

## **INSTRUCTIONAL MATERIAL: A PRE- REQUISITE FOR EFFECTIVE TEACHING AND LEARNING AMONG SECONDARY SCHOOL STUDENTS IN ENUGU EDUCATION ZONE**

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### **Abstract**

*Learning is a relatively permanent change in behavior arising from experience. It is also an association of stimulus and response resulting in change in behavior. Hence for this resultant change in behavior, certain principles, conditions and criteria must be put in place. Therefore this study sought to investigate instructional material as one of the pre-requisite for effective teaching and learning among secondary school students in Enugu Education zone. Two research questions and hypotheses guided the study. The study employed quasi experimental design with a sample size of 300 senior secondary schools we randomly selected from the three Local Government Areas in the zone. A researcher designed questionnaire was used to obtain responses from the student. The instrument was face validated by three experts from Department of Education Foundation and Measurement and Evaluation from Enugu state University of Science and Technology and Abia State University respectively. Internal consistency and co-efficient of 0.85 was obtained using Cronbach alpha. Research question was answered using mean and standard deviation while hypothesis was analyzed using t-test. There was a significant difference between students taught with instructional materials and the ones not taught hence it was recommended among others that the use of instructional materials no matter how little should be used in teaching and learning in order to consolidate in the permanence aspect of learning. Government should properly fund and supervise the quality and quantity of educational services given to students.*

**Keywords: Instructional Materials, Teaching, Learning. Secondary Schools, Students.**

## **Introduction**

Teaching in recent times is becoming increasingly complex and technical to be effectively actualized with traditional tools and methods alone. The search for effective and efficient delivery of instruction has always been a major concern for educators. This can be partly attributed to massive failures in internal and as well as external examinations and lack of instructional materials in teaching and learning. Since education at secondary school level is the bedrock and foundation for higher knowledge in senior secondary level and tertiary institutions. It is an investment as well as instruments for achieving technological, scientific, cultural, social and political developments. This is why the Federal ministry of education (2007) stipulated national policies for secondary school as an agent of national development that fosters individual development for further societal worth and development with equal opportunities for all. However, no nation can function academically, politically, culturally, socially and economically when her students learn in abstractness. It can be likened to a nation living without memories or brain hence the need for the use of instructional materials in teaching and learning as it has the capacity to destroy the country's younger generation and future workforce. Furthermore, academic performance among secondary school students has always been a matter of great concern to educational stakeholder comprising parents, educators, students and government. Though a lot of measures have been taken over the years in order to improve on the situation nevertheless, a large number of secondary school students still perform poorly. This is because they lack adequate change in behavior from memories of teaching and permanence expected from learning leading to lack of hard work, determination, resilience, cooperation among others which fosters individual achievement and national development (Animba, 2018). This can be seen in the level of employability and lack of entrepreneurial spirit exhibited by Nigerian graduates over the years leading to high level of unemployment in the land (Sulaimon, 2019)

The lack of creativity and creative thinking seen for decades now is because most subjects are taught in abstract. There is no correlation or relationship between some subject and learners. All students know are names without a feel of what some concepts or materials look like in reality thereby leading to disconnect between subjects and students. This has led to serious investigation by researchers on how to salvage the situation before the impending doom on Nigeria's education system. This is because instructional materials instill in a student the sense of independence, hard work, resilience, creativity and creative thinking. Moreover it makes learning fun and quicker.

Instructional materials refer to those alternative channels of communication which a classroom teacher uses to concretize concepts during teaching and learning (Amadioha, 2009). It helps provide variation in the ways which learning messages are sent across from the teacher to the learner. This is beyond the traditional talk and chalk used previously but the extension of materials range used in conveying learning through the various sense organs by the manipulation of real objects or use of stimulators. Instructional materials are also medium of exchange through which a learning experience is facilitated between a source (teacher) and a receiver (learner) in order to enhance the process of communication hence both the teacher and learner are involved in the learning process by sharing and exchanging ideas, feelings and skills. This is because instructional materials are made up of different tangible product which can be used by a learner. During the exchange, there is an interaction between the

learner and the materials which also leads to the manipulation of the material by the learner and avenue for exchange/expression of ideas about a given problem. Furthermore, feedback from this exchange gives a teacher idea on the extent a learner attained an instructional objective; they are also devices developed to assist teachers in transmitting, organizing knowledge and attitudes towards learners within instructional situation (Nwachukwu, 2006). They are essential and significant tool needed for teaching and learning in order to promote teacher's efficiency and improve student's performance by assisting teachers to make their lessons explicit to learners while transmitting information, ideas and notes to learners (Beatrice Arisa Arop, Umanah, 2015). Usman and Adewumi (2006) opined that instructional materials can be referred to as the widely variety of equipment and materials used for teaching and learning by teachers to stimulate self-activity on the part of the learners. Hence instructional materials also known as teaching /learning materials are collection of materials including inanimate and animate objects, human and non-human resources that a teacher uses in teaching and learning situation in order to achieve the desired learning outcome while helping a student in concretizing a learning experience in order to make learning exciting, interesting and interactive. This means that instructional materials are a wide range of materials and devices designed to provide realistic imagery and substitute experience in order to enrich curricular experiences (Bisiriyu, 2016). He further posited that one way of attaining this is by using real object in real life situation for instructions. However when real life objects are not possible, the alternative is for the teacher to use representations of real life situations; these representations are materials, devices and techniques which helps the teacher to make realistic approach to his job. Thus whether real or substitute, these representations are aimed to achieve a common goal which is effective and impactful teaching and learning so that student receives, understands, retains and apply the experience gained. Hence use of instructional material increases the rate of learning, saves teacher's time and effort, increases learner interest and facilitates retention of what is learned.

### **Types of instructional materials**

Instructional/ learning materials are generally classified into:

- A: Printed and reference materials: Examples include textbooks, newspapers, magazines, government documents, teachers guide, journals, handbooks, pictures, work books etc
- B: Graphic materials: Examples are graphic, charts, diagrams, maps, globes
- C: Display materials: Chalkboards, bulletin boards, flat pictures, magnet boards, flannel board
- D: Projected materials: Television, videotape, overhead projector, slides
- E: Audio and visual materials: Radio, model, computer, tape recording
- F: Community resource: zoos, agricultural centers, market place, parks, industrial establishment.

Some examples of instructional materials and their uses includes:-

- a: Instructional charts: A chart is a combination of pictorial, graphic, numeric materials which presents clear visual summary. It is a visual symbol summarizing, comparing, contrasting or performing other useful services in explaining subject matter (Ajoke, 2017). It shows relationships such as comparison, relative amounts, developments, process, classification and organization of learning variables. Furthermore a chart is a two dimensional object, flat visual material which contain diagrams, pictures, concepts

and set of relationship used to present ideas and concepts which may be difficult to understand if presented verbally (Ibe & Bassy, 2000). The use of instructional charts in teaching and learning improves students cognitive skill while stimulating creativity, motivation, continuity of the learning process, shows relationship between variable through facts, figures, present concept symbolically, present abstract ideas in visual form, shows development of structures and stimulates thinking and problem solving skills.

- b: Posters: A poster is a pictorial; device designed to attract attention and communicate a story, fact, idea, image among others quickly and clearly. It is also a pictorial or decorative placard with emotional appeal used to convey messages aimed at reinforcing an attitude or action. Hence it is a graphic representation with strong emotional appeal that is carried out through a combination of graphic aids like pictures, cartoons, letters and other visual arts for conveying specific message like teaching in order to exert a great influence on the learner.
- c: Flashcards: They are small card with pictures or symbols used in teaching and learning by associating words to activities, games or pictures in order to stimulate learning while making teaching fun.
- d: Slides: This is an optical aid used for the projection of pictures from a transparent wall or screen. It helps in showing a magnified version of an image in order to make it more clear and sharp.
- e: Film strips: This is used to teach skills, shows relationship in order to convey knowledge, affect attitude through individual and independent study groups.
- f; Flipchart: This is a series of sheet of paper fastened together at the top which helps students to remember information and acts as a teaching aid to the teacher.
- g; Cartoon: This is a simple picture of a situation, topical issue, framed drawings among others which tells a story. Cartoon pictures enable learner to discuss sensitive issues useful for teaching and learning.

### **Importance of instructional materials**

In making use of any instructional materials, such materials must be previewed by the teacher having full knowledge of the material, intended environment must be prepared and students prepared in order for the material to attract, stimulate, motivate and arouse the intended interest at the beginning, middle and end of the learning experience. This is because instructional material affect learner's cognitive, psychomotor and affective domain thus a single approach or methodology cannot elicit the desired response from students (Nsa, 2012). Although teachers use different instructional materials to motivate learning by using textbooks, charts, models, graphic, real objects as improvised materials (Awotua & Efobo, 2001), the success of achieving specific objective through the use of instructional material depends largely on the suitability of the material, adequacy and effective utilization of the material ( Ajoke, 2017). The effectiveness of instructional materials in promoting students' academic performance in teaching and learning is indisputable because it provides the needed sensory experiences needed by the learners for an effective academic performance of students in schools. The performance of students on the intended learning outcome provides the validation loop on the success of the interaction and instruction. Omabe (2006) asserts that instructional materials are central in teaching and learning because they are used to compliment efficiency of a teacher and effectiveness in lesson delivery. Esu, Enuokoha &

Umoren (2004), affirmed that instructional material facilitates learning of abstract concepts by helping to concretize ideas and stimulate learner's imagination. Moreover, instructional materials help to increase active participation in the learning process while saving teacher's energy and reducing teacher centeredness in teaching. This is supported by Matthew (2012) who opined that the use of instructional material makes teaching effective as it enable learners to participate actively in classroom instructions. To Kochar (2012), instructional materials are significant teaching and learning tools. He further added that there is need for teachers to find necessary and relevant instructional materials to complement classroom interaction and textbooks in order to broaden and arouse student's interest in the subject. In summary, the importance of instructional materials are:-

- It enables both teachers and students make learning more interesting, practical, realistic and appealing.
- It enables students to become active participants in learning experiences
- It gives room for acquisition of skills and knowledge with development of self-confidence and self-actualization
- It helps in practical demonstration of concepts during teaching and learning while helping teachers to present lessons in a logical and sequential way
- It improves the quality of teaching, makes explanation simpler and helps in the understanding of subject matter.

#### **Effect of instructional material in teaching and learning**

- i: According to Piaget, the age of a learner determines to a great extent the level and method of teaching especially in the use of instructional materials. In secondary schools, there are subjects that are difficult to understand except instructional materials are employed in order to make such concepts real while taking away its abstractness; subject like History, Geography, Basic science, Physics, Chemistry, Home economics, Agricultural science among others. Therefore it is expedient that when handling such subject, instructional materials are employed ranging from locally made resources to sophisticated media like radio, television, computers among others. Though some of these materials are designed in such a way that they may not be readily available for every classroom experience, the teacher as a facilitator, model and communicator uses his/her knowledge and experience to expand the learning experience. Furthermore, availability and application of instructional materials is a great advancement in teaching and learning. This is because it helps to enhance respect for teacher's knowledge, make learners have a clear view of what is being taught, make classroom realistic while giving life to the topic (Nursel, 2001).
- ii: Crist (2014), opined that instructional materials are highly important for teaching especially for inexperienced teachers. This is because they rely on instructional materials in every aspect of teaching for background information on the subject they are teaching. Due to anxiety or fear of expression in the classroom, they need instructional materials to help them. Therefore, they resort to the use of instructional materials in lesson planning in order to assess the knowledge of their students by assigning tasks, projects and examinations.
- iii: Instructional materials help teachers create assignment and project ideas for students. This is because a teacher is required to assess a student in the course of teaching and

learning using different methods in order to provide accurate evaluation hence instructional materials provide innovative and creative ways to assess student's performance. Moreover, lack of instructional material is likely to cause stress and anxiety on a teacher thereby affecting teaching and learning.

- iv: Instructional materials are designed to develop the learner's cognitive, psychomotor and affective domain in order to achieve learning outcomes/ objectives. This is because for any successful implementation of curriculum, there must be a qualitative and quantitative instructional material made available to the teacher and students. Hence instructional materials stimulate learner's interest in order to overcome physical limitation during physical presentation of subject. Hence instructional materials enrich learning while making it pleasurable (Arop, Umanah, 2015).
- v: Instructional materials serves as checks to a teacher's knowledge, a means of transmission, air of guidance and coordination, correction and brightens the classroom with different varieties and fun. Therefore every available, accessible, theoretical, practical and skill oriented resources that facilitate teaching entails instructional materials (Betiku, 2000). He also opined that it includes all devices, information carrying technologies that assist in transmitting facts, skills, attitudes and knowledge to the learners within the instructional system.

Teaching according to Rajagoplan (2019), is an interactive process primarily involving classroom talk which takes place between a teacher and a student during definable activities. It is a scientific process whose content include communication and feedback. It is an interpersonal influence aimed at changing the behavior of another, an arrangement and manipulation of a situation with obvious gaps which students seek to overcome and in the process learn life changing skills. Teaching can also be conceptualize as a form of problem-solving and decision-making which can be likened to the work of a physician.

#### **Characteristics of Teaching include:**

- Teaching is an effective interaction between a teacher and a student
- Teaching is an act as it calls for the exercise of talent and creativity. It is also a science because it involves a repetition of techniques, procedures and skills that can be systematically studied, described and improved
- Teaching is dominated by the skills of communication
- Teaching is a triple process involving educational objectives, learning experiences and change in behavior
- Teaching is suggestive not dictating, democratic with the teacher respecting the students while encouraging them to participate in the process
- Teaching provides guidance, direction and encouragement to students. It is remedial, cooperative and helps student make adjustments in life.

Teaching stimulates students' power of thinking and directs them towards self-learning. It is a specialized task with a set of component set of instructional objectives that is well observed, analyzed and evaluated.

It is very important for a teacher to have an in-depth analysis of meaning before engaging in the teaching process. This is because it will facilitate the understanding of learning for the

teacher and learning process needed for teaching. Learning is a relative permanent change in behavior arising from experience (Animba, 2020). It is the act of getting experience, knowledge, skills and values by understanding what to do and how to do any task by synthesizing the different types of information perceived by us. Learning brings about changes in the existing behavior of an individual. It starts from birth to death and involves practice in order to produce a permanent change in behavior. However, learning not only bring about change in existing behavior but enables a student to acquire new behavior. It also prepares a student for adjustment and adaptation with the existing environment. Hence in teaching and learning, learning is the process of molding the structure of a student personality and behavior in a particular subject. It is also a continuous and comprehensive process which involves different method of covering the three domain of education which is cognitive, psychomotor and affective. There are different kinds of learning; individualized, formal, group, motor, informal, verbal, sensory learning among others.

### **Purpose of study**

Fakunle (2008) opined that people generally remember 10% of what they read, 20% of what they hear, 30% of what they see, 50% of what they hear and see, 70% of what they say and 90% of what they say and do. Thus the use of instructional materials cannot be left outside teaching and learning process. However despite all these roles of instructional materials, most teachers still teach in secondary schools in isolation or without instructional materials; reasons being that they are not available, affordable or too large and expensive to be improvised, difficult to manipulate thereby wasting a lot time during teaching and learning. Moreover, the use of instructional material at secondary school level is supported by section 4 sub section 23 of the Nigerian National Policy on Education (NPE, 2004), which recommended that each state and local government authority shall establish teacher's resource centers where teachers will meet for discussion, investigation, study workshops, conferences, development and testing of teaching materials. However it is interesting to note that teachers are grossly ignorant of the relevance of instructional materials in secondary schools. Subsequently, they find it difficult to use teaching aids effectively in the impartation of knowledge to students which also leads to poor performance of students (Olubebe, 2008). This paper therefore examined instructional material as a pre-requisite for effective teaching and learning among secondary schools in Enugu Education Zone with the aim to answer some fundamental questions like the difference in teaching and learning between students taught with the use of instructional materials and those who were not taught using instructional materials.

### **Research Questions**

- 1: What is the difference in teaching and learning between students taught with instructional material and those taught without the use of instructional material in Enugu Education Zone?
- 2: What is the difference in teaching and learning between pre-test and post-test scores of students taught with instructional materials in Enugu Education Zone?

### **Hypotheses**

H01: There is no significant difference between the scores of students taught with instructional material and those not taught with instructional materials.

H02: There is no significant difference between pre-test and post-test scores of student taught with instructional materials.

### **Methodology**

The study adopted quasi-experimental design. A quasi-experimental design aims to establish a cause and effect relationship between an independent and dependent variable (Thomas, 2020). The design was used in order to check the influence of instructional material in effective teaching and learning among secondary school students in Enugu Education Zone. Hence a experimental and control group was used. The population for the study was all senior secondary school 1 in public secondary schools of the zone. Two schools each were selected from three local government that make up the zone. 50 SS1 students were randomly selected from each school to form sample for the study. Three schools formed the experimental group while the other three formed the control group. A 20-item questions called literary achievement test (LAT) was constructed by the researcher. The research item was face validated by three experts in Measurement and Evaluation and Educational Foundation in Enugu State University of Science and Technology and Abia State University respectively. Reliability co-efficient was calculated using Cronbach alpha with a reliability index of 0.85. Students in the experimental group were taught parts of a Prose using Buchi Emecheta’s Second Class citizen. No instructional material was used in the control group. At the expiration of three weeks, LAT was administered to the two groups. Scores generated were analyzed using mean, standard deviation and independent t-test.

### **Research question 1**

What is the difference in teaching and learning between student taught with instructional materials and those not taught with instructional materials in Enugu Education Zone?

Table 1a: Mean scores of Pre-test and Post- test scores of students taught with and without instructional materials in Enugu Education Zone.

| Groups       | Pre-Test            |           | Post-Test |           |       |
|--------------|---------------------|-----------|-----------|-----------|-------|
|              | Respondent<br>N=300 | Mean<br>X | SD        | Mean<br>X | SD    |
| Experimental | 150                 | 74.60     | 13.64     | 91.34     | 15.60 |
| Control      | 150                 | 50.50     | 15.60     | 62.20     | 17.40 |

Data on table 1a shows that the experimental group pre-test and post-test mean are 74.60 and 91,34 while the standard deviation are 13.64 and 15.60 respectively. The control group however has pre-test and post-test scores of 50.50 and 62.20 with a standard deviation of 15.85 and 17.40 respectively indicating increase for the treatment group over the control group in the use of instructional materials in teaching and learning of parts of a Prose.

**Hypothesis 1: There is no significant difference between students taught with instructional materials and those not taught with instructional materials.**



Table 1b: T-test computation of the difference between the students in which instructional materials was used and those it was not used.

| Groups       | N=300 | X     | S.D   | r-cal | r-crit |
|--------------|-------|-------|-------|-------|--------|
| Experimental | 150   | 91.34 | 15.60 | 8.76  | 1.98   |
| Control      | 150   | 62.20 | 17.40 |       |        |

Table 1b indicates that there was a significant difference between pre-test and post-test scores of learning with instructional material and without instructional material. This is because the cal t is greater than the crit t. This result is similar to the view held by Awolaju (2016) in which he referred to instructional material as those devices and assistance which help the teachers to convey intended messages effectively and meaningful to learners in order to achieve intended educational goals. From the result of the study, students taught with instructional materials achieved higher learning than those taught without instructional material. Hence the relationship is significant and hypothesis 1 rejected.

### Research Question 2

What is the difference between the pre-test and post-test scores of students taught with instructional materials in Enugu Education Zone?

Table 2a: Mean score of Pre-test-and Post-test scores of students taught with instructional materials?

| Groups    | Respondent<br>N=300 | Mean<br>X | SD    | Diff  |
|-----------|---------------------|-----------|-------|-------|
| Pre-Test  | 150                 | 74.60     | 13.64 | 16.74 |
| Post-Test | 150                 | 91.34     | 15.60 |       |

Data on table 1a shows that the experimental group pre-test and post-test mean are 74.60 and 91,34 while the standard deviation are 13.64 and 15.60 respectively indicating increase of 16.74 for the treatment group signifying increase in teaching and learning using instructional.

**Hypothesis 2: There is no significant difference between pre-test and post-test scores of students taught with instructional materials.**

Table 2b: T-test computation of the difference between pre-test and post-test of students in which instructional materials was used.

| Groups    | X     | S.D   | r-cal | r-crit |
|-----------|-------|-------|-------|--------|
| Pre-Test  | 74.60 | 13.64 | 6.76  | 1.98   |
| Post-Test | 91.34 | 15.60 |       |        |

Table 2b indicates that there was a significant difference between pre-test and post-test scores of learning with instructional material and without instructional material. This is because the cal-t is greater than the crit-t. This result is similar to the view held by Inyang & Abia (2000), Sistelli & Harrison (2001) who emphasized on the use of instructional materials for effective learning. Brown (2000) also stressed on the roles of instructional material in ensuring retention and making learning more important. Hence the relationship is significant and hypothesis 2 rejected.

### **Discussion of Findings**

The findings from the study revealed that there is a statistical significant between students taught with instructional materials and students taught without instructional materials. Also there is increase in teaching and learning when students are effectively exposed to the use of instructional materials than when they are not. This is in agreement with the work of John Lawrence Tety (2016) on the role of instructional materials in academic performance which led to increase in teaching and learning.

Furthermore, there was a significant increase in permanence and learning from the study between pre and post- test carried out on students using instructional materials. This is similar to a research carried out by Beatrice Arop, Felicia Umanah & Oji Effiong (2015) and Ajoke (2017) on effects and importance of instructional materials in teaching and learning of junior secondary school subjects which suggested that for effective teaching and learning, instructional materials must be used.

### **Conclusion**

The current state of education in Enugu Education Zone is shredded on the fact that there are a lot of factors militating against effective teaching and learning which unfortunately have been left unaddressed hence pointing to the fact that all is not well with education in the state. Much of these problem emanated from government policy hence affect the direct work of the teacher in the classroom. Furthermore, teachers over the years are often accused of using traditional method and approaches in teaching and assessing students without the aid of instructional materials. The study has also reiterated the fact that for teaching and learning to be taken to the next level in the state and be able to compete with other technological countries of the world; use of instructional materials must be made compulsory.

## Recommendations

From the findings of the study, these recommendations were made:-

- 1: Use of instructional materials should be mandatory used for teaching and learning as it enables effective and eventful learning experience.
- 2: Adequate funding and attention should be given through a partnerships between government, parents and public in order to ensure that instructional materials are readily available as and when due for effective teaching and learning.
- 3: In areas and schools where instructional materials are not adequate or lacking, teachers should improvise with as little as they can.
- 4: Government should as a matter of urgency supervise the use and maintenance of instructional materials supplied to schools through Education inspectors and supervisors in order to ensure proper use of these materials.
- 5: Periodic workshops and seminars should be organized for teachers by government and schools for proper selection and planning of instructional materials.

## References

- Alabere Rabiati Ajoke (2017). The Importance of Instructional Materials in Teaching English as a second language. *International journal of Humanities and Social Science Invention*. ISSN (print) 2319-7714 Volume 6 issue 9/ September. 2017//pp.36-44.
- Amadioha, W. S. (2009). The Importance of Instructional Materials in our Schools. An Overview. *New Era Research Journal of Human, Educational and Sustainable Development*, Volume 2, Nos. 3 & 4. March 2009.
- Animba, I. E (2018). *Foundation of History for junior secondary school 1-3*. Jesuit Educational Books.
- Animba, I. E. (2020). *Educational Psychology for Beginners*. Jesuit Educational Books. Enugu.
- Beatrice, A. A., Felicia I. U., & Oji E. F. (2015). Effects of Instructional Materials on the Teaching and Learning of Basic Science in Junior Secondary Schools in Cross River State, Nigeria. *Global Journal of Educational Research*. Volume 14, 2015: 67-73.
- Betiku, R. M. (2000). *Improvisation in Mathematics in FCT Primary Schools: How far?* 41<sup>st</sup> Annual Conference Proceedings of Stan 339-341
- Bisiriyu A. A. (2016). Instructional Materials as Correlates of Students' Academic Performance in Biology in Senior Secondary Schools in Ogun state. *International journal of Information and Education Technology*. Volume 6, No, 9, September 2016.
- Brown, R. M. (2000). *Curriculum and Teaching on Introduction to Method of Teaching*. Ibadan-Macmillan Press.
- Crist, M. (2014). *What are the Importance of Instructional Materials in Teaching?* Retrieved 10<sup>th</sup> March 2014 for Employment blurit. Com /2247194.
- Esu A. E. O., Erukoha, O. I. T., & Umoren, G. U. (2004). *Curriculum development in Nigeria for Colleges and Universities*. Owerri: Whyte and Whyte Publishers.
- Effiong, O. E. & Igiri C. E (2015). Impact of Instructional Materials in Teaching and Learning of Biology in Senior Secondary Schools in Yakurr Local Government Area. *International Letters of Social and Humanistic Sciences*. ISSN: 2300-2697, Volume, 62, pp 27-33.
- Fakunle I. (2008). Enhancing the Teaching and learning of Mathematics through Effective Utilization of Instructional Materials. *Journal of Teachers Education* 9(1): 102-111.
- Federal Republic of Nigeria (2004). *National Policy on Education*. Lagos/Abuja, NERDC.

- Inyang & Abia M. E. (2000). *Essentials of Educational Technology*. A Hand book of Education and Media partitions. Uyo: Legacy Nigeria Ltd.
- Rajagopalan, Isola (2019). Concept of Teaching. *Shanlax International Journal of Education*, vol 7 No 2, p5-8 March 2019.
- John Lawrence Tety (2016). *Role of Instructional Materials in Academic Performance in Community Secondary Schools in Rombo District*. A dissertation submitted in partial fulfilment of the requirements for the degree of Masters of Education in Administration, Planning and Policy studies of the Open University of Tanzania.
- Kochar S. K. (2012). *The Teaching of Social Studies*. New Delhi India. Sterling Publishers private limited.
- Nimot Sulaimon (2019). *A lot of Nigerian Youths are Unemployable*. Pm news Nigeria. Com
- Nsa, S. O. (2012). *Instructional Strategies and Students Skills Acquisition in Vegetable Production*. J. Bus. Econs. Review, 3(1).
- Nursel F. A. (2001). *Instructional Design*. Springfield: Charles Thomas publication.
- Nwachukwu C. E. (2006). *Designing Appropriate Methodology in Vocational and Technical Education for Nigeria*, Nsukka University Trust Publishers.
- Omabe C. C. (2006). *Instructional Materials for Social Studies Education in Nigeria*. Abakiliki: Willy Rose and Apple seed Publishers.
- Sisteil C. & Harrison, D. (2019). *Fundamentals of Teaching with Instructional Aids*: New York: Macmillan publishers.