

The Relative Efficacy of Realia and a Combination of Pictures and Charts in the Teaching of Comprehension in Nigerian Junior Secondary Schools

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Abstract: This study focused on the relative efficacy of realia and a combination of pictures and charts in the teaching of comprehension in Nigerian Junior Secondary Schools. The study employed an experimental design with 2 experimental groups and one control group. The sample consisted of 78 Junior Secondary School Students randomly selected into three groups of 26 students each. Realia and a combination of pictures and charts were used to teach the 2 experimental groups, respectively while the control group was taught with the traditional lecture method. The pre-test and post-test considered valid were also administered to the students. The results were computer-analysed. Three hypotheses were generated and tested. Two of them were accepted while one was rejected. The results show that realia are more effective than a combination of pictures and charts in the teaching of comprehension in Junior Secondary Schools, although, none of them has been found to be more effective than the traditional lecture method. Based on the findings, some recommendations were made.

Key words: Relative efficacy, combination of pictures and charts, Junior Secondary Schools, Nigeria

INTRODUCTION

English Language is one subject in the Nigerian education system that is of great importance. Apart from the fact that the language itself is the lingua franca in the country, the subject is such which failure in the secondary school can deter the educational progress of any student. Moreover, it is the language of instruction in all the secondary schools to teach all subjects except the local languages. These underscore the fact that its teaching has to be taken with all seriousness.

Many scholars agree that effective teaching is better done with the use of various learning resources (Agun, 1988; Mkpa, 1991; Adeosun, 1998; Seweje and Jegede, 2005; Ajayi, 2007; Fajemilehin, 2008). These resources vary and they have been classified differently by some authors (Agun and Imogie, 1988; Adeosun, 1998; Ajelabi, 2005). Some others have also explained that the volume of experience given by the resources vary from resources to resources (Dale, 1969; Adewoyin, 1998).

This is why more instructional strategies and resources are being developed so that better learning can take place. Today, we therefore, talk about computer-assisted learning, simulations and games. All these developments have been focused on most subjects and the English Language is not an exception.

However, effective and efficient as many of the sophisticated resources may be, it has been expressed that they may not in the long run be beneficial to Nigerian secondary school students being not adapted

to the situations in their environment especially the culture and the facilities with which to utilize and maintain some of these resources (Muyanda-Mutebi, 1983; Ogunranti, 1985; Fafunwa, 1999). These scholars, therefore, suggested the utilization of those materials that may be referred to as 'appropriate' considering our social milieu.

It is in this light that one is not yet disturbed over the fact that the use of charts, albums, pictures, posters, etc., as instructional materials are still common in our schools. But, the need to test the effectiveness of these materials and know which one is better or best to teach what topic at what level becomes imperative. This is the focus of this study viz to test the effectiveness of realia and a combination of pictures and charts in the teaching of comprehension in Nigerian Junior Secondary Schools.

Research hypotheses: The following hypotheses were generated and tested in the study:

- There is no significant difference in performance between students taught with realia and those taught without realia.
- There is no significant difference in performance between students taught with a combination of pictures and charts and those taught without a combination of pictures and charts.
- There is no significant difference in performance between students taught with realia and those taught with a combination of pictures and charts.

MATERIALS AND METHODS

Design and sample: This is an experimental study consisting of two experimental groups and one control group. The sample consisted of 78 Junior Secondary School students randomly selected into three groups of 26 students each.

Research materials and instrument: The research materials used for this study included realia (real objects), pictures, charts and a comprehension text. The realia, pictures and charts depicted the materials and phenomena referred to in the comprehension passage used for the study.

The research instruments used were the pre-test and post-test administered to the students. The pre-test was administered to confirm that the groups were initially equal and comparable in performance. Each of these tests included 20 questions carefully drafted and adjudged valid by a panel of English Language teachers in the schools where the experiment was carried out. A pilot test was also carried out to determine the reliability of the instruments. To determine the reliability of the instrument, the test-retest method was adopted and the correlation coefficient obtained was 0.84 and this was considered adequate for the study.

Data collection and analyses: The three groups were given the same pre-test to find out their previous knowledge of the comprehension passage with the assistance of the English Language teachers in the schools. After 2 days, each of the 2 experimental groups was taught with the appropriate instructional material as explained above. The control group was taught using the normal lecture method. The teaching was done by the same research assistant who is also a trained English Language teacher. After the lessons, the post-test was administered to the students. The responses to the tests were scored on a maximum score of 10 and the data collected were computer-analysed, specifically using the t-test.

RESULTS

Table 1 shows the results of the post-test for the group taught realia and the control group. The t value (0.89) when compared with the Table value (1.67) is less. This shows that the difference in the performance is not significant at 0.05 level of probability.

Hypothesis 1 is thereby accepted. This means that there is no significant difference in performance between students taught with realia and those taught without realia.

Table 1: Difference in performance between students taught with realia and those taught without realia

Variable	N	\bar{X}	SD	df	t
Realia	26	5.92	2.48	50	0.89*
Control	26	5.35	2.17		

*Not Significant at 0.05 level of probability

Table 2: Difference in performance between students taught with a combination of pictures and charts and those taught without a combination of pictures and charts

Variable	N	\bar{X}	SD	df	t
Pictures and charts	26	4.73	1.99	50	1.07*
Control	26	5.35	2.17		

*Not Significant at 0.05 level of probability

Table 3: Difference in performance between students taught with realia and those taught with a combination of pictures and charts

Variable	N	\bar{X}	SD	df	t
Realia	26	5.92	2.48	50	1.91*
Control	26	4.73	1.99		

*Significant at 0.05 level of probability

Table 2 shows the result of the post-test for the group taught with a combination of pictures and charts and the control group. The t value (1.07) when compared with the Table value (1.67) is less. This shows that the difference in the performance is not significant at 0.05 level of probability. Hypotheses 2 is thereby accepted. This means that there is no significant difference in performance between students taught with a combination of pictures and charts and those taught without a combination of pictures and charts.

Table 3 shows the results of the post-test for the group taught with realia and the group taught with a combination of pictures and charts. The t value (1.91) when compared with the Table value (1.67) is greater. This shows that the difference in the performance is significant at 0.05 level of probability. Hypothesis 3 is thereby rejected and the alternative hypothesis accepted. This means that there is a significant difference in performance between students taught with realia and those taught with a combination of pictures and charts.

DISCUSSION

This study has shown that realia are better instructional materials in teaching comprehension in Junior Secondary Schools than a combination of picture and charts. Realia refer to real objects and they are assumed to be the best instructional materials (Adewoyin, 1991; Adeosun, 1998). One may not be surprised therefore, that they have turned out to be more effective than pictures and charts put together.

It is, however, strange that realia have not been seen in this study to be more effective than the traditional lecture method. Perhaps, the only explanation one can give to this is that in teaching a comprehension passage,

it is not possible to present realia for all materials and situations referred to in the passage. If one would want to tool-up such a lesson with realia therefore, the lesson may not be thorough. Nevertheless, the researcher still wonders why the realia were not more effective than the lecture method.

Another surprising outcome of this study is the suggestion that a combination of pictures and charts may not even be as effective as the traditional lecture method. The researcher believes that the reason must have been that the lesson was too tool-up to the extent whereby the instructional materials, being too many, began to inhibit learning instead of enhancing it.

This kind of situation had been noted before now (Adeosun, 1998) and it shows that instructional materials do not enhance learning effectively unless they are deliberately arranged or organized and utilized to do so. This is part of the reasons instructional materials are expected to be designed, produced and utilized in order to solve specific learning problems and not just to enhance learning.

CONCLUSION

This study focused on the relative efficacy of realia and a combination of pictures and charts in the teaching of comprehension in Junior Secondary Schools. The results have shown that realia are more effective in teaching comprehension than a combination of pictures and charts. The results also revealed that realia are not more effective than the traditional lecture method while the combination of pictures and charts may even be less effective than the traditional lecture method. Based on the findings, the following recommendations are made:

- Teachers should de-emphasize the use of realia in the teaching of comprehension in Junior Secondary Schools except in a comprehension passage where there is no other alternative method to depict what is referred to than the realia.
- Teachers should note that the important thing in utilizing instructional materials is not how many of them are utilized in a lesson but how well they are arranged to be able to bring about better learning effectively.

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