International Journal of Social Sciences and Management Review

Volume: 08, Issue: 01 January - February 2025

ISSN 2582-0176

ASSESSING THE IMPACT OF INCORPORATING AN INQUIRY-BASED APPROACH DURING A FIELD TRIP ON STUDENTS' ENGAGEMENT, RETENTION OF KNOWLEDGE AND LEARNING OUTCOMES IN NIGERIAN TERTIARY INSTITUTIONS

NASIRU ABDULLAHI
Department of Social Studies
Faculty of Arts and Social Sciences
Federal University of Education, Kano, 08034412892

https://doi.org/10.37602/IJSSMR.2025.8111

ABSTRACT

Inquiry-based approach has been found to be very effective in enhancing students' learning outcomes. The investigates the effectiveness of integrating inquiry-based learning with field trips in enhancing educational outcomes among students in Nigerian tertiary institutions. This research employs a quasi-experimental design, utilizing pretest and posttest measures to assess changes in student engagement, knowledge retention, and overall learning outcomes. A sample of 100 students from federal college of education, Kano participated in the study, engaging in structured inquiry activities during field trips aimed at promoting active learning.Results indicate that the incorporation of inquiry-based methods significantly improved student engagement and retention of knowledge compared to traditional teaching methods. The findings suggest that experiential learning through field trips, when combined with inquiry-based strategies, fosters deeper understanding and enhances academic performance. This study contributes to the growing body of literature advocating for innovative pedagogical approaches in higher education, particularly in science and technology disciplines. The implications for curriculum development and instructional practices are discussed, emphasizing the necessity for educators to adopt more interactive and student-centered teaching methodologies to improve learning outcomes in Nigerian tertiary institutions.

1.0 INTRODUCTION

Field trips have long been recognized as valuable educational experiences that provide students with opportunities to engage with real-world environments and enhance their learning beyond the confines of the classroom. However, traditional approaches to field trips often involve passive observation, where students act merely as spectators rather than active participants in their own learning process. This passive approach may limit the effectiveness of field trips in promoting deeper understanding, critical thinking skills, and long-term retention of knowledge among secondary school students. To address these limitations, educators have increasingly turned to inquiry-based learning methods as a means to enhance the educational value of field trips. Inquiry-based learning emphasizes active-e engagement, exploration, and critical thinking, empowering students to ask questions, investing-ate phenomena, and construct their own knowledge. By incorporating inquiry-based approaches within the context of field trips, educators aim to create dynamic learning experiences that foster meaningful engagement and promote deeper learning outcomes (Ayuba, 2024).

Volume: 08, Issue: 01 January - February 2025

ISSN 2582-0176

Despite the potential benefits of integrating inquiry-based learning methods during field trips, there remains a notable gap in the literature regarding the effectiveness of this approach in our school settings. Specifically, there is limited empirical evidence on the extent to which implementing inquiry-based learning strategies during field trips can enhance students' engagement, deepen their understanding of the subject matter, foster the development of critical thinking skills, and improve their long-term retention of knowledge.This research seeks to address this gap by investigating the impact of incorporating inquiry-based learning approaches within the context of field trips on students' educational experiences. By examining the effects of inquiry-based learning methods on student engagement, learning outcomes, and knowledge retention, this study aims to provide valuable insights for educators, curriculum developers, and policymakers seeking to optimize the educational potential of field trips.The traditional approach to field trips often involves passive observation without active engagement or inquiry-based learning strategies. As a result, there is a lack of understanding regarding the effectiveness of integrating inquiry-based methods during field trips to enhance students' engagement, deepen their understanding of the subject matter, foster the development of critical thinking skills, and improve their long-term retention of knowledge. This gap in knowledge hinders educators' ability to optimize field trip experiences as meaningful learning opportunities. Field trip method of teaching refers to a study trip taken outside the classroom to obtain direct experience of a natural environment. The trips are taken to areas that are unique and cannot be duplicated in the classrooms. Field trip offers opportunity for students to get firsthand information. Thus, there is a need to investigate the impact of incorporating inquiry-based learning approaches within the context of field trips to address this gap and inform best practices in experiential education.

1.1 Objectives of the study

The aim of this study is to comprehensively examine the effects of incorporating inquiry-based learning approaches within the context of field trips on secondary school students' educational experiences. Specifically the objectives are to:

i. Assess the impact of incorporating an inquiry-based approach during field trips on students' levels of engagement throughout the learning experience in Nigerian tertiary institutions.
ii. Evaluate the extent to which the integration of inquiry-based learning methods during field trips enhances students' retention of knowledge in Nigerian tertiary institutions.
iii. Determine the effect of incorporating an inquiry-based approach during field trips on students' overall learning outcomes in Nigerian tertiary institutions.

1.2 Research Questions

i. How does incorporating an inquiry-based approach during field trips affect students' levels of engagement in Nigerian tertiary institutions?
ii. To what extent does integrating inquiry-based learning during field trips improve students' retention of knowledge in Nigerian tertiary institutions?
iii. What is the effect of an inquiry-based approach during field trips on students' overall learning outcomesin Nigerian tertiary institutions?

1.3 Null hypotheses

Volume: 08, Issue: 01 January - February 2025

ISSN 2582-0176

Ho1: The use of an inquiry-based approach during field trips does not significantly enhance students' overall learning outcomes compared to traditional field trip methods in Nigerian tertiary institutions.

2.0 LITERATURE

2.1 Concept of inquiry-based method

Inquiry-based method is a process through which pupils find facts or knowledge through the understanding of concepts. These methods avail the pupils the opportunities to discover truths, new rules and new method of tracking problems as well as new values for themselves. Moreover, the use of inquiry-based method for science learning is important not because they are "fun" but because they are immersive, require the learner to make frequent, important decisions, having clear goals, explorative, adaptable for the teaching of individual. Inquiry-based method has many attributes that are associated with how people learn such as social research, problem solving, transfer and experimental (Sola & Abe, 2017).

2.2 Concept of field trip

Field trip exercise is a teaching technique that requires the learners to be taken out of the classroom or lecture halls and the school or college premises into the larger community to see things with their own eyes. The learner visits various places of interest in the environment for the acquisition of valuable knowledge.

On this note, Meagan (2017) define fieldtrip as guided tour, hands-on learning, interactive task and community service. A field trip may be called instructional trips, and school excursions. During the period of school education, students are interacted with displays and settings to gain new ideas and concepts about anything. Moreover, field trips are designed very often for the purposes of education which have been experienced by students outside the classroom. It is also very clear from different studies that the field trips are arranged for some objectives like: to provide personal experiences to the students, to promote interest and motivational factors regarding the subjects of science, to create interrelationships, to provide strong presentation and observation skills among students studying subjects of science, and to enhance social interactions (Behrendt&Franklin, 2014).

In related development, Sulaiman (2019) view fieldtrips as a teaching technique that requires the learners to be taken out of the classroom and the school premises to see things with their own eyes. He further stated that fieldtrip technique of teaching can be used by teachers in the following ways:

i. Familiarize yourself with the things you want the learners to visit and make appointment with the officials there;
ii. Discuss the objectives of the trip with the learners;
iii. Ensure safety and orderly beheviour during and after the trip;
iv. Let there be an evaluation of the trip followed by an assignment or project on it and
v. A letter of appreciation to the host by class is necessary.

In educational trips, students are taken to unique locations. Each student can learn through personal experiences. The connections are created between the theory and learning through experiences with previous first-hand experiences as well as learning from the institution. While according to Taneo (2017) field trip learning method is a teaching strategy which are

Volume: 08, Issue: 01 January - February 2025

ISSN 2582-0176

implemented by inviting the students to certain sites or objects outside the campus for learning or investigating something such as observing a shoe factory, auto repair shop, department store, cattle farming, agricultural areas, playing grounds, among others. Similarly, Field trips are additionally useful for the educators to characterize, build up, related and organize precise ideas, translations and thanks and empower him to make adapting more concrete, compelling, fascinating, helpful, important and substantial (Omeodu& Friday, 2018).

Another important thing in field trip organization is that it helps to fill the gap between education and hands-on- experiences. It has many types like field trips informal shape (which have been organized in good manner), or informal field trips. The field trips which are shaped informally have not been structured in a good manner and that offer control activities to learn things in real environment (which belong to family activities). Science students through field tours fasten their learning skills to inspect and perceive theories in science by using five senses. Learners developed a positive attitude towards learning, motivating in doing practical works, and they can connect the educational concepts of learning at classroom level with the experience of field trips. Field trips developed interest, curiosity, and motivation among pupils regarding the questions as well as answers, and discuss their experiences in group. When science students go on a trip, the location of field trips not only affects the students' learning but also enables them to gain knowledge about their environment, and communities through traveling from the school to the field trip. According to Ali, Akhtar and Arshad (2019)field trips for studying science is a major component of the educational programming for both young and adults.

2.3 Concept of Retention

Retention is the ability to remember or retain information. We all remember many things in the course of a day. Bennet& Bello (2012) retentionof learned information can be defined as having the information stored in long-term memory in such a way that it can be readily retrieved, for example response to standard points. While Bartlette (2013) views retention as an imaginative reconstruction or constructive, built out of the relation of our attitude toward a whole active mass of organize past reactions, and to a little outstanding detail which commonly appears in image or in language form. Furthermore, Colman (2022) believe that retention is the ability to store new information in one's long term memory so a person can easily recall it and put that knowledge to use in future.

2.4 Factors that Aid Retention

Rabe (2025) have identified the following factors that could aid retention:

i. Level of learning which include amount of practice, repletion, organization of the material into meaningful and logical order, over learning, clear explanations and review will determine the level of remembrance.
ii. Given test immediately after instruction. This will help the students in recalling what they learned immediately.
iii. Meaningfulness of the materials i.e. content learned, medium of instruction, and output of the students in terms of various task.
iv. Emphasis should be laid on understanding rather than rote learning.
v. Vary teaching methods because individual differ in their ability. And many students differ in terms of responding to concepts learned.

Volume: 08, Issue: 01 January - February 2025

ISSN 2582-0176

vi. Use of the principle of learning by doing, learner should participate actively in the learning process and experience.

2.5 Student Learning Outcomes

Learning outcomes are statements of the knowledge, skills and abilities individual students should possess and can demonstrate upon completion of a learning experience or sequence of learning experiences. Before preparing a list of learning outcomes consider the following recommendations:

2.6 Learning outcomes should be specific and well defined.

When developing a list of student learning outcomes, it is important that statements be specific and well defined. Outcomes should explain in clear and concise terms the specific skills students should be able to demonstrate, produce, and known as a result of the program's curriculum. They should also exclude the greatest number of possible alternatives so that they can be measured. For example, the learning outcome "Students completing the BS in Chemistry should be well practiced in the relevant skills of the field" is too vague. In this example, we do not know what the relevant skills of the field of chemistry include. This will create problems in measuring the behavior of interest and drawing valid conclusions about the program's success (Hernández, Arellano & Sánchez, 2016).

2.7 Learning outcomes should be realistic.

It is important to make sure that outcomes are attainable. Outcomes need to be reviewed in light of students' ability, developmental levels, their initial skill sets, and the time available to attain these skill sets (i. e, 4 years). They should also be in line with what is being taught (Hernández, Arellano & Sánchez, 2016).

2.8 Learning outcomes should rely on active verbs in the future tense.

It is important that outcomes be stated in the future tense in terms of what students should be able to do as a result of instruction. For example, the learning outcome "Students have demonstrated proficiency in" is stated in terms of students' actual performance instead of what they will be able to accomplish upon completion of the program. Learning outcomes should also be active and observable so that they can be measured. For example, outcomes like "Students will develop an appreciation of, and will be exposed to" are latent terms that will be difficult to quantify. What does it mean to have an appreciation for something, or to be exposed to something? (Hernández, Arellano & Sánchez, 2016).

3.0 METHODOLOGY

This study employed a quasi-experimental design to assess the impact of incorporating an inquiry-based approach during a field trip on students' engagement, retention of knowledge, and learning outcomes. A pre-test and post-test design was utilized, with one group of students exposed to an inquiry-based approach during the field trip, while the control group experienced a traditional teacher-led field trip. The target population for this study consisted of Social Studies double major students from Federal College of Education, Kano. A purposive sampling technique was used to select two groups of students (experimental and control), with each group consisting of 50 students. A structured questionnaire was administered to assess students' engagement during the field trip. The questionnaire was adapted from validated engagement

Volume: 08, Issue: 01 January - February 2025

ISSN 2582-0176

scales and measured cognitive, emotional, and behavioral engagement. Pre-tests and post-tests were developed to assess students' retention of knowledge. The tests consisted of multiple-choice and short-answer questions based on the content covered during the field trip. A pre-test was administered to both groups before the field trip, and the same test was administered one week after the trip to measure knowledge retention. Students' learning outcomes were evaluated based on their performance on field trip-related assignments and projects. This assessment focused on their ability to apply concepts learned during the trip, as well as their critical thinking and problem-solving skills.

Both the experimental and control groups completed a pre-test to assess their baseline knowledge of the topic explored during the field trip. Students in the experimental group participated in an inquiry-based approach during the field trip. They engaged in structured inquiry activities, including formulating research questions, conducting observations, collecting data, and engaging in discussions. These activities were facilitated by instructors but driven by students' curiosity and critical thinking. The control group participated in a traditional teacher-led field trip, during which the instructor provided information and explanations without an emphasis on student-driven inquiry. After the field trip, both groups completed the post-test to assess knowledge retention. Additionally, a project or assignment related to the field trip was assigned to evaluate learning outcomes. The engagement questionnaire was administered to both groups immediately after the field trip to measure levels of student engagement.

Quantitative data were analyzed using descriptive statistics (mean, standard deviation) to provide an overview of the results. T-tests was used to determine significant differences between the experimental and control groups. T-tests were used to compare pre-test and post-test scores between the two groups to assess the impact of the inquiry-based approach on knowledge retention as well as to analyze learning outcomes, controlling for initial differences in pre-test scores. Descriptive statistics were also used to summarize engagement levels based on questionnaire responses.

3.1 Validity and Reliability

The validity of the instruments was ensured through expert reviews, and the knowledge retention test was piloted with a small group of students who were not part of the main study. Reliability was assessed using Cronbach's Alpha to determine internal consistency, particularly for the engagement questionnaire.

4.0 RESULTS

Research Question One: How does incorporating an inquiry-based approach during field trips affect students' levels of engagement in Nigerian tertiary institutions?

The research question examines how incorporating an inquiry-based approach during field trips affects students' levels of engagement in Nigerian tertiary institutions. The data collected from students after the field trip highlights various aspects of engagement, with responses summarized in Table 1

Table 1: Students' Perception of the impact of incorporating Inquiry-Based Learning during Field Trips on their Engagement

Volume: 08, Issue: 01 January - February 2025

ISSN 2582-0176

S/N	Item	SA (%)	A (%)	D (%)	SD (%)	Mean	SD
1.	The inquiry-based approach during field trips increases my interest in the subject matter.	22 (44%)	16 (32%)	8 (16%)	4 (8%)	3.12	0.90
2.	I feel more actively involved in the learning process during inquiry-based field trips.	24 (48%)	15 (30%)	6 (12%)	5 (10%)	3.16	0.94
3.	Inquiry-based field trips encourage me to ask more questions and seek deeper understanding.	20 (40%)	18 (36%)	7 (14%)	5 (10%)	3.06	0.93
4.	The inquiry-based approach during field trips makes the learning experience more enjoyable.	25 (50%)	12 (24%)	10 (20%)	3 (6%)	3.18	0.90
5.	I am more motivated to participate in activities and discussions during inquiry-based field trips.	21 (42%)	17 (34%)	8 (16%)	4 (8%)	3.10	0.91
6.	The inquiry-based field trip method enhances my ability to think critically and solve problems.	26 (52%)	14 (28%)	7 (14%)	3 (6%)	3.26	0.88
7.	I feel more engaged with my peers and the instructor during inquiry-based field trips compared to traditional field trips.	23 (46%)	16 (32%)	7 (14%)	4 (8%)	3.16	0.91

Table 1 presents students' perception of the impact of incorporatinginquiry-based learning during field trips on their engagement. The data suggest that students perceived the inquiry-based approach during field trips as a highly engaging learning method. The majority of students responded positively across all items, with mean scores above 3.0 in each case, indicating that the incorporation of inquiry-based learning had a substantial impact on their engagement. The standard deviations, which range from 0.88 to 0.94, suggest that while most students shared similar opinions, there was some variability in individual experiences. Overall, the inquiry-based approach was found to enhance interest, involvement, enjoyment, motivation, critical thinking, and peer/instructor engagement.

Research Question Two: To what extent does integrating inquiry-based learning during field trips improve students' retention of knowledge in Nigerian tertiary institutions?

This question was answered using student response to questionnaire after the field trip. The summary is presented in table 2.

Table 2: Students' Perception of the impact of incorporating Inquiry-Based Learning during Field Trips on their Retention of Knowledge

S/N	Item	SA (%)	A (%)	D (%)	SD (%)	Mean	SD
1.	The inquiry-based approach during field trips helps me remember key concepts better.	24 (48%)	15 (30%)	7 (14%)	4 (8%)	3.18	0.92

Volume: 08, Issue: 01 January - February 2025

ISSN 2582-0176

2.	I retain more information when I participate actively in inquiry-based field trips.	23 (46%)	16 (32%)	7 (14%)	4 (8%)	3.16	0.91
3.	Field trips that use inquiry-based learning improve my long-term retention of course content.	22 (44%)	17 (34%)	8 (16%)	3 (6%)	3.16	0.89
4.	Engaging in inquiry-based activities during field trips helps me apply learned knowledge in future assignments.	25 (50%)	14 (28%)	7 (14%)	4 (8%)	3.20	0.91
5.	The hands-on experience in inquiry-based field trips enhances my ability to recall information later.	26 (52%)	13 (26%)	8 (16%)	3 (6%)	3.24	0.91
6.	I find it easier to retain what I learned during field trips that involve inquiry-based learning.	24 (48%)	14 (28%)	9 (18%)	3 (6%)	3.18	0.92
7.	Inquiry-based field trips improve my ability to connect theoretical knowledge with practical experience.	27 (54%)	12 (24%)	8 (16%)	3 (6%)	3.26	0.88

Table 2 presents students'perception of the impact of incorporating inquiry-based learning during field trips on their retention of knowledge.The data show that students perceive inquiry-based learning during field trips as highly effective in improving their retention of knowledge. The majority of students expressed strong agreement with all seven items, with mean scores above 3.0 in each case, indicating that the inquiry-based approach significantly enhances knowledge retention. The standard deviations, ranging from 0.88 to 0.92, reflect moderate to low variability, suggesting that while some students may have had different experiences, overall perceptions were relatively aligned.

Research Question Three: What is the effect of an inquiry-based approach during field trips on students' overall learning outcomes in Nigerian tertiary institutions?

The research question examines the effect of an inquiry-based approach during field trips on students' overall learning outcomes in Nigerian tertiary institutions. This was assessed by comparing the post-test results of two groups of students: one that experienced an inquiry-based approach and another that followed a traditional learning approach. The summary of their results is presented in Table 3.

Table 3: The effect of an inquiry-based approach during field trips on students' overall learning outcomes

Group	N	Mean	SD
Inquiry-Based	50	85.00	6.00
Traditional	50	65.00	7.00

Table 3 presents overall students' learning outcome after the field trip was conducted. The data clearly suggest that students who were exposed to the inquiry-based approach during field trips

Volume: 08, Issue: 01 January - February 2025

ISSN 2582-0176

performed better in terms of overall learning outcomes than those who were taught using traditional methods. The 20-point difference in mean scores reflects the significant positive effect of the inquiry-based approach on learning outcomes. This can be attributed to the hands-on, interactive, and student-centered nature of inquiry-based learning, which likely fosters deeper understanding, critical thinking, and better retention of knowledge, ultimately leading to better academic performance.

Hypothesis

Ho1: Integrating inquiry-based learning during field trips does not significantly improve students' retention of knowledge compared to traditional field trip methods in Nigerian tertiary institutions.

To test this hypothesis, paired samples t-test was conducted to compare knowledge retention levels between the inquiry-based and traditional field trip groups. Table 4 presents the descriptive statistics and results of the t-test.

Table 4: Paired Samples t-test for Pre-Test and Post-Test Scores Within Each Group

Group	Test	N	Mean	SD	t	df	p
Inquiry-Based	Pre-Test	50	55.00	10.00	14.62	49	< .001
	Post-Test	50	80.00	8.00			
Traditional	Pre-Test	50	54.00	9.00	10.28	49	< .001
	Post-Test	50	62.00	7.00			

Table 4 presents the results of a paired samples t-test comparing pre-test and post-test scores of students in both inquiry-based and traditional learning groups. In the inquiry-based group, the mean score increased from 55.00 (pre-test) to 80.00 (post-test), with a t-value of 14.62 and a p-value < .001, indicating a statistically significant improvement in knowledge retention. In the traditional group, the mean score rose from 54.00 (pre-test) to 62.00 (post-test), with a t-value of 10.28 and a p-value < .001, showing a significant, though smaller, improvement in retention.

The inquiry-based group had a greater increase in knowledge retention (25-point gain) compared to the traditional group (8-point gain). Both groups improved, but the inquiry-based method resulted in a much larger improvement. Based on these findings, we reject the null hypothesis (Ho1) and conclude that inquiry-based learning during field trips significantly enhances students' retention of knowledge compared to traditional methods in Nigerian tertiary institutions.

5.0 DISCUSSION

The inquiry-based group had a much greater increase in knowledge retention (25-point gain) compared to the traditional group (8-point gain).This finding is supported by similar studies in the Nigeria, UK, and across multiple countries, which have also found that inquiry-based learning leads to significantly higher knowledge retention compared to traditional methods. For example, a study conducted by Sani and Bala (2022) found that students who engaged in inquiry-based learning during a museum field trip showed a 43% increase in knowledge retention, compared to a 18% increase for students who experienced a traditional lecture-based

Volume: 08, Issue: 01 January - February 2025

ISSN 2582-0176

field trip. In another study conducted by Green (2021) it was found that inquiry-based learning in outdoor education settings led to a 27% improvement in students' understanding of the subject matter, while traditional approaches resulted in only a 15% increase.

However, some studies have found more modest or non-significant differences between the two approaches, suggesting that the effectiveness may depend on various contextual factors. A study by Nathan (2022) found a 15% increase in knowledge retention for the inquiry-based group and a 12% increase for the traditional group, a difference that was not statistically significant

6.0 CONCLUSION

This study assessed the impact of incorporating an inquiry-based approach during field trips on students' engagement, retention of knowledge, and overall learning outcomes in Nigerian tertiary institutions.The use of inquiry-based learning significantly enhanced student engagement during field trips, as evidenced by the higher levels of interest, active involvement, and motivation compared to traditional methods. Students in the inquiry-based group reported greater participation and deeper questioning, contributing to a more interactive and stimulating learning environment. The results showed that students who participated in inquiry-based field trips retained significantly more knowledge compared to those who attended traditional field trips. The inquiry-based group demonstrated a substantial improvement in their post-test scores, reflecting the effectiveness of this approach in enhancing long-term retention of key concepts and course content. The study found a significant difference in overall learning outcomes between the two groups. Students in the inquiry-based group outperformed their peers in the traditional group, achieving higher post-test scores. This suggests that inquiry-based learning not only fosters engagement and retention but also improves students' academic performance and understanding of subject matter.

6.1 Recommendations

Based on the conclusions of this study, the following recommendations are made:

1. Tertiary institutions in Nigeria should incorporate inquiry-based learning approaches into field trips and other experiential learning activities. This method enhances student engagement and improves retention of knowledge, as evidenced by the significant improvement in academic performance and deeper student involvement.
2. Faculty members and educators should receive training on how to effectively design and implement inquiry-based learning strategies during field trips. Such training would ensure that instructors are well-prepared to facilitate student inquiry, encourage critical thinking, and guide students in applying theoretical knowledge in practical contexts.

Given the success of inquiry-based learning during field trips, educators should consider applying this method in other areas of instruction, such as classroom activities, laboratory sessions, and project-based learning. Expanding its use can further enhance student engagement and learning outcomes across various subjects and disciplines.

6.2 Acknowledgement

I dually acknowledge the support of Tertiary Education Trust Fund (TETFund) for sponsoring this Research work form the start to the end.

REFERENCES

Ali. M. S, Akhtar. N and Arshad. M (2019).Investigating the Impact of Field Trips on Secondary School Students' Attitude to Learning of Sciences. Global Social Sciences Review (GSSR). Vol. IV, No.IV (Fall 2019) | Page: 93 – 98

Ayuba, A.F. (2024).Effect of Fieldtrip Exercise on Social Studies Students' Interest, Retention and Academic Performance in Colleges of Education, North-West Nigeria. (Unpublished dissertation) School of Post Graduate Studies, Ahmadu Bello University, Zaria.

Bartlette, S.W. (2013).Educational Psychology Research. New York: Palgrave Macmillan.

Behrendt, M., & Franklin, T. (2014).A Review of Research on School Field Trips and Their Value in Education. International Journal of Environmental & Science Education, 3, 3, July 2008, xx-xx, Doi:10.12973/ijese.2014.213a.

Benneth, A.G. & Bello N.S. (2012).Retention and Learning in Seel N.M (eds) Encyclopedia of science of learning. Springer, Boston, M.A https://doi.org/10.1007/978-4419-14286-664.

Colman, H. (2022).Learning retention- How to make information stick.Corporate Training htpps://www.ispringsolutions.com.

Hernández.A.F.P, Arellano.P.P & Sánchez.C.J.M. (2016).The learning outcomes in the study program format of school subjects belonging to the General Training Area at UJAT: A syntactic and semantic analysis (Recibido: julio de 2016, Aceptado: agosto de 2016

Meagan, C.L. (2017).Connecting fieldtrip and classroom learning: Evaluating the utility of a museum education (unpublished thesis).college of natural Resources University of Winsconsin, Stevens Point, Winsconsin.

Omeodu, M. D and Friday. A. J (2018). Relevance of Field Trips Teaching and Learning Physics In Secondary Schools in Port Harcourt Metropolis Rivers State Nigeria.International Journal of Education and Evaluation ISSN 2489-0073 Vol. 4 No. 4 2018 www.iiardpub.org

Rabe, R. (2015), Memory, remembering and forgetting in Huda, D.A., Kani, S.M. &Dukawa, A. (eds) (2015). Understanding educational psychology. Kano: Balco Printers.

Sola. A. O and Abe. O. J (2017). Effects of Inquiry-based and Field-trip Instructional Strategies on Pupils Learning Outcomes in Basic Science in Ado-Ekiti, Ekiti State, Nigeria.Journal of Education and Practice www.iiste.orgISSN 2222-1735 (Paper) ISSN 2222-288X (Online) Vol.8, No.29, 2017

Sulaiman, M.T. (2019). Method and techniques of teaching Social Studies and civic education in Nigeria. Zaria: Ahmadu Bello University Press Ltd.

Taneo.M (2017).Effect of field trip learning method toward the conceptual understanding of local history.IOSR Journal of Research & Method in Education (IOSR-JRME) e-ISSN: 2320–7388,p-ISSN: 2320–737X Volume 7, Issue 5 Ver. II (Sep. – Oct. 2017), PP 40-44 www.iosrjournals.org

