

PARTICIPATION IN VISUAL ORIENTED ACTIVITIES AND AUDITORY LEARNING ACTIVITIES AS DETERMINANTS OF STUDENT'S ACADEMIC PERFORMANCE IN ABAK LOCAL GOVERNMENT AREA

By

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ABSTRACT

The study was conducted to investigate participation in visual oriented activities and auditory learning activities as determinants of students' academic performance in Abak Local Government Area. To guide the study, two specific purposes, research questions and null hypotheses respectively were formulated. The survey research design was adopted for the study. The population comprised of all primary school pupils in Abak Local Government which was 75,642. A sample size of 240 respondents was selected using simple random sampling techniques. The researcher developed instrument entitled: Learning Activities Questionnaire (LAQ) to generate data for the study. The instrument was validated by the researcher's supervisor and an expert in test and measurement. Test-retest reliability analysis was used to determine the reliability coefficient that yielded reliability index of 0.85. Pearson Product Moment Correlation analysis was used to test the hypotheses. The findings of the study reveal that there is significant relationship between students' participation in visual oriented activities and their academic performance. The study also indicated that there is significant relationship between students' participation in auditory learning activities and their academic performance. It was recommended that school activities should involve all the modules of learning in teaching students for better understanding.

Keywords: visual oriented activities, academic performance, auditory learning activities, Abak Local Government Area.

Introduction

Learners' academic achievement and progression is a great concern for all educational institutions including primary, secondary and tertiary. The primary role of schools everywhere is to act as places where future leaders are nurtured. Students' participation according to Rudduck and Flutter (2004) is two folds. First, it takes (seriously) into account pupils' views on their experiences of learning, and what they identify as good and bad practices. Secondly, it involves finding effective ways to include these views in the process of designing the learning environment and the learning experience, from the classroom to the institutional level (Rudduck and Flutter, 2004).

Learning activities are defined as "any activities of an individual organized with the intention to improve his or her knowledge, skills and competence'. The two fundamental criteria to distinguish learning activities from non-learning activities are: the activity must be intentional, so the act has a predetermined purpose; and, the activity is organized in some way, including being organized by the learner himself. This typically involves the transfer of information in a

broader sense (messages, ideas, knowledge and strategies). Children who have visual learning exposures will thrive if they are given regular opportunities to present their work pictorially.

According to Edwards (2002), the visual become as an example, help the pupils to use a mind-map to share what they learned about a topic in History or Geography. Gardner, (1993), also said that children will also benefit from drawing diagrams in the class, such as creating labeled pictures of experiment outcomes in Science or diagrams of mechanisms in technology. According to Castelli (2007) auditory or language learners learn through listening to what others have to say and talking about what they are learning. They are also more likely to remember information by talking aloud, need to have things explained orally, may have trouble with written instructions and talk to themselves while learning something new. Nkopodi and Mosimege (2009) stressed that the teachers' role should be to enable learners relate concepts learned to their everyday life.

Statement of the Problem

Over the years experts have pronounced various learning strategies for teachers to expose their children for the purpose of improving upon their academic performance. This is due to the fact that good learning activities do not end in one given subject but also cut across all subjects and disciplines. It has become a fact that learning activities such as visual oriented activities and auditory activities have contributed immensely to remarkable improvement of the academic performance of students and pupils. Thus, the question is, how effective are these learning activities in improving the academic performance of students? The problem of this study therefore is how students' participation in learning activities such as visual oriented and auditory activities affect academic performance, in Abak Local Government Area.

Purpose of the Study

The main purpose of the study is to examine student's participation in learning activities and academic performance in Abak Local Government Area. Specifically, the study is designed:

1. To determine the relationship between students' participation in visual oriented activities and academic performance of students.
2. To examine the relationship between students' participation in auditory learning activities and academic performance of students.

Research questions

The following research questions will be answered

1. What is the relationship between students' participation in visual oriented activities and academic performance?
2. What is the relationship between student's participation in auditory learning activities and academic performance of students?

Research Hypothesis

1. There is no significant relationship between students' participation in visual oriented activities and academic performance of students.
2. There is no significant relationship between students' participation in auditory learning activities and academic performance of students.

Literature Review

Visual learning activities and academic performance of pupils

Visual learning activities have contributed immensely to the improvement of academic performance of pupils in primary schools. Children like watching and imitating what they see. That is why Wurst, Jones & Moore (2005) stated that presence seems to play an important role in learning and it is a subject needing further and intensive studies. According to Cuaresma (2008),

Students learn best by seeing the value and importance of the information presented in the classroom. If the students are not interested in the material presented, they will not learn it. In order to achieve the ultimate goal of student learning, it is important to use a combination of teaching methods and to make the classroom environment as stimulating and interactive as possible. Students learn in many different ways.

Ldpride (2009) asserts that visual learners think in pictures and learn best in visual images. They depend on the instructor's or facilitator's non-verbal cues such as body language to help with understanding. Sometimes, visual learners favor sitting in the front of the classroom. They also take descriptive notes over the material being presented. Eisner (2002) says that, the ability to understand pupils learning styles can increase the educational experience. Teachers might adjust their teaching style so that it is more congruent with a given student's or class of students' learning style. One of the most important uses of learning styles is that it makes it easy for teachers to incorporate them into their teaching.

According to Cuaresma (2008), visual learners (pupils) learn visually by means of charts, graphs, and pictures. It is important for teachers to incorporate in their curriculum activities related to each of these learning styles so that all students are able to succeed in their classes. While we use all of our senses to take in information, we each seem to have preferences in how we learn best. In order to help all students' learn, teachers need to teach as many of these preferences as possible. The various inventories on learning styles allow teachers to gain insight into which areas they can use further development in and which are already well developed.

Chapman (2005) says that, discovering this learning style (Visual learning) will allow the pupils to determine his or her own personal strengths and weaknesses and learn from them. Teachers can incorporate learning styles into their classroom by identifying the learning styles of each of their students, matching teaching style to learning style for difficult tasks, strengthening weaker learning styles through easier tasks and drill, and teaching students.

Auditory learning activities and academic performance of pupils

According to Ldpride, (2009), auditory learners discover information through listening and interpreting information by the means of pitch, emphasis and speed. These individuals gain knowledge from reading out loud in the classroom and may not have a full understanding of information that is written. Cuaresma, (2008) says that auditory learners (pupils) learn best by listening to their teachers since they remember when they hear things. They read textbooks out loud to themselves. They also put study questions and answers on tape for themselves to listen to over and over again. According to MacKeracher (2004), auditory learners (pupils) learn through discussing questions and answers with instructors or other pupils in class with their teachers. Also with the permission of the instructor, tape lectures and record notes for listening help the pupils to always recall what they were taught.

Biggs (2001) says that it is important that individuals receive education in areas suitable for their learning styles. A person educated in an area having no relationship to his/her learning style may lack confidence and she or he may be less successful; he or she may as a result become frustrated. Knowledge of learning style also provides information to the student as to why he or she has learnt in a different way than others. It helps to control the process of learning. It is vital because one of the most important signals in learning is to learn to be autonomous, that is, for the individual to take responsibility for his or her own learning. Because of this, he or she should know what his or her learning style is. This has to be part of the learning process to enable the individual to obtain knowledge, which constantly shifts and changes, without any help from others. Learning to learn and grasping knowledge in a suitable manner will lessen the need for an

overbearing control by teachers. At this point, teachers guide the students. The students take responsibility for their learning, they are at the centre of the process and everything is under their control. They search for answers to problems and benefit from their unique performances and preferences in their learning styles.

It is important for students to have multiple learning opportunities and “learning style-shift” and teachers should achieve a match between teaching strategies and the students' unique learning styles. Adoption of appropriate learning styles like auditory learning improves students' overall learning results, increases both motivation and efficiency and enables a positive attitude towards the language being learned (Celce-Marcia, 2003).

Methods

Research design

This study adopted a survey research design. This design was considered appropriate for the research as it attempted to check the already existing influence of the independent variable (learning activities) on the dependent variable (pupils' performance).

Area of the Study

The area of study is Abak Local Government Area of Akwalbom State.

Population of the Study

The population of this study consisted of all primary schools' pupils in Abak Local Government Area. The population of the students in all the primary school was 75,642.

Sample and Sampling Technique

The sample for this study consisted of 240 respondents who were obtained through simple random sampling technique where appropriate numbers of student were drawn proportionally from the population of each school.

Instrumentation

The first research instrument to be used by the researcher for this study was a questionnaire. The questionnaire was tagged “LEARNING ACTIVITIES QUESTIONNAIRE (LAQ)” and was used to collect data on the independent variables presented in both sections A and B of the questionnaire.

Validation of the Research Instrument

The face validation of the research instrument was made by the researcher's supervisor and an expert in test and measurement.

Reliability of the Instrument

In order to establish the reliability of the instrument, test-retest reliability analysis was carried out on the research instrument, using 30 people who did not form part of the main work. From the analysis, the reliability coefficient (0.85) was obtained and used to prove the instrument reliable for use in the work.

Method of Data Analysis

The data obtained were analyzed using Pearson Product Moment Correlation analysis to test the hypotheses. The calculated values were compared with the critical values for significance of the result at 0.05 alpha levels.

Data analysis and results

Research Question One

The research question sought to find out the relationship between students’ participation in visual oriented activities and their academic performance. In order to answer the research question, descriptive analysis was performed on the data collected as shown in table 1.

Table 1

Descriptive analysis of the relationship between students’ participation in visual oriented activities and their academic performance.

| Variable | N | Arithmetic mean | Expected mean | r | Remarks |
|----------------------------|-----|-----------------|---------------|-------|---------------------------------|
| Visual Oriented activities | 240 | 15.87 | 12.5 | 0.59* | *moderately strong relationship |
| Academic Performance | | 60.95 | 50 | | |

Source: Field Survey

Table 1 presents the result of the descriptive statistics of the relationship between students’ participation in visual oriented activities and their academic performance. The two variables were observed to have moderately strong relationship at 59%. The arithmetic mean for the visual oriented activities (15.87) was observed to be greater than the expected mean score of (12.5). In addition to that, the arithmetic mean as regards to the academic performance (60.95) was observed to be higher than the expected mean score of (50). The result therefore means that there is remarkable relationship between students’ participation in visual oriented activities and their academic performance.

Research Question Two

The research question sought to find out the relationship between students’ participation in auditory learning activities and their academic performance. In order to answer the research question, descriptive analysis was performed on the data collected as shown in table 2.

Table 2

Descriptive analysis of the relationship between students’ participation in auditory learning activities and their academic performance.

| Variable | N | Arithmetic mean | Expected mean | r | Remarks |
|------------------------------|-----|-----------------|---------------|-------|---------------------------------|
| Auditory learning activities | 240 | 17.76 | 12.5 | 0.72* | *moderately strong relationship |
| Academic Performance | | 60.95 | 50 | | |

Source: Field Survey

Table 2 presents the result of the descriptive statistics of the relationship between students’ participation in auditory learning activities and their academic performance. The two variables were observed to have moderately strong relationship at 72%. The arithmetic mean for the auditory learning activities (17.76) was observed to be greater than the expected mean score of (12.5). In addition to that, the arithmetic mean as regards to the academic performance (60.95) was observed to be higher than the expected mean score of (50). The result therefore means that there is remarkable relationship between students’ participation in auditory learning activities and their academic performance.

HYPOTHESES TESTING

Hypothesis One

The null hypothesis states that there is no significant relationship between students’ participation in visual oriented activities and their academic performance. In order to test the hypothesis, two variables were identified as follows: -

1. Visual oriented activities as the independent variable.
2. Academic performance as the dependent variable

Pearson Product Moment Correlation analysis was then used to analyze the data in order to determine the relationship between the two variables (see table 3)

Table 3

Pearson Product Moment Correlation Analysis of the relationship between students’ participation in visual oriented activities and their academic performance

| Variable | $\sum X$ | $\sum X^2$ | $\sum XY$ | r |
|--------------------------------|----------|------------|-----------|-------|
| | $\sum Y$ | $\sum Y^2$ | | |
| Visual oriented activities (X) | 3808 | 61390 | 234400 | 0.59* |
| Academic Performance (Y) | 14628 | 907336 | | |

***Significant at 0.05 level; df =238; N =240; critical r-value = 0.139**

Table 3 presents the obtained r-value as (0.56). This value was tested for significance by comparing it with the critical r-value (0.139) at 0.05 levels with 238 degree of freedom. The

obtained r-value (0.59) was greater than the critical r-value (0.139). Hence, the result was significant. The result therefore means that there is significant relationship between students' participation in visual oriented activities and their academic performance.

Hypothesis Two

The null hypothesis states that there is no significant relationship between students' participation in auditory learning activities and their academic performance. In order to test the hypothesis, two variables were identified as follows: -

1. Auditory learning activities as the independent variable.
2. Academic performance as the dependent variable

Pearson Product Moment Correlation analysis was then used to analyze the data in order to determine the relationship between the two variables (see table 4)

Table 4

Pearson Product Moment Correlation Analysis of the relationship between students' participation in auditory learning activities and their academic performance

| Variable | $\sum X$ | $\sum X^2$ | $\sum XY$ | r |
|----------------------------------|----------|------------|-----------|-------|
| | $\sum Y$ | $\sum Y^2$ | | |
| Auditory learning activities (X) | 4262 | 76858 | 262848 | 0.72* |
| Academic Performance (Y) | 14628 | 907336 | | |

***Significant at 0.05 level; df =238; N =240; critical r-value = 0.139**

Table 4 presents the obtained r-value as (0.75). This value was tested for significance by comparing it with the critical r-value (0.139) at 0.05 levels with 238 degree of freedom. The obtained r-value (0.75) was greater than the critical r-value (0.139). Hence, the result was significant. The result therefore means that there is significant relationship between students' participation in auditory learning activities and their academic performance.

Discussion of Findings

The result of the data analysis in table 3 was significant due to the fact that the obtained r-value (0.59) was greater than the critical r-value (0.139) at 0.05 level with 238 degree of freedom. The result implies that there is significant relationship between students' participation in visual oriented activities and their academic performance. The result therefore was in agreement with Edwards (2002) who said that children who have visual learning exposure will thrive if they are given regular opportunities to present their work pictorially. Visual learning helps the pupils to use a mind-map to share what they learned about a topic. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

The result of the data analysis in table 4 was significant due to the fact that the obtained r-value (0.72) was greater than the critical r-value (0.139) at 0.05 level with 238 degree of freedom. The result implies that there is significant relationship between students' participation in auditory learning activities and their academic performance. The result therefore was in agreement with the research findings of Ldpride, (2009), who stated that auditory learners discover information through listening and interpreting information by the means of pitch, emphasis and speed. He also said they gain knowledge from reading out loud in the classroom and may not have a full understanding of information that is written. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

Conclusions

Based on the findings of the research work, it is concluded that there is significant relationship between students' participation in visual oriented activities and their academic performance. Also, there is significant relationship between students' participation in auditory learning activities and their academic performance.

Recommendations

The following recommendations were deemed necessary:

1. School activities should involve all the modules of learning in teachings students for better understanding.
2. Audio visual devices should be utilized as a learning activity; this will help foster assimilation and in turn enhance academic performance.
3. Building laboratories for student to explore and see what they were taught in their class room is another way of promoting learning so it should be encouraged.

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