between summative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State.

Research Questions

The following research questions guided the study:

1. What is the relationship between formative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State?
2. What is the relationship between summative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State?

Hypotheses

The following research hypotheses were formulated for the study and were tested at 0.05 level of significance:

1. There is no significant relationship between formative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State.
2. There is no significant relationship between summative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State.

Methodology

This study adopted the correlational survey research design. From a population of 851 senior secondary 1 (SS1) students of public senior secondary schools in Rivers State (Source: Rivers State Senior Secondary Schools Board, 2021), 30% of the population (255 students) was selected for the study using the purposive sampling technique. A self-structured questionnaire titled "Self-Assessment Questionnaire" (SAQ) with a four-point

rating scale was used in measuring self-assessment, while examination scores of the students in Financial Accounting were obtained from the selected schools and used as data for Academic Achievement. The instrument (SAQ) was validated by two experts in the field of Measurement and Evaluation, who established and proved that the instrument was valid, while a reliability coefficient of 0.79 was obtained using Cronbach Alpha. The Pearson's Product Moment Correlation was used in answering the stated research questions, and the t-transformation statistic was used in testing the formulated null hypotheses at 0.05 level significance.

Results

Research Question 1: What is the relationship between formative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State?

Table 1: Relationship between formative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State.

Variables	N	Σx	Σx^2	Σxy	R	Decision
		Σy	Σy^2			
Formative Self-Assessment (x)	255	20461	436710	830029	0.79	Positive (Strong)
Academic Achievement (y)	255	21642	529042			

Source: Researchers' Analysis from Field Survey, 2022.

The information in Table 1 above shows the relationship between formative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State. The calculated $r = -0.79$ shows that there is a positive relationship between formative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State. This implies that formative self-assessment among students improves their academic achievement in public senior secondary schools in Rivers State.

Research Question 2: What is the relationship between summative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State?

Table: 2. Relationship between summative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State.

Variables	N	Σx	Σx^2	Σxy	R	Decision
		Σy	Σy^2			
Formative Self-Assessment (x)	255	23753	330621	756933	0.73	Positive (Strong)
Academic Achievement (y)	255	20926	466781			

Source: Researchers' Analysis from Field Survey, 2022.

The information in Table 2 above shows the relationship summative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State. The calculated $r = 0.73$ shows a strong positive relationship between summative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State. This implies that summative self-assessment among students improves their academic achievement in public senior secondary schools in Rivers State.

Test of Hypotheses

Hypothesis 1: There is no significant relationship between formative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State.

Table 3: t-transformed of relationship between formative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State.

Variables	N	Σx	Σx^2	Σxy	df	r-cal	t-trans	t-crit	Decision
		Σy	Σy^2						
Formative Self-Assessment (x)	255	20461	436710	830029	253	0.79	20.49	1.96	H ₀
Academic Achievement (y)	255	21642	529042						

Rejected

Source: Researchers' Analysis from Field Survey, 2022.

In Table 3 above, the t-transformed value of 20.49 is greater than the t-critical value of 1.96 for 253 degrees of freedom at 0.05 level of significance, the null hypothesis which states that there is no significant relationship between formative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State is hereby rejected and the alternate is thus accepted. This implies that there is a significant positive relationship between formative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State.

Hypothesis 2: There is no significant relationship between summative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State.

Table 4: t-transformed of relationship between summative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State

Variables	N	$\sum x$	$\sum x^2$	$\sum xy$	df	r-cal	t-trans	t-crit	Decision
		$\sum y$	$\sum y^2$						
Summative Self-Assessment (x)	25 5	23753	330621	756933	25 3	0.73	16.99	1.96	H ₀
Academic Achievement (y)	25 5	20926	466781						Rejected

Source: Researchers' Analysis from Field Survey, 2022.

In Table 4 above, the t-transformed value of 16.99 is greater than the t-critical value of 1.96 for 253 degrees of freedom at 0.05 level of significance. Thus, the null hypothesis that "there is no significant relationship between summative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State" is hereby rejected and the alternate accepted. This means that there is a significant positive relationship between summative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State.

Discussion of Findings

Based on the analysis of the data, the Research Question 1 revealed that the relationship between formative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State is positive and strong. The calculated $r = 0.79$ shows that there is a positive relationship between

formative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State. This implies that formative self-assessment among students improves the academic achievement of students of public senior secondary schools in Rivers State. The corresponding test of Hypothesis 1 established that the t-transformed value of 20.49 is greater than the t-critical value of 1.96 for 253 degrees of freedom at 0.05 level of significance. Thus, the null hypothesis that “there is no significant relationship between formative self-assessment and academic achievement among Financial Accounting students of public senior secondary schools in Rivers State” is hereby rejected and the alternate accepted, which implies that there is a significant positive relationship between formative self-assessment and academic achievement among Financial Accounting students of public senior secondary schools in Rivers State.

In line with the findings of this study, Andrade, Hadi and Du (2017) asserted that formative assessment is an essential part of teaching and learning. It does not add to the final marks given for the unit; instead, it improves learning through giving advice. Also, it points out what is good about the work and what is not? Similarly, it also affects what the students and teacher will plan in the future for learning. Further, in formative peer-assessment, a collaborative learning technique, students evaluate their peers' work and have their own work evaluated by their peers. Often used as a learning tool, peer-assessment gives students feedback on the quality of their work, with ideas and strategies for improvement. At the same time, evaluating peers' work can enhance the evaluators' own learning and self-confidence. It personalizes the learning experience, potentially motivating continued learning. When used in grading, it can give the instructor needed information on students' performance. Especially for large online classes, it may allow inclusion of assignments where students' creative work could not be graded reliably through automation or efficiently by teaching staff (Lladó, Soley, Roura-Pascual & Moreno, 2014). The intent of formative self-assessment is to help students help each other plan their learning, identify their strengths and weaknesses, target areas for remedial action, and develop meta-cognitive and other personal and professional skills. A peer assessor with less skill at assessment but more time in which to do it can produce an assessment of equal reliability and validity to that of a teacher.

The analysis of the data on Research Question 2 revealed the relationship between summative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State. The calculated $r = 0.73$ shows a strong positive relationship between summative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State. This implies that summative self-assessment among students improves their academic achievement in public senior secondary schools in Rivers State. The corresponding test of hypothesis 2 revealed that the t-transformed value of 16.99 is greater than the t-critical value of 1.96 for 253 degree of freedom at 0.05 level of significance, indicating that there is a significant relationship between summative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State. This implies that summative self-assessment positively influences academic achievement among Financial Accounting students in public senior secondary schools in Rivers State.

Supporting this finding, Sambell, McDowell and Montgomery (2013) informed that summative self-assessment is an assessment method where students assess each other on the basis of their observed performance by the conclusion of the task or assignment which requires teamwork skills to be employed. Basically, the assessment may comprise a mark, comments, or both. Thus, it usually entails observing, reading, or interacting with peers in completion of the group work assessment task. Also, Tan and Keat (2015) opined that the objective of a summative self-assessment is to evaluate student learning at the end of an instructional unit by comparing it against some standard or benchmark. It is typically heavily weighted with high point value administered at the end of an instructional unit as in midterm exam, end-of-term exam, cumulative work over an extended period such as final project or creative portfolio, end-of-unit or chapter tests, etc. It evaluates what students learn, covers complete content areas, assigns grade to students' understanding, and emphasizes the product of student learning. If students do not have access to the process of summative assessment, their involvement in the power basis of education will be merely peripheral. Nevertheless, Tan (2018), argued that the participation of students in summative self-assessment only increases their power when the result of such self-assessment has priority over the instructor's assessment.

Conclusion

The study revealed that engaging students in self-assessment can help them in learning to evaluate their own learning and in interpreting assessment criteria. Further benefits include increasing feedback to students; reducing marking loads for staff; giving students a sense of ownership of assessment process; encouraging critical analysis of students' work, so students see beyond a mark/grade. In education, self-assessment has been used at an increasing rate in recent decades, as a tool for students' appraisal as it represents a system for learning, built around the learner which focuses on the full integration of the student in the process of collaborative learning with peers under the supervision of the teacher. On the whole, there is a significant relationship between formative self-assessment, summative self-assessment and academic achievement among Financial Accounting students in public senior secondary schools in Rivers State.

Recommendations

From the findings of the study, the following recommendations are made:

1. Schools should allow for and ensure effective adoption and invigoration of formative self-assessment in public senior secondary schools to enhance learning.
2. Increased summative self-assessment should be integrated in the school curriculum to improve academic achievement of students.

References

- Andrade, H., Hadi, P., & Du, Y. (2017). Students' responses to criteria-referenced self-assessment. *Assessment and Evaluation in Higher Education*, 32(2), 159-181.
- Gielen, S., Dochy, F., Onghena, P., Struyven, K., & Smeets, S. (2011). Goals of self-assessment and their associated quality concepts. *Studies in Higher Education*, 36(6), 719-735.

- Ketonen, L. (2020). Implementing self-assessment at secondary school, science. *International Journal of Science and Maths Education*, 18(3), 13-24.
- Lladó, A., Soley, L., Sansbelló, R., Pujolras, G., Planella, J., Roura-Pascual, N., & Moreno, L. (2014). Student perceptions of self-assessment: An interdisciplinary study. *Assessment & Evaluation in Higher Education*, 39(5), 592-610.
- Narael, H., & Abullah, O. (2016). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199-218.
- Ndupuechi, T.I. (2019). Improving the teaching of Economics in Nigerian schools: *Journal of Jos Educational Forum*, 4(1), 91-97.
- Noonan, B. (2015). Peer and self-assessment in high schools. *Practical Assessment, Research and Evaluation*, 10(17), 45-59.
- Orsmond, D.R. (2015). Interpretations of criteria-based assessment and grading in higher education. *Journal of Assessment and Evaluation in Higher Education*, 30(2), 175-194.
- Reynolds, N., & Walberg, D. (2012). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199-218.
- Rimer, S. (2017). *Harvard task force calls for new focus on teaching and not just research*. New York: The New York Times.
- Ristea, N. (2012). Implementing peer assessment at secondary school, science. *International Journal of Science and Mathematics Education*, 18(3), 13-24.
- Sambell, K., McDowell, L., & Montgomery, C. (2013). *Assessment for learning in higher education*: Abingdon, U.K: Routledge.
- Tan, C., & Keat, T. (2015). Group investigation in the cooperative classroom. In S. Sharan (Ed.), *Handbook of cooperative peer-assessment methods*. Westport: Praeger.
- Tan, A. (2018). *The impact of peer assessment on academic performance*. A meta-analysis of control growing studies.
- Thomas, C., Martin, M., & Pleasants, R. (2011). The impact of self- and peer-grading on student learning. *Journal of Educational Assessment*, 11(1), 1-31
- Yunlok, F. (2014). *Student self-assessment in higher education: Alone or plus*. Paper presented at the CPLA Conference Lebanese American University, Lebanon.