

THE INFLUENCE OF CARTOONS AS INSTRUCTIONAL MEDIUM ON SECONDARY SCHOOL STUDENTS ACADEMIC PERFORMANCE IN FINE ARTS IN CROSS RIVER STATE

FRANK I. UTI

(Received 21, August 2015; Revision Accepted 10, November 2015)

ABSTRACT

This study examined the influence of cartoon strips as instructional medium on the academic performance of secondary school students in Cross River State. The instrument used was a structured Achievement Test in Fine Arts (SATFA). The sample used consisted of 46 Junior Secondary School two students. SATFA was analyzed using the independent t-test, because the control and experimental groups were equivalent before the experiment. Result obtained from this study led to the rejection of the null hypothesis, because cartoon strips as an instructional medium impacted on the academic performance of students. From this result a few recommendations were made to include the innovative use of cartoon strips as an instructional medium in secondary schools.

INTRODUCTION

Instructional media is an essential part of conveying knowledge in learning situations. Instructional media goes beyond the classroom situation. It is often used on television educational programs and educationally related routines etc.

Ajayi – Dopemu (1991) says that teachers have been known to quite frequently choose instructional media with physical appeal to the teacher without due consideration either for the needs of the learner or demand of the subject. This could be an impediment to learning. The subject matter of any lesson must be understood by learners; otherwise the teacher would not have achieved his objectives. One way of achieving the objectives of a lesson is by choosing appropriate teaching techniques or methods that would include the right instructional medium that attracts interest and bring fun to learning. These twin facts of drawing interest and fun to a lesson pulled the researcher into applying cartoon strips not only as an instructional medium but also as a method of teaching. Could cartoon strip fill in the gap of drawing interest and fun to any lesson for children at the Junior Secondary School level? Although cartoon strips is been introduced as an instructional medium and a method of teaching, there are other forms of instructional media and

methods of teaching.

Ogar (1998) regards instructional media as ‘channels through which information is transmitted from the teacher to the learners,’ while California Department of Education (2015) see’s instructional media ‘as materials that are designed for use by the pupils and their teachers as a learning resource and helps pupils to acquire facts, skills, or opinions or to develop cognitive processes.’ The definitions may differ in relationships, the first speaks of teacher to pupils while the second refers to it been used by the pupils and their teachers as a learning resource. Cartoon strips as an instructional medium brings the two definitions to play in character, because it is a resource that the teacher and the pupil could take advantage of, one to impact the other to receive even for private use. Instructional media differs from instructional methods in meaning!

CSN (2011) see’s instructional methods “as the process by which instruction occurs”, instructional media is usually used within the ambit of the different methods of teaching and could be instrumental to the teacher achieving his objectives. But it is possible for the student to display more interest were the medium brings appeal and fun. Since cartoon appeals to children it is then possible to turn cartoon strips to both medium and method. Just like other instructional

Frank I. Uti, Department of Visual Arts and Technology, Faculty of Environmental Sciences, Cross River University of Technology Calabar, Cross River State, Nigeria.

materials as audio-visuals, audio-resource, photographic materials, flipcharts etcetera, are used, cartoons could still be used within the process of other teaching methods as lecture, discussion, activity, demonstration methods etc.

Thompson (1997) on her research on television cartoon indicated how children are drawn to cartoons and seem to believe everything they read or see in cartoons, be it on television or on print as a strip, children are always interested. It was based on this, the study therefore sort to find out if cartoon strip as a method of teaching could influence positively the academic performance of secondary school students in Fine Art theories in Cross River State.

Cartoon strips or comic strips as they are sometimes called, are graphic materials that are drawn to reality or abstracted sometimes using forms and figures to tell stories in a series of layouts arranged adjacently with written words presented in oval circles or rectangular or square boxes.

Theoretical Frame Work of the Study

The theoretical framework of this study is based on Ivan Pavlov's (1849-1936) theory of classical conditioning that was developed in 1903. He was a Russian physiologist. The theory requires that a stimulus be applied to evoke a certain response. Learning-Theories.com (2015). In Pavlov's experiment a dog was used, where it involved the sound of the bell, the smell of food and the response of Salivation from the dog.

However, in this study the conditional stimulus provided was the cartoon strip. It was expected that the cartoon strip would draw interest that would evoke remembrance and recall, while the increase in performance was expected to arise from learning with pictures that bring fun combined with words using cartoon methods.

Research Question

One research question was formed, which is; can the use of cartoon strips as a method of teaching, exert any influence on the student's academic performance in secondary schools in Cross River State?

Hypothesis

Ho 1: There is no significant influence of the use of cartoon strip as instructional medium on Fine Art student's academic performance in secondary schools in Cross River State.

Design of the Study

This study employed the quasi-experimental design technique. The quasi-experiment used a Structural Achievement Test in Fine Arts (SATFA) to determine student achievement gains.

MATERIALS AND METHODS

The population of this study consisted of all government owned secondary schools in Cross River State. The State had a total of 229 secondary schools with the student population of 107, 290 as at 2006, information through interview from the state secondary education board.

Government owned secondary schools were chosen because they had more population of students with Fine Art teachers. Out of 19 secondary schools in Calabar, only 7 of them offer Fine Art at Junior Secondary School (JSS) level.

From this population, two sample secondary schools in Calabar, was randomly chosen from the seven, having Fine Art teachers. They both had several streams from JSS one to three.

However JSS two was chosen because of the topic to be taught in the quasi-experiment. The choice of the class to be used was by ballot. A sample size of 46 students was chosen by ballot.

The instrument used to gather data for this quasi-experiment was a Structured Achievement Test in Fine Arts (SATFA). The test consisted of ten questions coined from the topic taught using the cartoon strip. Evaluation was based on 100%, with ten percent awarded to each question. The test questions were validated by a professional before use. This was done to see if the use of cartoon strips as a method of teaching as instructional medium could influence the academic performance of students.

The administration of the instrument was done by the researcher. It was rendered using a cartoon strip in a lesson whose subject matter was on the elements of art.

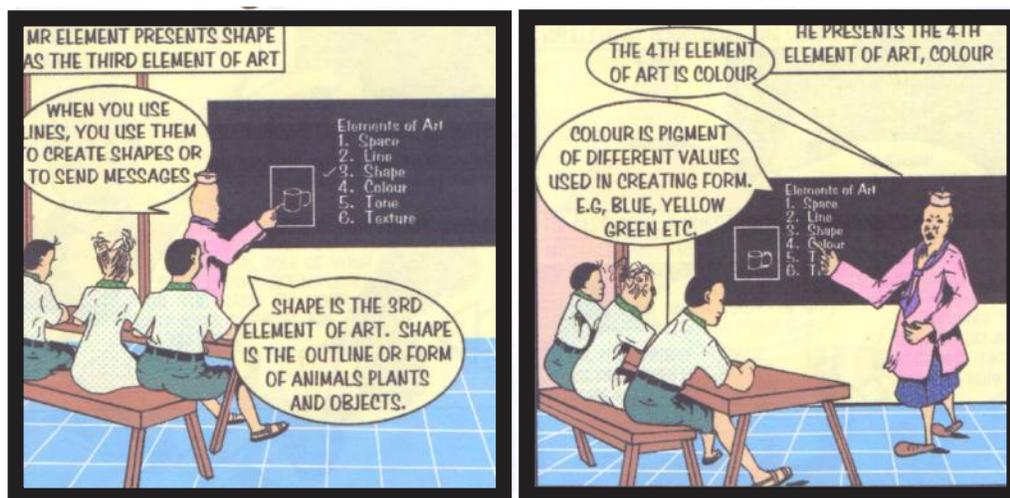
A4 paper size, pencil, pen and ink were the major materials used in making the initial illustrations. A resource person adept in the use of computer scanned the illustrations and used the Corel Draw program to provide colours to the illustrations.

Coloured cartoons were used. It provided room for greater attraction to the subject. The final prints were made to the size of 15.5 by 19 inches, large enough to be seen and read by a large

class. The total layout series came to 15 in number.

The cartoon strips were pinned to the black board serially. The researcher then used cane to point at the figures. As he read the students also repeated after him, following methodically from layout one to fifteen. Where necessary the researcher had to place emphasis

on certain parts of the cartoon strip. Ideas within the cartoon strip were logically presented in tune with Dynamic Flight (2013) which holds that instructors should lead their students in a logical manner toward the desired goal in an attempt to hold the students concentration. At the end of the lesson students were administered a structured achievement test.



Sample; Two Page Layout of Cartoon Strip Used

The Concept of the Comic Strip

The concept of the comic strip was based on classroom situation where a male teacher with a bullet looking head wore an Efik attire teaching three children the basic elements of art in a theory class. The teacher's attire of the Efik tradition was intended to draw attention to the teacher and what he was saying. This attire is worn on special occasions. This is based on the idea that anything could happen in cartoons.

Statistical Treatment of Data

The data from SATFA was analyzed using the independent t-test. This was used because on conducting analysis on the pretest scores using the independent t-test, results showed that there was no significant difference

between the experimental group and the control group which suggested that the two groups were equivalent before the experiment.

RESULTS

The research question which stated; can the use of cartoon strips as a method of teaching exert any influence on the student academic performance in secondary schools in Cross River State? A null hypothesis was raised! There is no significant influence of the use of cartoon strips as instructional medium on Fine Art student's academic performance in secondary schools in Cross River State.

To test this hypothesis, the independent t-test was used; the result of this is presented in tables one and two.

Table 1: Summary of independent T-test on pretest scores.

GROUP	N	MEAN	SD	T
Experimental	20	51.44	13.5	.17
Control	26	50.8	9.12	

Table one shows that the independent t-test of pretest scores produced a t-value of .17, which was statistically significant at 0.05 level. The result indicates that there was no significant difference between the experimental and control groups in the pretest scores; suggesting that the

two groups were equivalent before the experiment.

To find out if treatment was effective in enhancing learning, independent t-test was applied to the post-test score. The result of this is presented in table two.

Table 2: Summary of independent T-test of post-test scores for experimental and control groups.

GROUPS	N	MEAN	SD	T
Experimental	20	58.7	4.49	4.117
Control	20	52.4	6.20	

Table two shows that the t-test analysis of the difference between the experimental and control groups on the post test scores produced a t-value of 4.117, which was statistically significant at 0.5 levels (Critical $t = 2.021, df = 38$). This result indicates that there was difference between the experimental and control groups in their post-test mean scores. A glance at the table shows that the experimental group had a higher mean of $X = 58.7$ than the control group at $X = 52.4$, suggesting that the experimental group performed significantly better than their counterpart in the control group.

Thus from the above result, the hypothesis is hereby rejected, indicating that the use of cartoons strip significantly impacted on the students' performance in fine art theories.

DISCUSSION OF RESULTS

The null hypothesis which states that there is no significant influence of cartoon strips as instructional medium of fine art students' academic performance in secondary schools in Cross River State was rejected. This was rejected because there was significant impact of cartoon strips as instructional medium on fine art student. This agrees with the words of Dynamic Flight (ibid) that students learn by doing. That is a welder must necessarily do the action of welding to know his job etc.

Based on the theoretical framework of this study on Ivan Pavlov's theory of classical conditioning, cartoon strips can be the stimulus to

evoke greater possibilities of gaining the right response from students academically.

CONCLUSIONS

This study was specifically aimed at innovating cartoon strips as an instructional medium and as a method of teaching fine art theories in secondary schools in Cross River State, with the view to drawing more interest and zeal from learners and in the process having fun as they learn. The quasi-experiment indicated a significant impact of the use of cartoon strip which led to the rejection of the null hypothesis.

RECOMMENDATIONS

Based on this result the following recommendations have been made:

1. An innovative use of cartoon as instructional medium is hereby recommended.
2. Educational technologist should employ cartoon strip for self-study not only in the fine arts but in other subject areas.
3. Cartoon strips in the classroom situation, requires large size layouts of about 16x19 inches, therefore the cost of production would astronomically be high, governments are therefore charged to go into its production.
4. Training programs could be organized for teachers on the use of cartoon strips as a method of teaching.

REFERENCES

Ajayi-Dopemu, Y., 1991. "Production of instructional media" In Agun and Imali (ed) Fundamentals of Educational Technology, Ibadan Y. Books PP 108-133. California Department of Education (2015)," Instructional Materials FAQ". www.cde.ca.gov/ci/cr/imffaq.asp

Cross River State Secondary Education Board., 2006. Students' Population. Unpublished.

CSN., 2011." Different Instructional Methods". <https://www.csn.edu/pages/2359.asp>

Dynamic Flight., 2013. "Teaching Methods; Organizing Material". www.dynamicflight.com/avcfibook/methods/

Learning-Theories.com; Knowledge base and bibliography., 2015." Classical Conditioning (Pavlov)". www.Learning-Theories.com/classical-Conditioning-pavlov.html

Ogar, N., 1998. "Instructional Media". In Ebam and Ada (ed) Instructional Methods, Calabar. Centaur Publishers. 11-17.

Thompson, T. L., 1997. "Television Cartoons", Do Children Notice it's a Boys World. www.ask.com.