Influence of School Type on Creative Thinking Ability of Lower Primary School Pupils in Ondo State, Nigeria

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Abstract:  
This study determined the influence of school type on creative thinking ability of lower school pupils in Ondo State. The study adopted an ex post facto research design. The population for the study comprised of lower primary school pupils in Ondo State. The sample size comprised of 560 primary III school pupils using multistage sampling procedure. One instrument was used for data collection titled: Creativity Assessment Questionnaire (CAQ). Data obtained were analyzed using frequency counts, simple percentages and Chi-Square method of statistical techniques. The results showed that there was no significant influence of school type on creative thinking ability of lower primary school pupils in Ondo State, ($\chi^2 = 0.687, p > 0.05$). The study concluded that most of the lower primary school pupils that participated in this study had low level of creative thinking ability and this was found not being influenced by their school type.

Keywords: School type, creative thinking ability and lower primary school pupils

1. Introduction

Primary education is the basic foundational education of any child/ward. It is at the primary level that the child is formed and it is very important to educate the child properly so as to instill in him/her the right mindset in the pursuit of knowledge. Primary education is the education given to children prior to their secondary education (FRN, 2014). It is the education given to children between the ages of 6 – 11. Primary education in Nigeria was originally known as universal primary education (UPE) before it was renamed Universal Basic Education (UBE) in the year 1999 to accommodate the first 3 years of junior secondary education. Primary education under the universal Basic Education is divided into levels. The first level comprises of primary 1-3 where all subjects are taught except pre-vocational studies and this is referred to as Lower Primary Education.

Lower primary education is the education designed for children between the age six to eight years prior to the middle basic education. Education at this level of education is managed and responsibility of local education authorities (LGEAs) under the supervision of State Universal Basic Education Boards (SUBEBs) and the UBEC at the federal level. (Austine, Ngozi & Tanko Audu, 2015)

Today, there are more than hundred definitions of creativity. In accordance with the concepts of creativity Guilford (1969), Torrence (1962), Bogoyavlenskaya (1983), creativity is a common feature of the personality and effects creative productivity regardless of the scope of manifestation of personal activity. Gilford has determined that Creativity is a process of divergent thinking. However, he included in the structure of creativity not only divergent thinking, but also the ability to change the accuracy of the solution and other smart options. It was determined a positive correlation between intelligence and creativity. In his writings Guilford identifies six parameters of creativity: the ability to identify the problem, generate great amount of ideas; originality – the ability to respond to stimuli outside the box; the ability to improve the object, adding details; ability to solve problems, i.e. the ability to analyze and synthesize. Thus, he identified one aspect of creativity creative thinking- a type of thinking characterized by the creation subjectively new product and tumors in the cognitive activity. Neoplasm has to do with motivation, goals and evaluation.

Some researchers (Starnberg, Lubart) highlight the General requirements to the process of creative thinking, regardless of the problems to which it is directed, namely: changes in the structure of external information and internal representations by forming analogies and connections in conceptual spaces; continuous reformulation of problems; the application of existing knowledge, memories and images to create new and use old knowledge and skills in a new way; the use of non-verbal thought patterns; the process of creativity requires tension. I believe that these requirements can be met in the process of cognitive activity. But for the development of creative thinking students need to master and apply the techniques of mental activity. In the process of teaching has come to the conclusion that it is the game, simulation, and applied inventive problem solving, independent work, practical work, participation in seminars and debates, work on projects contributes to the formation of a creative personality.

In each training topic on computer science can be create the conditions necessary for creative activity. On the student survey, the highest preference they give to the work in groups and pairs, which contributes to the generation of
diverse thoughts and ideas (sometimes incredible). The children determine the collective work to help learn, to listen and hear others.

It can also be described as the capacity of an individual to produce compositions, products or ideas related to a particular task which are essentially new or novel, previously known or unknown to the producer or creativity is a process, the contribution of new ideas a different viewpoint; a new way of looking at a problem, situation or event, where the freedom of the individual is the basis of expression.

Creativity thinking is a way of looking at problems or situations from a fresh perspective that suggest unorthodox solutions. Creative thinking can be stimulated both by an unstructured process such as lateral thinking. (Shum, 2016)

Creative thinking involves four (4) stages

- Preparation: formulate the problems and collect facts and materials necessary for finding new solutions
- Incubation: the unconscious thought process of finding a solution to the problem
- Illumination: the sudden flash of idea i.e. the eureka experience
- Verification: evaluate the validity of the solution.

Three (3) keys to creative thinking process;

- In-the-box: This applies knowledge accumulation and critical thinking to the problem. Based on their expertise, innovators can generate many relevant ideas and make connections later.
- Out-of-the-box: This is a wide – angle and unfocused thinking process. It allows the innovators to imagine an entire universe of possibilities. Here, there is no constraints
- New box: When people think in new boxes, they learn how to ask the right questions in order to open up the most promising doors to creativity, innovation and opportunity

Eight (8) creative thinking techniques:

- Mind mapping: Brainstorming or spider diagram.
- The checklist: Why. Where, when, who, what, how
- Thinking Hats: Facts, emotions, judgment, logic, creativity, control
- Lateral thinking: Side stepping
- Random word: Imagine association
- Picture association: Imagine association
- Change perspective: In other people's shoes
- Get up and gout: Let your mind wander

1.1. Statement of the Problem

Creative thinking ability varies from individual to individual and can arise as a result of various variables such as environment, parental involvement, biological determinant, teachers' variables, school types and many others. Some of these variables have been examined by various experts in the past. However, for the purpose of this study, emphasis is placed on how school type could influence creative thinking ability of lower primary school pupils with emphasis on empirical findings.

1.2. Purpose of the Study

The study is designed to assess the creative thinking ability of pupils among lower primary school pupils in Ondo State. Therefore, the specific objective of the study is to determine the influence of school type on creative thinking ability of lower school pupils in Ondo State.

1.3. Hypothesis

There is no significant influence of school type on creative thinking ability of lower primary school pupils in Ondo State.

2. Methodology

The study adopted the ex-post facto research design. An ex post facto research method is sometimes known as causal comparative because it seeks to determine the cause and effect relationships between independent and dependent variables. One of the advantages of this design is that its use is found suitable in a situation where it may be impossible for the researcher to randomize and manipulate the variable. The population for the study comprised lower primary school pupils in Ondo state. The population of the study were lower primary school pupils in Ondo Central Senatorial District.

The sample size for this study comprised 560 primary III schools pupils. Multi stage sampling procedures were employed in selecting the sample for this study. In the first instance, out of the three senatorial districts in the state, one senatorial district was selected using simple random sampling technique. Four local government areas (LGAs) were then selected from the selected senatorial district. In each of the selected LGAs, a simple random sampling technique was adopted in selecting seven schools. Furthermore, twenty primary school pupils were selected from each of the selected schools using simple random sampling technique

One research instrument was used for data collection in this study titled: Creativity Assessment Questionnaire (CAQ). CAQ was used to collect data that measured creative thinking ability of the lower primary school pupils. The instrument contained 18 items were adapted from the Iterative Original Scale Akinboye (1976). The Iterative Original Scale is part of Ibadan Creativity Assessment Scale (I.C.A.S). The original items on this scale took on five point Likert type scale ranging from ‘Totally unlike’ (0) to ‘Very much like me’ (4). However, the response patterns for these items were
modified into True or False, due to the status of the respondents. The items therein were also reconstructed to suite the linguistic ability of the pupils. Also, items such as 3, 14, and 17 were reversed in scoring due to their negative wording. In this scale, higher scores represent high level of creative thinking ability and vice versa. For scoring purposes, responses of the pupils to each item on the scale were scored and cumulated. The minimum and maximum scores obtainable in this scale were 0 and 18 respectively since 1 was allotted to a True response for every positive worded item and 0 for a false response. Therefore, scores range from 0-6 was adjudged as 'Low creative thinking ability', 7-12 as 'Average creative thinking ability' and 13-18 as 'High creative thinking ability'.

In order to ensure the validity of this instrument, the researchers ensured that the items were reconstructed to the grammatical understanding of the pupils without jeopardizing the construct the instrument intends to measure. The draft copy of the instrument was scrutinized by the experts in Test and Measurement. All their observations, corrections and suggestions were adequately effected.

In order to ensure the reliability of the instrument used in this study, copy of CAQwas pilot-tested on 20 lower primary school pupils outside the selected study areas. Internal consistency approach based on Cronbach Alpha was adopted to test the reliability of the scores generated from the pilot-tested copies of the instrument. A reliability coefficient of the instrument yielded a Cronbach’s Alpha of 0.81 via internal consistency approach of test reliability. Data were collected through trained research assistants. The data collection exercise took four week’s to complete. The data obtained from the respondents were analyzed using frequency counts, percentages and Chi-Square method of statistical technique.

2.1. Hypothesis

There is no significant influence of school type on creative thinking ability of lower primary school pupils in Ondo State. In order to test this hypothesis, the school type variable was cross tabulated with pupils’ level of creative thinking ability. The Chi-square value was also obtained. The result is presented in Table 1.

| School Type | Creative Thinking Ability | Total | $\chi^2$ | Df | p |
|-------------|--------------------------|-------|---------|----|----|
|             | Low  | Average | High |      |    |    |
| Private     | 118(21.1%) | 38(6.8%) | 84(15.0%) | 240(100.0%) | .687 | 2 | .709 |
| Public      | 167(29.8%) | 44(7.9%) | 109(19.5%) | 320(100.0%) |       |    |    |
| Total       | 285(50.9%) | 82(14.6%) | 193(34.5%) | 560(100.0%) |       |    |    |

Table 1: Chi-square Analysis of Influence of School Type on Creative Thinking Ability of Lower Primary School Pupils in Ondo State

Table 1 shows the result of the influence of school type on creative thinking ability of lower primary school pupils in Ondo State. It is shown that out of 240(100.0%) of the pupils sampled from private schools, 118(21.1%), 38(6.8%) and 84(15.0%) respectively had low, average and high creative thinking ability. Also, out of 320(100.0%) of the pupils sampled from public schools, 167(29.8%), 44(7.9%) and 109(19.5%) respectively had low, average and high creative thinking ability. However, it can be observed that a Chi-square test result indicated that there exists no significant influence of school type on creative thinking ability of lower primary school pupils,$\chi^2(n = 560) = .687$, df = 2, p = .709. Since p-value is greater than 0.05 level of significance, we therefore do not reject the stated null hypothesis. This result therefore, concludes that there is no significant influence of school type on creative thinking ability of lower primary school pupils in Ondo State.

3. Discussion of Findings

This study revealed no significant influence of school type on creative thinking ability of lower primary school pupils in Ondo State. This finding corroborates the findings of Kumari (2012) and Surapuramath (2014) that found no significant difference in creativity of students in government and private schools. However, the finding contradicts the outcome of the study of Tasaduq and Azim (2012) that reported that the private and government school children differ significantly in their creative abilities. It was reported in their findings that children in private schools recorded a higher creative thinking ability than their counterparts from government owned school. In actual sense, due to access to necessary instructional resources coupled with effective management available in private schools, one would have expected that pupils in private schools should have possessed higher creative thinking ability than their counterparts in public schools. However, all other things being equal, fostering creative thinking ability in pupils goes beyond the availability of teaching resources. Teachers must deliberately engage in activities that are capable of bringing the best in their pupils and for this to be done, teachers have to be motivated. This seems to be absence in many of the private schools in which their quest for profit maximization has contributed to their inability to meet the expectations of their work force in terms of emolument. Besides, private schools owners employed work force of lower academic qualification when compared with government and in many cases, government pay higher salary than them. Remuneration seems to be a significant factor in teachers’ motivation and teachers’ productivity seems to be a function of their motivation.
4. Conclusion

It was revealed in this study that most of the lower primary school pupils that participated in this study had low level of creative thinking ability and this was found not being influenced by their school type.

5. Recommendation

As the outcome of this study suggests that school type had no significant influence on creative thinking ability of the pupils, it now behooves the teachers as well as parents that pupils are naturally endowed with creativity ability that required their deliberate effort to nurture for natural growth.

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