

The Effect of Inquiry Based Pedagogical Approach on Students' attitude towards Civic Education in Plateau State

Ozoanieke Joseph Chiemeize

Faculty of Education Al-Madinah International University jozoanieke@gmail.com Asst. Prof. Dr. Popoola Kareem Hamed Faculty of Education Al-Madinah International University popoola.kareem@mediu.edu.my

Asst. Prof. Dr. Nursyahidah Binti Khalid Faculty of Education Al-Madinah International University nur syahidah hazirah.khaidir@mediu.edu.my

Abstract

The present study investigates the effect of Inquiry-based teaching methods on achievements of affective objective among senior secondary school II civil education students in Mangu LGA Plateau state. The design adopted for the study was quasi-experimental research design specifically non-equivalent pre-test post-test. The study used a sample size of 92 SSS II students which consists of 40 students in the experimental groups and 52 students in the control group. Both groups were in their intact class. Achievement test in civic inquiry was developed by the researcher and used as an instrument for the study. Data was collected with the help of research assistants through administration of the instrument (CEIAT). The result of the study was tested using ANCOVA and the significance calculated depicts a lower value of 0.00 compared to the significant value of 0.05, caused the rejection of the null hypothesis and acceptance of the alternative. It is clearly showed that, the means score before intervention in the experimental group is different from the mean score after intervention and the after is significantly higher which is evidence the treatment is highly effective and should be encouraged. The study further recommended that, civic education teachers should re-evaluate their teaching pedagogies to provide students balanced and equal platform to learn and perform better, also teachers should be scheduled for training and retraining to ensure they keep standard with best global practices.

Introduction

Inquiry is perhaps one of the most misunderstands approaches to teaching and learning. Often oversimplified as merely "asking a question," more often seen as fad that denies central themes and content within the discipline, inquiry, by its nature, seems to defy a central definition. Part of the confusion rest in existence as a teaching strategy as well as learning strategy, and part of the issue rests within the diverse facets of its implementation within dissimilar disciplines. The concept of inquiry has been defined in different ways. Inquiry is an approach to teaching, the actions scientists do when conducting science, and it may be a very effective teaching strategy that fosters conceptual understanding and the application of process skills in pupils (Yagger and Akcay, 2010). Thus, allowing students to learn by finding out gives them firsthand experience and when they are allow to exhibit behaviours and attitudes in civic content they see the reciprocating attitude to the one they have exhibited towards another person and they get to understand how to behave and treat people. Inquiry teaching method is also a term used in science teaching that refers to a way of questioning, seeking knowledge, information or finding out about phenomena. It involves investigating data and arriving at a conclusion (Husni, H. 2022)".

This means that, with inquiry method students can seek knowledge and know better since experience is the best teacher and whatever knowledge we discover ourselves or attitude we learn remain in our mind for donkey years. Students learn concepts in inquiry situations, but they also develop selfreliance, accountability, and interpersonal skills. Assimilation and accommodation of information are also made possible for students. When people are left alone, it is how they learn. It is believed that by using this



tutoring approach, pupils will develop a curiosity for learning or a want to learn more. When they initially get interested in a study or event, students will also attempt to gather crucial information about it. The student will then look for evidence, compile that evidence, discover other pertinent information, and ultimately draw conclusions. The purpose of the inquiry approach is to promote rather than to discourage pupils from applying information to the current situation and using logical thinking to challenges, problems, or knowledge. (1989, Abdul Rahim Abdul Rashid). "Inquiry technique needs to be understood before it can be used, and the process of understanding inquiry learning technique is such that are visible to follow because it simply discusses a process of systematic thought used in exploration and discoveries. Knowledge is not only a collection of information that you can recall, but comes from the process of discovering who you are. Learning is acquisition of knowledge and it is mental process which leads to observed change in behaviour. The learning process is mentally tasking and requires a serious mental process. The goal of this mental process or mental work is for students to fully develop their minds, personally, physically, pragmatically, mentally, and emotionally.

Thus, in the process of learning, in the inquiry teaching technique the teacher is not expected to prepare materials that must be memorized by the students and take charge of all the class activities but rather the teacher is expected to design and plan learning activities that enables students to discover and develop their self-made materials that will be better understand and comprehended. Using students' own discoveries as a basis for information and skill acquisition, learning is the process of enabling discovery activities. From the foregoing, it is very clear that, the inquiry learning technique

involves arrays of learning activities that involves all students' abilities to search and investigate knowledge or seek information critically, systematically, logically and analytically, such that the students can be able to structure their individual or group confident conclusions. In order for students to build their own knowledge, they are guided to be able to learn alone and in groups through the inquiry technique usage". Students must solve problems through fact-finding exercises to develop their skills and knowledge autonomously as part of the inquiry learning paradigm (Trna, Trnova&Sibor, 2012). Inquiry learning is a set of educational activities that promotes the process of thinking critically and analytically to explore and develop one's own solution to the given challenge, according to Sanjaya (2006).

The foundation of inquiry learning is the idea that people are naturally driven to seek out knowledge. The major goal of inquiry learning is to aid students in developing their critical thinking abilities and intellectual discipline by posing questions and obtaining answers out of curiosity (Sanjaya, 2006). With the inquiry learning approach, students are taught to be willing to voice their opinions and develop independent thought that is helpful for problem-solving. The amount of time teachers has to regulate the path of the learning process will decrease with the efficient and effective use of these strategies, and student boredom in a lesson will go down (Soewarso, 2000). "Simply put, inquiry-based learning is a pedagogical strategy in which students use inquiry-based procedures to create knowledge (Lazonder & Harmsen 2016). A creative method that encourages students to solve problems on their own or with the teacher's guidance by using reflective thinking and the skills of the inquirer that the method fosters: rational decision-making.

They further asserted that the inquiry method involves the scientific



approach of identifying problems, 'emulating hypothesis, collecting relevant data to authenticate the data, drawing conclusions even if attentively and developing generalizations, in the utilization of the inquiry method, investigation-oriented. The instructor should offer questions that would elicit an answer or statement from the students and help orient the inquiry, as opposed to forcing the students to ask a number of questions on the identified problem. "As it is evident from this method, instead of the teacher serving as the students' information source or imparting knowledge to them, as is characteristic of the conventional expository method, the students, especially in a free-ranging inquiry that is often student-initiated, students move off on their own, individually or in groups, to seek solutions to difficulties while the studies teacher only serves as a facilitators of information disperser. This means that, the teacher serves as a guide to the students in the teaching learning process while students takes the bold steps to investigate and find out information for themselves. This way the students will understand better because they have been able to follow the inquiry process to logical conclusion and find out knowledge for themselves as expected.

Problem Statement

Attitudes are one of the challenges teachers have to wrestle within the classroom. This post will provide a more in-depth understanding of what an attitude is and the traits of attitudes. A student's attitude is their tendency to respond a certain way towards something. Naturally, the student's response can be on a continuum of positive to negative or good to bad. When a teacher says that a student has a bad attitude, they mean that the student did not respond positively to something they were asked to do. The opposite is also true; a student with a good attitude is likely someone who has a cooperative spirit in terms of complying with

what they are asked to do by the teacher. It is essential to mention that attitude is considered a psychological construct. This means you can see the consequences of the attitude but not the attitude itself. In other words, the behaviour is observed to determine the attitude. For example, a child who refuses to follow orders provides evidence that they have a bad attitude. The introduction of civic education in Nigeria school syllabus was targeted at shaping attitudes, values, enlighten others about character and assist them in having control over their emotions, build a deep sense of sympathy and love for your country and fellow citizens. These are all issues that should be resolved by civic education goals that are affective in nature.

Despite these elements in the civic education curricula, which are meant to mould the values of the nation's children, there are still horrifying media stories on murder, rape, theft, and other social vices among young people, many of whom have been taught civic education. It is crucial to think about how to improve the teaching and how to teach the affective components of civic education. "Inquiry method has shown promising results in sciences and other fields to achieve and improve affective objectives in civic that will perhaps yield positive verdict if inquiry method is employed which is the stand of this study. It means that inquiry method of teaching can be handy in trying to improve the achievement of affective objectives in students.

Research Question

- 1. What is the effect of inquiry based approach on Civic Education Students' Attitude in Plateau State after exposure to treatment?
- 2. To what extent is there difference in mean score of students taught civic education using traditional method and those taught using inquiry method?
- 3. Are there any significant differences between the attitude of control group students and experimental group students towards Civic Education



after treatment in favour of the experimental group?

Research Objectives

- 1. To examine the effect of inquiry based approach on Civic Education Students' Attitude in Plateau State after exposure to treatment?
- 2. To investigate the extent to which there is difference in mean score of students taught civic education using traditional method and those taught using inquiry method.
- **3.** To find out if there are any significant differences between the attitude of control group students and experimental group students towards civic education after treatment in favour of the experimental group.

Significance of the Study

The results of this investigation would benefit different stakeholders such as; students, teachers, civic education professionals, government and policy makers, parents, and future researchers among others".

It is believed that those learners who are the centre of any learning and teaching process will benefit from the results of this investigation, as it will give them insight on the effects inquiry method of civic education is being taught, and how it will affect affective objectives of students accordingly. The researcher intends to socially drive the study by uploading the study online for user consumption and consultation".

"It is also believed that the findings of this study will benefit civic education teachers who are the master of activities in any ideal classroom, teachers are equally the pilot of classroom activities. The results of this investigation will make clear to the educators the effects inquiry method will have on the civic education performance of senior secondary school students, will further make them aware of the benefits of utilizing inquiry method of teaching which make students learn better as well as improve their affective objectives. "It is also believed that the study findings will profit the parents by exposing them to the effects and relevance attached to the use of inquiry method of learning, which deals with learning by doing and self-knowledge discovery. This way, the parent or guardians as the case will provide their unconditional support and encouragement to all activities that will make their wards succeed in the activity of inquiry at home and school accordingly"

Methodology

"The research design to be adopted for this study is quasi experimental researches design, specifically, the non-equivalent pretest-posttest design, Quasi experimental research design is that type of design that does not permit or give room for randomization but allows for the use of intact group. Two intact groups which are non-randomized will be used and a pre-test will be administer to determine the ability of each group before the intervention will be introduced during the period where affective related topics will be taught in civic education to the experimental group while the control group will be taught same affective related topics using the traditional method of talk and chalk.

The research adopted quasi-experimental design base on the recommendation of Slchonefield (2006) that quasi-experimental design use in research when its involves selection groups upon which a variable is tested, without any random pre selection process as well as with a variable compared between different groups or over a period of time, it is a type of design which aim to determine whether an intervention has effect on a study participant".



مجلة جامعة المدينة العالمية للعلوم التربوية والنفسية (MIJEPS) العدد العاشر فبراير 2023

Group	Pre-test	Intervention	Post test
Experimental group	O 1	\mathbf{X}_1	O2
Control group	O1	\mathbf{X}_0	O2

Table 1 above depicts the design to be adopted for the study, the experimental group and control group. The two groups would be given a pretest as O_1 . Only the experimental group will be given intervention (X₁) after which both groups will be given a posttest as O_2 . The X₁ shows the absent of treatment/intervention for the control group but during the intervention, the control group will equally be busy with same content using the traditional methods (lecture and discussion) of teaching

POPULATION AND SAMPLE

Population

The population for this study comprises of the Senior Secondary School civic education students of public schools in Mangu Local Government Area of Plateau State. There are 25 public Senior Secondary Schools in Mangu LGA of Plateau State, with a population of 5707 Senior Secondary School students". "The justification for selecting public schools for this study is because public schools have significant level of homogeneity and makes the population substantial. The rationale behind the selection of the public schools hinged on the fact that, public schools share same characteristics, same standard and will make a good choice for the study.

- ۲۷۳ -

The Effect of Inquiry Based Pedagogical Approach on Students Ozoanieke Joseph Chiemeize, Dr. Popoola Kareem, Dr. Nursyahidah Binti Khalid

S/N	Schools	Population
1	GSS Ampang West	672
2	GSS Bidol	168
3	GSS Bwai	170
4	GSS Bwalbwang	72
5	GSS Chakem	127
6	GSS Chanso	356
7	GSS Daika	149
8	GSS Jakatai	154
9	GSS Jannaret	33
10	GSS Jipal	78
11	GSS Katul	251
12	GSS Kerang	32
13	GSS Kombu	351
14	GSS Kombili	53
15	GSS Lankai	552
16	GSS Mangu Halle	274
17	GSS Mangun	220
18	GSS Murish	76
19	GSS Nyemdung	115
20	GSS Pushit	127
21	GSS Manja	370
22	GSS Ramani	420
23	GSS Wubel	136
24	GSS Mangu	85
25	GSS Panyam	351
	Total	5707

Table1: Population distribution of the study



Source: Plateau State Area Directorate, Mangu LGA

Sample

Two Government Secondary Schools selected from the 25 Public Senior Secondary Schools that made up the Population of the study in the study area. The sample consists of 92 students (Government secondary school Panyam 40 and Government Secondary School Mangu 52) as intact groups found in the schools for both experimental and control group respectively.

Table 2: Selected Sample distribution of Respondents

	No. of sample selected					
Group	Name of Sch	Male	Female	Total		
Experimental group	GSS Panyam	22	18	40		
Control group	GSS Mangu	31	21	52		
Total		53	39	92		
		0.01				

Source: Researcher Field Work 2021

SAMPLING TECHNIQUE

For the purpose of this study the researcher adopts simple random sampling technique which provides equal opportunity for all elements to be selected. In achieving this, the researcher used hat and draw method by writing out the names of the schools on small pieces of papers and squeeze them to conceal their content, then the researcher put all of it in a basket"After choosing the two public schools to be used as sample for the study (government secondary school Mangu&Panyam) the researcher further conducted a simple random sampling by toasting a coin to determine the class to be used between the two arms in both schools selected. This enable the researcher to determine whether A or B will be used as well as further determine the school to host experimental group and control group as it were using same coin toasting

INSTRUMENT FOR DATA COLLECTION

The instrument used for this study for the purpose of generating data was developed by the researcher. The instrument was titled Civic Education Inquiry Achievement Test (CEIAT). The instrument was administered for pretest and posttest to both experimental and control group, before and after intervention. This enabled a researcher ascertain effects of inquiry method on achievement of Secondary School II civic students' affective objectives in the study area.

PROCEDURE FOR DATA COLLECTION

The data for this study was collected through the administration of the instrument CEIAT. To acquire data for this study, the researcher secured a consent letter from the department of Educational Psychology, faculty of Education introducing the researcher and the study to take to the schools to be used for the study, from where the researcher seeked the permission of principals in the selected secondary schools for the purpose of conducting the study. This enabled the researcher administer pretest, intervention and later posttest".

METHOD OF DATA ANALYSIS

Due to the research questions and statistical test that were used to test the study's hypotheses, the data were analysed. The study's theories were put to the test using the research questions. The means, standard deviation, and easy percentage approach were used to examine the research issues. To test the hypotheses and find the differences, the t-test statistic was used. In order to accomplish this, SPSS was utilised to analyse the data that was gathered".



Results

ANALYSIS OF BIO-DATA

Table 4Frequency	distribution	of	respondents	based	on	treatment
groups and gender						

	Gender				
Treatment Groups	Male	Female	Total		
Experimental	22	18	40		
Control	31	21	52		
Total	53(57.6)	39(42.4)	92		

Table 4 above depicts category of respondents based on gender which shows that, the study used two groups for the study consisting of 92 students out of which 40 were in experimental group and the remaining 52 were in control group. The table shows that, 53 representing 57.6% out of the total 92 students used for the study were male while the remaining 39 students representing 42.4% were females.

Answering of research questions

Research question 1: What is the effect of inquiry based approach on Civic Education Students' Attitude in Plateau State after exposure to treatment?

Group after treatment						
	Group	Ν	Mean	SD	Mean Difference	
Pre-test	Experimental	40	27.70	3.89		
Post-test	Experimental	40	39.35	4.40	0.51	

Table 1: The Mean Scores difference of Experimental and Control

Table 5 above shows the analysis of research question for which is on the effect on inquiry based approach on student's affective objective mean score after exposure to treatment. The analysis revealed that, after treatment the mean score of students in experimental group who are exposed to the treatment improved commendably with over 0.50 which suggest that the treatment is welcome and should be encouraged to boost achievement as well as affective objective achievement of students in civic education as in the study area

Research question 2: To what extent is there difference in mean score of students taught civic education using traditional method and those taught using inquiry method?

The research question attempts to determine the difference in mean score of students taught civic education using traditional method and those taught using inquiry methods. The students taught using inquiry method are the treatment group which is experimental group while those taught using conventional method are the control group. This was obtained by determining the mean score difference between control and experimental group students' using the post test scores and the result is as presented below.

 Table 2: Mean scores of students in both groups after intervention (post-test)

Groups	Ν	Mean	Mean Diff	Std. Deviation	Std Error Mean
Experimental	40	39.35		4.400	.69573
Control	52	29.94	9.41	3.769	.52279

Table 6 above presents the response to research question for which depicts the means difference between students taught civic education using inquiry method and those taught using conventional method. From the analysis in the table it shows that, the mean difference between the control group and experimental group is 9.41 margin which is an indication that experimental group have a higher mean score compare to control group and this can be as

- ۲۷۸ -



a result of the treatment given to the experimental group in terms of inquiry method used in teaching the group. Both groups have a means score of 39.35 and 29.94 for experimental and control group respectively.

Research question 3: Are there any significant differences between the attitude of control group students and experimental group students towards Civic Education after treatment in favour of the experimental group?

	Group	Ν	Mean	SD	Mean Difference
	Experimental	40	27.70	3.89	
Pre-test	Control	52	27.86	3.67	0.16
	Experimental	40	39.35	4.40	
Post-test	Control	52	29.94	3.76	9.41

 Table 7: The Mean Scores difference of Experimental and Control Group after treatment

Table 7: shows the mean scores difference of the experimental and control group after treatment. The Table compared the mean score difference of both group considering the pre-test and post-test score for both groups. The tables show that there exists some little difference in mean score of the two groups in the pre-test while a significant difference was recorded in the post test mean scores of the experimental and control groups. The difference recorded was 9.41 in the post test where by the experimental group had a mean score of 39.35 and control group had a mean score of 29.94. This is evident that the treatment yielded significant improvement, on the performance of the experimental group as revealed from the mean scores.

Discussion of findings

The study investigated the inquiry based pedagogical approach for teaching and learning analytical study of the civic education students' attitude in plateau state. The study used only public schools and also used quasi-experimental design, a total number of 92 students were used for the study were 40 students were in experimental group and the remaining 52 were in the control group. The study also revealed from the research questions a lot of findings, it was made clear that, the mean score of students in both groups prior to intervention were similar and only marginal difference existed but after the treatment the research showed that, a widespread distinction exists between the mean score of learners taught using inquiry method and those learners taught using the conventional method. It simply portrays that inquiry method improved student's achievement of affective objectives compares to students taught using conventional method because inquiry method is activity based.

This in line with the position of Mezieobi (2013) who mentioned that inquiry method as an activity oriented, and thought provoking, creative method in which students out of curiosity and on their own or under the guidance of the teacher investigate a solution using the reflective thinking and logical decision-making skills that the process helps the inquirer develop. The study's test of the hypothesis also showed a significant difference between students who were taught civic education using the inquiry technique and those who were taught using the conventional way in terms of mean acquired scores. The hypothesis was tested using ANCOVA and the significance calculated depicts a lower value of 0.00 compared to the significant value of 0.05, caused the rejection of the null hypothesis and acceptance of the



alternative. It clearly showed that, the means score before intervention in the experimental group is different from the mean score after intervention and the after is significantly higher which is an evidence the treatment is highly effective and should be encouraged.

Conclusion

Given that this study's conclusion indicated that the inquiry method of teaching civic education appears to be more useful to learners and results in significantly greater achievement levels than the traditional technique. The findings revealed that, inquiry instructional strategy has a significant effect on the mean score of students taught using inquiry method. It also revealed that there exist a significant difference between the mean score of both control and experimental group after treatment. It is thereby concluded that inquiry method is more effective than conventional method in achievement affective objectives of students in civic education as shown in the study and also to improve students' academic achievement as seen in the study.

REFERENCES

- 1. Acar, O. A., and J. Van den Ende. (2016). "Knowledge Distance, Cognitive-search Processes and Creativity: The Making of Winning Solutions in Science Contests." Psychological Science 27 (5): 692–699.
- 2. Adejo.L.O. (2015) Effects of inquiry method on academic performance of Chemistry Students in Senior Secondary Schools in Kaduna State. Unpublished Masters Degree Thesis, ABU, Zaria
- Adeyemi, B. A. & Salawudeen M. O. (2014). The Place of Indigenous Proverbs in Peace Education in Nigeria: Implication for Social Studies Curriculum: *International Journal of Humanities and Social Science* 4(2) 186 – 192.
- Aditomo, A., P. Goodyear, A.-M.Bliuc, and Ellis, R. A. (2013). "Inquirybased Learning in Higher Education: Principal Forms, Educational Objectives, and Disciplinary Variations." Studies in Higher Education 38 (9): 1239–1258.
- 5. Adoke, I.M. (2015). *Effect of simulation games teaching strategy on academic performance of upper basic level students in civic education in kaduna state*: unpublished M.ed thesis, ABU, Zaria
- 6. Agboola, O.S & Oloyede, E.O. (2007).Effect of Project, Inquiry and Lecture-Demonstration Teaching Method on Academic Achievement on Senior Secondary Students in Separation of mixture practical test. Educational Research and Review 2(6): 124-132.
- 7. Akintola, F. N. (2001). Methods of teaching social studies. *Social Studies*, 12 (1&2), 23-32.
- Aliyu, A. (2015) Effects of inquiry method on academic performance of Junior secondary school students in IRS in Katsina State, Nigeria. Unpublished M Ed thesis ABU
- 9. Allen, K. N. & Friedman, B. D. (2010). Affective learning: A taxonomy for teaching social work values. *Journal of Social Work Values and Ethics*, 7(2) 2-10.
- 10. Alper, Christi. (2016). "Embracing Inquiry-Based Instruction." *Edutopia*.
- 11. Annan, S. T., Adarkwah, F., Abaka-Yawson, A., Sarpong, P. A., & Santiago, P. K. (2019). assessment of the Inquiry Teaching Method on Academic Achievements of Students in Biology Education at Mawuko Girls School, Ho, Ghana. *American Journal of Educational Research*, 7(3), 219–223. <u>https://doi.org/https://doi.org/10.12691/education-7-3-5</u>



- Arends, R. (2015). Learning to Teach. New York: McGraw-Hill. Bache, I., and R. Hayton. 2012. "Inquiry-based Learning and the International Student." Teaching in Higher Education 17 (4): 411–423.
- Baer, M. (2012). "Putting Creativity to Work: The Implementation of Creative Ideas in Organizations." Academy of Management Journal 55 (5): 1102–1119.
- 14. Bake and Igharo (2013) Effects of Guided Inquiry teaching method on Students Achievement in Logic in Jalingo education zone Taraba State, Nigeria: *International Researcher Journal* Vol. 2 (1)
- 15. Barlow, Daniel Lenox, (1985). Educational Psychology: The Teaching-Learning Process, Chicago: The Moody Bible Institute
- 16. Beyer, Barry K., (1971). *Inquiry in the Social Studies Classroom: A Strategy for Teaching*. Charles E. Mevrell Publishing Co.
- Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). *Taxonomy of educational objectives: The Classification of educational goals. Handbook 1: Cognitive domain.* New York: Longman.
- 18. Bloom, B.S. (1956). Taxonomy of educational research an introduction (4thed.). New York: Longman W.C. Bloom, B. S. (1964). Taxonomy of educational objectives: The classification of educational goals by a committee of college and university examiners. New York: Mackay.
- 19. Blyth, K. (2010). Effectiveness of Using Inquiry-Based Instruction to Increase Students Performance in High School Biology as Bardwell Institute [OTS Master's Level projects & papers, Old Dominion
- 20. Bruner, J. (1966). Toward a Theory of Instruction. Cambridge, MA: Harvard University Press.
- Bybee, R. W. (2006). Scientific Inquiry and Science Teaching. In L. B. Flick & N. G. Lederman (Eds.), *Scientific Inquiry and nature of science : Implication for Teaching, Learning, and Teacher Education* (pp. 1–10). Springer.
- 22. Caleb (2010) Survey of Availability and Use of Instructional Materials in Civic Education in JSS students, Unpublished M.Ed Thesis, Unijos, Jos
- Chetty R, Friedman JN, Hilger N, Saez E, Schanzenbach D, Yagan D. (2011). How does your kindergarten classroom affect your earnings? Evidence from Project STAR. *Quarterly Journal of Economics*. 126(4):1593–1660.
- 24. Creswell, J.W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Thousand Oaks, CA: Sage

Publications.

- 25. Darling-Hammond L. (2013). *Getting teacher evaluation right: What really matters for effectiveness and improvement.* New York: Teachers College Press
- 26. Dauda, A.D. (2014). Effects of Inquiry and Simulation Games Techniques on Academic Performances of JSS students in Kaduna State-Nigeria.An Unpublished M.ed. Thesis Submitted to Post-Graduate School, Ahmadu Bello University, Zaria.
- 27. Deboer, G. E. (2006). Historical perspectives on Inquiry Teaching in schools. In L. . Flick & N. . Lederman (Eds.), *Scientific Inquiry and nature of science: Implication for Teaching, Learning, and Teacher Education* (pp.17–34). Springer.
- 28. Denault, A., &Guay, F. (2016). Motivation towards extracurricular activities and motivation at school: A test of the generalization effect hypothesis. Journal of Adolescence. 54, 94–103
- 29. Edinyang and Ubi (2012) Relative Effects of inquiry and expository Method of Teaching Social Studies on Academic Performance of Secondary Schools: *Journal of Education and Human development*. Vol 11 (4)
- 30. Fakorede, S. (2015). Precise Civic Education. Ado Ekiti: Seagull Publishers
- Falade, D. A. &Falade, M (2013). An assessment of primary school teachers' competence in the teaching of civic education in South Western Nigeria *International Journal of Research and Development* 1(2) pp 19 26.
- 32. Falade, D. A. (2011) Civic Knowledge and Attitude of Primary School Teachers in Osun and Ondo States, Nigeria.*Nigerian Journal of Social Studies*, Vol.XIV (2): 163-174.
- 33. Falade, D. A. (2012). Civic Knowledge and Attitude as Factors for determining Primary School Teachers' Competence in the Teaching of Civic Education in Southwest, Nigeria. Proceedings of AFTRA Teaching and Learning in Africa Conference held from May 23rd – 25th at the Palais Des Congress de Cotonou, Cotonou Republic of Benin 148-154.
- 34. Falade, D. A. (2012). Civic Knowledge and Attitude as Factors for determining Primary School Teachers' Competence in the Teaching of Civic Education in Southwest, Nigeria. Proceedings of AFTRA Teaching and Learning in Africa Conference held from May 23rd – 25th



2012 at the Palais Des Congress de Cotonou, Cotonou Republic of Benin 148-154.

- 35. Falade, D. A. and Adeyemi, B.A. (2015) Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS) 6.1: 113-118
- 36. Falade, D. A. and Adeyemi, B.A. (2015) Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS) 6.1: 113-118
- 37. Falade, D.A. (2012). Civic Knowledge and Attitude as Factors for Determining Primary School Teachers' Competence in the Teaching of Civic Education in Southwest, Nigeria. Proceedings of AFTRA Teaching and Learning in Africa Conference held from May 23rd -25th 2012 at the Palais Des Congres de Cotonou, Cotonou, Republic of Benin. 148-154.
- 38. Federal Republic of Nigeria, 2014.National policy on education. Lagos: Federal Ministry of Information.
- 39. Filgona, J., Filgona J., &Sababa, L. K. (2016).Effect of hands-on learning strategyon senior secondary school students' achievement in topographical map studiesin Mayo Belwa Local Government Area, Nigeria.*International Journal of Progressive Sciences and Technologies* (*IJPSAT*); 4(1), 01-10
- 40. Fischer, N., &Theis, D. (2014). Extracurricular participation and the development of school attachment and learning goal orientation: The impact of school quality. Developmental Psychology, 50(6), 1788–1793. doi:10.1037/a0036705
- 41. Forawi, S. (2011). Inquiry instruction and the nature of science: how are they interconnected? *Journal of Science Education, vol.12, pp. 11-14.*
- 42. Forawi, S. (2014).Impact of Explicit Teaching of the Nature of Science on Young Children.*The International Journal of Science, Mathematics and Technology Learning, vol.* 20, pp. 41-49.
- 43. Forawi, S. A. & Liang, X. (2011). Developing in-service teachers' scientific ways of knowing, *International Journal of the Humanities, vol.* 9, pp. 265-270.
- 44. Fowler Jr, F.J., 2013.Survey research methods.Sage publications.
- 45. Ghumdia & Adams, A. (2017). Effects of inquiry-based teaching strategies on students' science process skills acquisition in some selected biology concepts in secondary schools in Borno State. *International Journal of Scientific Research*, 1(2). http://journalijsr.com/content/2016/IJSR13.pdf
- 46. Hamalik, U. (2001). Proses Belajar Mengajar. Jakarta: Bumi Aksara.
- 47. Hoskins, B. and Crick, R.D. (2010). Competences for learning to learn and active citizenship: Different currencies or two sides of the same

The Effect of Inquiry Based Pedagogical Approach on Students

Ozoanieke Joseph Chiemeize, Dr. Popoola Kareem, Dr. Nursyahidah Binti Khalid

coin? European Journal of Education, 45(1): 121-137.Available at: <u>https://doi.org/10.1111/j.1465-3435.2009.01419</u>.

- 48. Hussain A. (2011). Physics Teaching Methods: Scientific Inquiry Vs Traditional Lecture. *International journal of humanities and social science.Vol.1.No19.*
- 49. Ibrahim. (2007). Penelitian dan Penilaian Pendidikan. Bandung : Sinar Baru Algensindo
- 50. Ifeany-Uche and Ejabukwa (2013) Effects of inquiry based method and students academic achievement in secondary school home economics: *Journal of education and Social Research* Vol 3(4) p109
- 51. International Journal of Academic Research In Education and Review, 2(1), 1–16. <u>https://doi.org/10.14662/IJARER2013.010</u>
- Issaka, M. (2020). Effect of Inquiry-Based Teaching Method on Students Achievement and Retention of Concepts in Integrated Science in Senior High School. *Texila International Journal of Academic Research*, 7(2), 78–88. <u>https://doi.org/10.21522/tijar.2014.07.02.art009</u>
- 53. Jekayinfa, A.A; Mofoluwawo, E.O and Oladiran, M.A. (2011). Implementation of Civic Education in Nigeria: Challenges for Social Studies Teachers. *Nigerian Journal of Social Studies*, xiv (1) 147-155.
- 54. Jürgens R, Drolet M, Pirow R, Scheiner E, Fischer J. (2013). Encoding conditions affect recognition of vocally expressed emotions across cultures. *Frontiers in Psychology*.
- 55. Kadeef, M. H. (2000). Approaches to social studies teaching. *Journal of Education*, *13*(1), 59-71.
- 56. Kayode-Olawoyin, Omolola B., (2017). Civic education in secondary schools: its immediate values and life-long impacts *Nigerian Journal of Social Studies Vol. XX (2), P. 82-91*
- 57. Krathwohl, D. R. (1964). The taxonomy of educational objectives-Its use in curriculum building. In C. Lindual (Ed). *Defining educational objectives*. University of Pittsburg Press, Pittsburg.
- 58. Krathwohl, D. R., Bloom, B. S., & Masia, B. B. (Eds). (1994). *Taxonomy* of educational objectives handbook II: The affective domain. New York: Mckay.
- 59. Lazonder, A. W., and R. Harmsen. (2016). "Meta-analysis of Inquirybased Learning: Effects of Guidance." Review of Educational Research 86 (3): 681–718.
- 60. Lederman, S., Lederman, N. and Antik, A. (2013) 'Nature of Science and Scientific Inquiry as Contexts for the Learning of Science and Achievement of Scientific Literacy'.*International Journal of Education*



in Mathematics, Science and Technology, 1(3) pp.138-147. 61. Llewellyn, D. (2013). Inquire within. Corwin Press.

- 62. Long, Atan(1980). Pedagogi: Kaedah Am Mengajar. Fajar Bakti.
- 63. McDonalds, S.M., (2012). Perception: A concept analysis. International Journal of Nursing Knowledge, 23(1): 2-9. Available at: https://doi.org/10.1111/j.2047-3095.2011.01198.
- 64. Mezieobi, K. E, Fubara, V. R and Mezeiobi S. A, (2013), Social studies in Nigeria: *Teaching Method Instructional Materials and Resources*. Owerri: Acadapeaker.
- 65. Nasreen, A and Naz, A. (2013). A Study of Factors Effecting Academic Achievement of Prospective Teachers.
- 66. NERDC. (2007). 9-year Basic Education Curriculum: Civic Education for JS 1-3, Lagos, UBEC.
- 67. NERDC. (2012). Senior Secondary School Curriculum: Civic Education SSS 1-3 Lagos, NERDC Printing Press.
- 68. Neuman, K., & Friedman, B. (2008).*The art of effective facilitating professional socialization in students through affective learning*. Paper presented at the annual programme meeting of the council on social work education. Philadelphia, PA.
- 69. Njoroge, G. N., Changeiywo, J., & Ndirangu, M. (2014). Effects of inquiry-based teaching approach on Secondary School Students ' achievement and motivation in Physics in Nyeri County, Kenya.
- 70. Ogundare, S. F. (2011). Reflections and Lessons from the International Association for Evaluation of Educational Achievement's Globalization of Civic education.*Nigerian Journal of Social Studies*, xiv (2), 105-3122.
- 71. Ogundare, S. F. (2011). Reflections and Lessons from the international Association for Evaluation of Educational Achievement's Globalization of civic education. Nigerian Journal of Social Studies, 14.2:105-122
- 72. Ogunkeye, O. S. (2012). Comprehensive Civic Education for Senior Secondary School in Nigeria. Ilesa: Fypewter Publishers
- 73. Ogunyemi, B. (2011). A Clash of Past and Present: Citizenship Education in Nigeria's Junior Secondary School Curriculum. *European Journal of Social Sciences*. 18(3), pp 378-385.
- 74. Okafor, G. C (2012): Redemocratization and Democratic Leadership Development in Nigeria: The Impact of Civic Education.http//www.udni.proquest.com/educational-leadership.
- 75. Okam C. C. & Lawal, H. (2011). Exploring civic education for effective

citizenship in the task of nation building.*Nigeria Journal of Social Studies*, Vol. XIV (1).

- 76. Okam, C. C. and Lawal, H. (2011). Exploring Civic Education for Effective Citizenship in the Task of Nation Building in Nigeria. Nigerian Journal of Social Studies, xiv (1) 1-20.
- 77. Okeahialam, U. P. (2013) An Analysis of the Effectiveness of Secondary School CivicEducation on the Attainment of National Objectives in Nigeria. Unpublished PhD dissertation University of Colorado, Colorado.
- 78. Olibie, E. (2012). *Effects of Guided Inquiry Method (GIM) on Students Performance in Social Studies in Anambra State*.M.ed. Thesis Submitted to Post-graduate School, Ahmadu Bello University, Zaria.
- 79. Ololobou, C.O. (2010). *Methodological Approaches in Social Studies Education*. Kano: Jaleyemi General Enterprises.
- Olusegun, Obadanjo. (2010) "Education and National Development", A Lecture Presented at the 2012 Graduation Ceremony of University of Nigeria, Nsukka, January 26, p. 3
- 81. Opara, J. A. (2011). Inquiry Method and Student Academic Achievement in Biology : Lessons and Policy Implications. 6(1), 28–31. https://www.idosi.org/aejsr/6(1)11/5.pdf
- 82. Pandey, G. k., Nanda, O. & Ranjan, V. (2011). Effectiveness of inquiry Training Model over Conventional Teaching Method on Academic Achievement of Science Students in India. *Journal of Innovation Research in Education 1(1), (pp.7-20).*
- 83. Philip-Ogoh, A. (2011) Evaluation in Civic Education: Issues and Challenges. *Nigerian Journal of Social Studies*, Vol. XIV (1): 168-182
- 84. Rashid, Abdul Rahim Abdul. Strategi Pengajaran Sejarah KBSM. Fajar Bakti, (1989). Teig, Nani. "More Isn't Always Better: The Curvilinear Relationship between Inquiry- Based Teaching and Student Achievement in Science." Learning and Instruction, vol. 56, 2018, pp. 20-29.
- Saeed, K.M, (2011). Effects of Inquiry Method on Achievement of Students in Chemistry at Secondary School Level. International Journal of Academic Research; Jan 2011, Vol3 issue 1, pp55.
- 86. Salihu, J.J., 2015. Effects of educational field trips on academic performance of JSS students in social studies in Kaduna state-Nigeria.Unpublished M. Ed Dissertation, Ahmadu Bello University, Zaria.



- 87. Samuel, E.S. (2011). Distinction Civic Education for Senior Secondary Schools. Ibadan: Pyramid Publishers.
- 88. Sanda, A., &Mazila, E.A. (2012).Effects of lecture and discussion method of teaching on Learners performance in Social Studies in continuing education institution Borno State, Nigeria.*International Journal of Education and Educational Research Vol 1*(1)
- 89. Sanjaya, W. (2006). Strategi Pembelajaran. Jakarta: Kencana Prenada Media Group
- 90. Sanni, E.N. (2015). Political Participation and Apathy in Nigeria (2011-2015). Case Study of Undergraduate Students of the University of Jos. A publication of Brics International Resource Solutions
- 91. Shakil, A.F., Faizi, W.N., Hafeez, S., (2011). The Need and Importance of field trips at Higher level in Karachi. Pakistan in International Journal of Academic Research in Business and Social sciences, 2, (1).
- 92. Shanmugavelu, Ganesan, Balakrishnan Parasuraman, (2020). "Inquiry Method in the Teaching and Learning Process." *Shanlax International Journal of Education*, vol. 8, no. 3, pp. 6–9.
- Shetu, I. C. (2011). Needs Assessment for Civic Education in Nigeria. Nigerian Journal of Social Studies, 14.1:112-124
- 94. Silva, E. (2008). *Measuring Skills for 21st Century*. Washington D.C: Education Sector
- 95. Smith, C. &Bhuyan, R. (2012) Constructions of migrant rights in Canada: sub-national citizenship possible? *Citizenship Studies* 16(2), 203-221.
- 96. Soewarso.(2000). Cara-cara Penyampaian Pendidikan Sejarah Untuk Membangkitkan Minat Peserta Didik Mempelajari Bangsanya. DEPDIKNAS
- 97. Sumiati dan Asra. (2009). Metode Pembelajaran. Bandung: CV Wacana Prima
- 98. Suto, Irenka. (2013). 21st Century skills: Ancient, Ubiquitous, Enigmatic. Cambridge: A Cambridge Assessment Publication
- 99. Tanko, A.A. (2014). *Effects of Inquiry Teaching Methods on the Academic Performances of Junior Secondary School Students in Social Studies in Kaduna State.* A Thesis Proposal Presented to Department of Arts and Social Science Education. Ahmadu Bello University, Zaria.
- 100. Trna, J., Trnova, E and Sibor, J. (2012). Implementation of Inquiry Based Science Education in Science Teacher
- 101. University].
- 102. Utulu, R.E. (2011). Civic Education, Democracy and Nation Building

in Nigeria: Conceptual Perspective. Nigerian Journal of Social Studies, xiv (1), 21-38

- 103. Utulu, R.E., (2011). Civic educatin, democracy and nationa building in Nigeria: Concept Al perspective. Nigerian Journal of Socia Studies, 14(1): 21-30.
- 104. Van Eekelen, I. M. Vermunt, J. D. &Boshuizen, H. P. A. (2006) Exploring teachers' will to learn. *Teaching and Teacher Education*, 22, 408–423.
- 105. Voss, T., Kunter, M., &Baumert, J. (2011). Assessing teacher candidates' general pedagogical/ psychological knowledge: Test construction and validation. Journal of Educational Psychology, 103(4), 952-969
- 106. Wabuke, M. J., Samikwo, C. D., Opara, S. M. F. C. & Momanyi, L. O. (2017). Fostering Students' Learning in the 21st Century: Effect of Inquiry-Based Learning on Students' Achievement of Science Process Skills in Biology Subject. *African Journal of Education, Science, and Technology,* 4(2), 137–145. https://www.ajest.info/index.php/ajest/article/view/11/40
- 107. Willcox, M. del R. (2011). Factores de riesgo y protecciónpara el rendimientoacadémico: Unestudiodescriptivo en estudiantes de Psicología de unauniversidadprivada. RevistaIberoamericana de Educación, 55(1), 1-9.
- 108. Yagar RE, Akcay, H (2007) Comparison of Students learning Outcomes in middle School Science Classes with an STS approach and a typical textbook dominated approach. Res Middle Level Edu 31(7): 1-16
- 109. Yang, D. H. (2010).Gender and classroom learning. Psychology in the Schools, 22, 08–223.
- 110. Yerima, D.M. (2007). *Effectiveness of simulation game and demonstration teaching methods on academic performance of JSS home economics students in Kano state.*: unpublished M.ed thesis ABU Zaria.
- 111. Zhang, X., and K. M. Bartol. (2010). "Linking Empowering Leadership and Employee Creativity: The Influence of Psychological Empowerment, Intrinsic Motivation, and Creative Process Engagement." Academy of Management Journal 53 (1): 107–128.