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Research Article

Comparative Effects of Futures-wheel and Story-telling Methods of Teaching on Students' Interest in History in Delta State, Nigeria

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Abstract

Objective: The study investigated the comparative effects of futures-wheel and story-telling methods of teaching on students' interests in history.

Methods: The study adopted quasi-experimental design involving non-equivalent pre-test, post-test, control and experimental groups. Two research questions were raised and two hypotheses were tested. The study population comprised of 450 SS1-3 students, with a sample size of 120 SS1 students (50 males/70 females) selected from two schools in the Sapele Education Zone of Delta State. Two intact classes were utilized, with one class assigned to the control group and taught with story-telling, while the other class was assigned to the experimental group and taught with the futures-wheel method. Data were collected using History Interest Scale and analyzed using IBM SPSS version 25.

Results: The results indicated that students taught with the futures-wheel method exhibited a greater interest in history than those taught with the story-telling method; and female students showed a greater interest in history than male students. Additionally, the futures-wheel is an innovative teaching method that can effectively motivate and sustain students' interest in history, and thereby preventing the subject from becoming extinct in secondary schools because studying history catalyzes national unity and development. The results also showed that futures-wheel method can facilitate and motivate students to brainstorm, think critically, perceive insights about problems, and proffer solutions.

Conclusion: The study's implications suggest that continued use of the futures-wheel method in teaching history can enhance students' interest in the subject, preventing its decline in secondary schools. The researchers suggested that the futures-wheel method should be integrated into history teaching in secondary schools.

Keywords: futures-wheels, story-telling, history, teaching method, delta state

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1 INTRODUCTION

The loss of students' interest in studying history as well as the gradual extinction of history subject from secondary school curricula in Nigeria is highly worrisome to history teachers, history scholars, and historians. According to Okereke[1], the study of history in secondary schools appears to be unproductive, non-functional, seemingly uninteresting, irrelevant, and unappealing to many students. Consequently, this has led to the extinction of history from the list of subjects of studies in secondary schools. Omolewa[2] stated that certain groups have been involved in the elimination of history from primary and secondary school curricula and have even threatened to remove it from the tertiary level of education. Evidently from Post Primary Education Board (PPEB)[3], the researchers practically gathered some viable information through oral interviews conducted in November 2021 with some educators working in the Zonal office of PPEB, Sapele Education Zone, as well as some students and teachers from Orodje Grammar School, Adeje Secondary School, and Oghara Model Secondary Schools. From these sources, it was evident that many students have lost interest in history and abandoned it as a course. This has made many history-trained teachers resort to teaching Government, Economics or Social Studies instead of history, which they were trained to teach[3].

Also, one of the senior educators at the office of PPEB in Sapele Education Zone, when interviewed about the names and statistics of the schools in the zone with reference to those offering history as a course; the Educator smeared discreditably and in a contemptuous manner concerning history and said "what are you doing with history! Many schools are no more teaching history and many students have lost interest in history, especially the male students"[3]. This attitude is disheartening and alarming. According to Okoli[4], one of the reasons for students' lack of interest in history is the false belief that it is not a viable subject that can lead to self-sustainable skilled jobs or entrepreneurship opportunities to alleviate poverty and hunger. Another misconception is that history cannot produce employable graduates, even in the field of education. However, these claims are entirely untrue!

In a related development, the problem of low motivation and loss of interest of students in the study of history is not peculiar to Sapele, Delta State or Nigeria alone; Other Countries such as Cameroun, South Africa and Lesotho, also have had the same issues. Fru[5] posited that: "I have realized that history education is given far less attention in the perking (sic) pecking order of academic subjects in these [above mentioned] countries…. I have observed a very significant level of stigma towards students who major in history [in their Universities] and even more towards their teachers [lecturers] because they are considered to be not good enough for other more challenging or meaningful subjects". This stigma is highly demeaning and discredits the history subject, portraying it as non-functional and uninteresting to students.

It is important to note that history, as a specific subject, involves the study of past events in human affairs for the purpose of correcting the present and being mindful of the future. History is considered the primary source of all subjects of study, as no subject can exist without its historical background. History is taught in various contexts, such as World history, Religious history, African history, Nigerian history, Tribal or Ethnic history, Family history and Personal history[6]. History is divided into topics. The researchers used some selected topics for the study, including British Colonialism in Nigeria, Direct and Indirect Rules, Amalgamation, Nationalism, and Independence of Nigeria. These topics were taught for six weeks with the permissions of the principals of secondary schools used for the study. The study focused specifically on the Sapele Education Zone of Delta State.

Moreover, The study also aimed to identify a more effective teaching method that can curb the loss of students' interest in history as well as invigorate students' interest and sustain history study in schools. To achieve this, the study compared the use of storytelling and futures wheel methods in teaching history. Storytelling is described by Onwueme[7] as a natural way of talking, gisting and narrating a story about an event or about a person to a listener without the listener contributing to the story. Onah[8] opined that story-telling method is the original and traditional teaching method that has existed since ages-past, but recently, due to dynamism in education and pedagogy, it has become outdated and obsolete because novel teaching methods have emerged, which seem better than story-telling method. According to Iloh et al.[9], novel innovative teaching methods include enter-educate, cooperative learning, peer-tutoring, devil's-advocate, concept-mapping, and futures-wheel methods. while conventional or old teaching methods include lecture, project, demonstration, Socratic, and storytelling methods. The researchers decided to compare story-telling and futures wheel methods because storytelling method has been used since ancient times, while futures-wheel is a newer teaching methods. Storytelling is teacher-centered, while futures-wheel is student-centered. The reason for choosing the futures-wheel method is that it catalyzes critical thinking, brainstorming, perceptive insights, and objective reasoning, It is discussion-oriented among students. In contrast, in storytelling method, teacher alone talks while the students listen and some students

may be passive and bored, and may not contribute anything during the lesson.

The Futures-wheel method is an innovative teaching strategy that makes students identify issues and consequences of an event or trend of things. According to Iloh et al.[9], the underlying philosophy of Futures-wheel method is futurism, which describes it as a perceptive insight, gestalt in nature, and a foresight teaching strategy that provides a model for the future based on the consequences of an event, issue or trend. Here, issues or trends are philosophically analyzed through brainstorming, critical thinking, and perceptibility of the inner meaning of such issues in order to proffer solutions. Based on this, the researchers investigated the comparative effects of Futures-wheel and Story-tellingg methods on the interests of students in the study of history in secondary schools. Futures-wheel method organizes thoughts about the futures. It identifies potential consequences of an issue and it analyzes complex inter-relationships of events or trends, it engenders "think-pair-share" and looks like a 'refurbished' Socratic method. According to Iloh et al.[9], the Socratic Method of teaching, originally applied peripatetic movement with questioning styles during teaching, but the futures-wheel method applies a "sit-down-think" with questioning and discussion styles of teaching during lessons. The strengths of the futures-wheel method include its ability to encourage group participation, its thought-provoking nature, it engenders sound reasoning, brainstorming, critical thinking, and problem-solving measures. However, its weaknesses may include the introduction of issues that are not part of the original contents of the lesson plans, and possible discouragement of some students from proper note-taking during class lessons[9].

Hypothetically, the teaching method that has been in use to date in explication of knowledge and learning contents of history might have constituted the problem. The conventional or traditional teaching method that has always been used in teaching history is the story-telling method which might have since become outdated, obsolete, repugnant, and uninteresting to students thereby making them lose interest in history[8]. In the classroom setting, teachers are in a better position to compare various teaching methods in order to verify and pick out the one that can motivate and ginger interests of students in their subject of study such as history. According to Iloh et al.[9], a comparison of two or more teaching methods is very essential in order to ascertain various effects of each of them on students' interest in a particular subject such as history. Based on this, Therefore, the researchers aimed to compare the effectiveness of futures-wheel and story-telling methods in motivating and sustaining students' interests in the study of history in secondary schools. The research question is formulated as follows: Which teaching method, between futures-wheel and story-telling, has a more significant impact on students' interests in history subject among secondary school students? This question presents the problem that necessitated the study.

2 MATERIALS AND METHODS

2.1 Research Design

This study was designed to make a comparative study of the comparative effects of the futures-wheel method and story-telling method of teaching on SS 1 students' interests in history subject.

Specifically, the study is designed to:

1. Ascertain the differences between the pre-test and post-test mean interest scores of students taught history using the futures-wheel method and those taught using the story-telling method.
2. Ascertain the differences between the mean interest scores of male and female students taught history using the futures-wheel method in the experimental group.

The study was guided by the following research questions:

1. What are the differences between the pre-test and post-test mean interest scores of students taught history using the futures-wheel method and those taught using the story-telling method?
2. What are the differences between the mean interest scores of male and female students taught history using the futures-wheel method?

The hypotheses formulated for the study were tested at a 0.05 level of significance, and they are as follows:

HO1: There is no significant difference between the mean interest scores of students taught with futures-wheel method and those taught with story-telling method.

HO2: There is no significant difference between the mean interest scores of male and female students taught with futures-wheel method and those taught with story-telling method.

2.2 Methods

The study adopted a quasi-experimental design using intact classes. Two schools were randomly sampled out of the three schools that were offering history in the area of study at the time of this research. The sample population consisted of 450 SS1-3 students, of which 120 SS1 students, comprising 50 males and 70 females, were selected from two public secondary schools. The SS 1 intact classes comprised one experimental group of 65 students and one control group of 55 students respectively.

Prior to the intervention, the two intact classes were pre-tested to ensure their educational equivalence, and the two research assistants were briefed on the study's objectives and procedures. History Interest Scale (HIS) was the instrument used for data collection, it was also used in testing and ascertaining the levels of the interests of the students. The HIS was validated by three experts, and the reliability of the instrument was established at 0.78 using Crombach Alpha.

The study was conducted over a six-week period during the normal school timetable allocated to the history subject. The SS1 history teachers of the two schools served as research assistants. The first week was used for visiting the participating schools and training the research assistants. The second week was used for pre-testing the two groups to determine their equivalence before teaching commenced. Over the subsequent three weeks, both groups were taught three topics. The experimental group was taught history concepts using the Futures-wheel method, while the control group was taught the same concepts using the Story-telling method. One week was used for revision and post-testing, and the HIS used for the pre-test was reshuffled and used for the post-test.

2.3 Data Analysis

Data analysis was conducted using IBM SPSS version 25. The data obtained from the pre-test and post-test were analyzed using mean and standard deviation to answer the research questions and Analysis of Covariance (ANCOVA) to test the hypotheses at a 0.05 level of significance. The level of significance (*P*) was evaluated on a scale of 0.05, whereby any value below the level of significance was rejected, while any value above the level of significance was not rejected.

3 RESULTS

3.1 Research Question One

What are the differences between the pre-test and post-test mean interest scores of students taught history using the futures-wheel method and those taught using the story-telling method?

The results in Table 1 showed that the students in the experimental group had mean interest scores of 42.96 in the pre-test and 44.90 in the post-test with a standard deviation of 8.52 in the pre-test and 9.24 in the post-test respectively in the HIS. While the students in the control group had mean interest scores of 41.93 in the pre-test and 44.53 on the post-test with a standard deviation of 6.15 and 8.51 in the pre-test and post-test respectively.

The results showed that the mean interest scores in the experimental group were higher than the mean interest scores in the control group. This means that the students' interest to study history were higher when futures-wheel method was used in teaching history than when story-telling method was used based on their pre-test (42.96 and 41.93) and post-test (44.90 and 44.53) scores.

However, the ANCOVA analysis in Table 1 reveals a link between the research question, hypothesis and findings. The analysis shows that there is a significant difference between the mean interest scores of students in the experimental and control groups as asked in the research question and hypothesized in the hypothesis. These findings suggest that there was a difference in the students' interest levels when the futures-wheel and storytelling methods were used individually to teach history to students.

3.2 Research Question Two

What are the differences between the mean interest scores of male and female students taught history using futures-wheel method?

The results in Table 2 showed that the mean interest scores of male and female students taught history using futures-wheel method. The male students had a mean score of 40.03 in the pre-test and 46.1 in the post-test, with the standard deviation of 9.24 in the pre-test and 6.01 in the post-test respectively, showing a mean score difference of 5.8 after treatment. While the female students had a mean score of 38.51 in the pre-test and 47.51 in the post-test with a standard deviation of 9.07 in the pre-test and 5.55 in the post-test respectively and a mean score difference of 9.0 after treatment.

This result shows that there was a significant difference between the mean interest scores of male and female students taught history using futures-wheel method. The scores showed that the female students exhibited greater interest in studying history than their male counterparts when this particular teaching method was employed.

Also ANCOVA analysis in Table 2 reveals a link between the research question, hypothesis, and findings. The results show that there is a very significant difference between the mean interest scores of males and females in regard to gender as asked in the research question and hypothesized. The findings were derived from the calculated figures in the data, which demonstrate that the female students were more interested in studying history than male students.

3.3 Results of Hypotheses

3.3.1 Null Hypothesis One

There is no significant difference between the mean interest scores of students taught with futures-wheel method and those taught with story-telling method.

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Table 1. Mean Interest Scores of Students Taught History Using the Futures-wheel Method and Those Taught Using the Story-telling Method

	Experimental Group = 65		Control Group = 55	
	Mean	SD	Mean	SD
Pre-test	42.96	8.52	41.93	6.15
Post-test	44.90	9.24	44.53	8.51

Table 2. Mean Interest Scores of Male and Female Students Taught History Using Futures-wheel Method

Experimental Group	Males: n = 30		Females: n = 35	
	Mean	SD	Mean	SD
Pre-test	40.3	9.24	38.51	9.07
Post-test	46.1	6.01	47.51	5.55

The results in Table 3 showed that the F-value of 2.160 and this is significant at .144. Since .144 is greater than .05, the F-value of 2.160 is not significant. The hypothesis of no significant difference is not rejected as stated. Therefore, there is no significant difference between the mean interest scores of students taught with futures-wheel method and those taught with story-telling method. The findings demonstrate that though the treatment group shows higher interest scores, but the difference was not significant, as predicted by the hypothesis.

3.3.2 Null Hypothesis Two

There is no significant difference between the mean interest scores of male and female students taught with futures-wheel and those taught with story-telling method.

Data in Table 4 on gender, show that F-value of 5.270 and this is significant at .023. Since .023 is less than .05; and at .05 levels, the F-value of 5.270 is significant. Therefore, hypothesis 2 is rejected as stated. Hence, the difference which exists between the male and female mean interest scores of treatment and control groups is significant.

The analysis reveals a significant difference in interest scores between male and female students taught using the futures-wheel and story-telling methods. The interests of those taught with futures-wheel were far higher than those taught with storytelling thereby rejecting the null hypothesis that was posited.

3.4 Summary of the Findings

These were the major findings from the study:

1. The mean interest scores of students in the experimental group were higher than the mean interest scores of students in the control group.

2. There was a significant difference between the mean interest scores of male and female students taught history using futures-wheel method.

3. Comparing the futures-wheel and story-telling methods, it was found that futures-wheel method is more proficient and more effective in motivating and sustaining the interests of students in the study of history in secondary schools.

4 DISCUSSION

This research compared the comparative effects of futures-wheel and story-telling teaching methods on the interests of the students in the study of history in secondary schools, especially in Sapele Education Zone of Delta State, Nigeria. The issues being investigated entail the loss of students' interests in studying history and a search for a proficient teaching method that can recover the lost interest and sustain it in the study of history in secondary schools, especially in Sapele Education Zone of Delta State Nigeria.

The relevance of the results entails that it has revealed that futures wheel method, if continually used in teaching history can revive, reinvigorate and sustain the interests of the students in the study of history. The result from Table 1, of the answered research question 1 showed the mean interest scores of students in both experimental and control groups in both pre-test and post-test. The result showed that the students in the experimental group obtained a mean interest score higher than the students in the control group. This means that the use of the futures-wheel method of teaching gingered and ignited more interest in the students and motivated them to embrace the study of history more than those students taught with story-telling method in the control group.

However, the results of the ANCOVA analysis demonstrated that there is a significant difference between the mean interest scores of students in the experimental and control groups. Although the treatment group showed a higher mean interest score compared

Table 3. Ancova Result on Mean Interest Scores of Experimental and Control Groups

	Type III Sum of Squares	df	Mean Square	F	*P*
Corrected Model	193.455[a]	1	193.455	2.160	0.144
Intercept	223316.155	1	223316.155	2493.851	0.000
Group	193.455	1	193.455	2.160	0.144
Error	10566.512	118	89.547		
Total	234536.000	120			
Corrected Total	10759.967	119			

Table 4. Ancova Result for Mean Interest Scores of Male and Female Students

Source	Type III Sum of Squares	df	Mean Square	F	*P*
Corrected model	460.024[a]	1	460.024	5.270	0.023
Intercept	220907.524	1	220907.524	2530.799	0.000
Gender	460.024	1	460.024	5.270	0.023
Error	10299.943	118	87.288		
Total	234536.000	120			
Corrected total	10759.967	119			

Notes: a : R Squared = .043

to the control group, the difference was not statistically significant. The findings of this study were similar to those of Eya as cited in Anamezie[10], who noted that comparing teaching methods is a catalyst that enhances the verification of a proficient method that can motivate students' interest in science subject and in any other subject [such as history]. The researcher compared the effects of futures-wheel method with story-telling method and found that the futures-wheel method was more effective in stimulating students' interest in studying history.

Moreover, the result from the answered research question 2 showed the differences in the mean interest scores of the students with respect to gender. It was seen from the results that the females had higher interest scores than the male students. These results suggest that female students demonstrated a greater propensity for engaging with and showing interest in the study of history, particularly when the futures-wheel method was employed as a teaching approach.

Furthermore, the ANCOVA analysis showed that there is a significant difference between the mean interest scores of males and that of females in regard to gender. This finding contrasts with the results reported by Onah[8], which revealed that there was no significant difference in the mean interest scores of males and females in mathematics, but the finding of this study showed that a significant difference existed between male and female interest scores of students in many other subjects including history. This finding is consistent with the results of Agwagah[11], which revealed that there was a significant difference between the male and female interest scores of students in some subjects such as history, and confirms that some females may exhibit greater interest in a subject than some males, as observed in this study regarding history.

5 CONCLUSION

The findings of this study demonstrate that the futures-wheel method is a more effective teaching approach than the story-telling method for fostering students' interest in the study of history in secondary schools. Many students promised to make history their choice core course and to write it in WAEC, and pursue it professionally in tertiary institution if futures-wheel method is continually used in teaching history in their schools. Students also reported that the futures-wheel method stimulated their critical thinking and reasoning abilities, facilitated brainstorming, and provided them with deep insights and perceptions about their lives and futures. Therefore, in conclusion, this research has succeeded in exhuming and showcasing futures-wheel method, being a novel innovative, interesting and attractive teaching method that can be used to motivate students to embrace studying history and any other seemingly dying or difficult subject for improved studies both in secondary schools and in tertiary institutions, as well as sustain history or such subject from dying out from the syllabi of curriculum implementation.

6 RECOMMENDATIONS

From the findings of the study, the following

recommendations are hereby made:

1. Futures-wheel method is recommended to be used in teaching history in order to sustain the interests of the students in the study of history.

2. Teachers of other subjects can also use futures-wheel method to teach their own subject in order to make the learning of their subject more interesting and attractive.

3. Curriculum implementers and other researchers should endeavour to embark on more comparative research on other novel innovative teaching methods in order to ascertain the more or the most effective ones that can increase the interests of students in various subjects especially history in secondary schools.

4. The History Society of Nigeria, Curriculum Implementers, and the Ministry of Education should organize workshops, seminars, and conferences for history teachers to re-educate them on effective teaching methods that can revive, improve, and sustain the teaching and learning of history in schools.

5. The Ministry of Education should fully return history and make it a compulsory core subject of study for all students in secondary schools in order to foster unity and national development of Nigeria.

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Conflicts of Interest

The authors declared no conflict of interest.

Author Contribution

All the authors contributed to original draft preparation, review and editing. The manuscript was read by all the authors and agreed to be published.

Abbreviation List

ANCOVA, Analysis of Covariance
HIS, History Interest Scale
PPEB, Post Primary Education Board

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