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# IMPACT OF INQUIRY METHOD OF TEACHING IN ADULT LITERACY CLASS FOR EFFECTIVE LEARNING OUTCOME IN ILORIN METROPOLIS

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# Abstract

This study investigated the impact of inquiry method of teaching in adult literacy class for effective learning outcome in Ilorin metropolis. The study adopted a quasi-experimental design of pre-test, post- test to enable the researcher evaluate the performance of the learners. The paper generated two (2) research questions and one hypothesis to guide the study. The population for the study covered all adult learners in Ilorin. Twenty (20) learners were sampled using cluster sampling technique, from two adult literacy centers' in Ilorin East and Ilorin South Local Government Areas in Kwara State. The participants were randomly assigned to experimental group (inquiry method) and control group (conventional method), were taught with detailed instructional programme in Social Studies which was designed in both methods. The researcher used 15 multiple questions tagged Social Studies Performance Test as the instrument. The test was administered on both groups in pre-test and post-test simultaneously by the researchers. The study covered a period of five weeks. 1st week- Pre-test, 2nd-4th week- Treatment/ control (teaching) and 5th week- Post-test. Mean and standard deviation were used to answer both research questions while Analysis of Covariance (ANCOVA) was used to test the hypothesis at 0.05 alpha level. Among other things, the study recommends the use of inquiry method in teaching adults in post literacy programme as it fosters deep understanding and assimilation of the subject matters

#### Introduction

Effective classroom teaching requires professional commitment. Although, exciting experiences may occur spontaneously; such happenings are the exception, not the rule. If teachers are to sustain a success-oriented environment by promoting student learning throughout the academic year, they must continually and thoroughly address the teaching act, which is founded on the planning and implementing of instructional activities and the assessment of learners' performance. According to Oloundare and Aderogba (2009), who are of the opinion that poor and improper teaching methods contribute to the factors responsible for poor performance in school subjects. More so, considering changes taking place in our society, educational practices should aim at improving innovations and students to be trained not just as consumers of information but also as producers of information.

In the view of Oladosu (2004), it was asserted that for teaching to be meaningful, a method that respects the learner's cognitive integrity and freedom of choice must be employed. Also, Lesfrancos (1988) maintains that inquiry method is the learning process that takes place when students are not presented with subject matter in its final form but rather, are required to organize it themselves. Additional attempts to improve the quality of education in the United States have focused on teacher education. Both the National Council for Accreditation of Teacher Education (NCATE) and the Teacher Education Accreditation Council (TEAC) have created standards for teacher education. The standards of these councils are designed to ensure that their accredited institutions produce competent, caring, and qualified teachers and other professional school personnel. Through this process, NCATE provides assurance to the public that graduates of those institutions have acquired the knowledge and skills necessary to help all students learn (NCATE, 2000). NCATE also addresses the need for teacher education institutions to identify teacher disposition, examples of which could include the following:

- A belief that all students can learn
- A vision of high and challenging standards
- A commitment to personal professional development and to a safe and supportive learning environment (Adams State College, 2002).

Teaching is a cluster of activities that we engage in during some specific time and period. It involves the process of informing and explaining knowledge and ideas to students which does not exclude the art of stimulating, identifying what to learn and evaluating (NTI, 2009). Hence, learning is a process by which ones capability or disposition is changed, as a result of experience. Learning refers to a process, which produces series of changes in human behavior and experiences. It involves the acquisition of new ideas, experiences, knowledge, skills and values which ultimately make the learner change his behavior.

According to Oni (2008), teaching and learning are among the major tools for carrying out any form of education. The teacher, the learners/students, and materials to be learnt must always be present before education can take place and they are very primary to education. Teaching and learning take place in virtually all fields of life or areas of human endeavors which could be at school, work place, factory, church, including activities among adult learners. It is the responsibility of a good teacher to bring the best out of the learners which could be done with the use of suitable teaching method for the topic to be taught.

According to James (2008), method is a procedure by which a goal is reached, a purpose accomplished or a result is achieved. Method is a practical application of teaching principles based on the nature of learners and of the subject. However, methodology is the study of methods and the process through which teaching and learning take place. It is the study of different methods and systematic means of presenting subject matter and learning experiences, it does not cover the philosophy of methods alone, but also influences the psychological principles involved in learning.

There are many methods and techniques for effective teaching in adult literacy classes in which inquiry or discovery method is found to be one. James (2006) describes inquiry method of teaching as a process where the teacher provides the learners with the necessary opportunities to discover new facts, new rules as well as new values by themselves. It is a problem solving activity that requires the ability to engage in creative thinking and seek data in human solving problems. Discovery method or inquiry helps adult learners to develop reflective thinking, transfer of useful competence and findings for future problems. Therefore, adult learners become independent of their thoughts and decisions which is relation to one of the characteristics of adult learners.

### Statement of the Problem

Teaching and learning have been taken place in different forms by individuals. However, for learning to be effective in adult literacy classes, the need to adopt different methods of teaching by the teachers is crucial to stimulate learning par excellent in adult learners. Therefore, inquiry method is one of the most suitable methods of teaching among adult learners as it involves active participation, observation, measurement, manipulation of things, collection of data, interpretation of results and making conclusion which covers all what learning entails particularly in adults who enrolled in a programme with the conscious attempt to solving their immediate problems with skills acquired through the process of learning by doing.

# Objectives of the Study

- To determine the level of performance of learners taught with inquiry method and conventional method in Social Studies.
- To determine the effectiveness of using inquiry method and conventional method in Social Studies.

# Research Questions

The following research questions were raised to guide the study.

- What is the difference in the performance of learners taught with inquiry method and conventional method in Social Studies?
- How effective is the use of inquiry method in teaching and learning of Social Studies?

## Research Hypothesis

Ho1: There is no significant difference between the scores of learners taught with inquiry method and conventional method of teaching.

### Methodology

A quasi-experimental (pre-test posttest) design was used for this study. The population for the study covered all adult learners in Ilorin metropolis. Twenty (20) adult learners were sampled, using cluster sampling technique from two adult literacy centres in Ilorin East and Ilorin South Local Government Areas of Kwara State. 20 learners in the post literacy programme volunteered for experiment in Social Studies. The learners were taught in detailed based on Social Studies syllabus.

The researchers used 20 multiple choice questions tagged Social Studies Performance Test. Questions were drawn from the topics in students' Social Studies scheme of work for adult literacy learners. Performance test was administered as pre-test for the two groups. The instrument (post-test) was administered simultaneously to the learners in each group by the researcher.

The study covered a period of five weeks. 1st week- Pre-test, 2nd-4th week- Treatment/ control (teaching) and 5th week- Post-test. A fifteen multiple choice tests were administered on the learners prior to the commencement of the study. The post-test was administered to respondents in each group. Mean and standard deviation were used to answer research question while Analysis of Covariance (ANCOVA) to test the hypothesis at 0.05 alpha level.

#### Result

Research Question One: What is the performance level of learners taught with inquiry method and conventional method of teaching?

Table: 1 Percentage Analysis of the Performance Level of Learners taught with inquiry method and conventional method

Performance	Inquiry method				Conventional method				
Level	Frequency		Percentage (%)		Frequency		Percentage (%)		
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	
High Level	17	16	47.2	39.1	16	18	44.4	51.4	
Average	13	15	36.2	36.6	13	11	36.2	31.4	
Low Level	6	10	16.6	24.3	7	6	19.4	17.2	
Total	36	41	(100%)	(100%)	36	35	(100%)	(100%)	

Result on table 1 indicated that out of 10 learners taught with inquiry method sampled, high level score 17 (47.2%) in pre-test and post-test 16 (39.1%), Average performance score 13 (36.2%) in pre-test and post-test15 (36.6%). Hence, low performance score 6 (16.6%) in pre-test and post-test10 (24.3%). The performance score and percentage of those taught with inquiry method (control group) had shown in the above table.

Research Question Two: How effective is the use of inquiry method in teaching amd learning of Social Studies?

In order to answer research question two, responses on the effectiveness of using inquiry method for teaching Social Studies, were collated and calculation using mean and standard deviation. The result is shown in table 2 below:

### Hypothesis testing

There is no significant difference in the scores obtained bythose taught with inquiry method and those taught with conventional method

For the testing of hypothesis, respondents' scores obtained from those taught with inquiry method and those taught with conventional method in post-test were computed using Analysis of Covariance (ANCOVA). The output of the analysis is presented in table3 below:

Table 3: Results of Analysis of Covariance on the Differences between the Treatment and Control Groups

Source of variance	Sum of squares	Df	Mean square	F-ratio	Sig.	Decision
Corrected model	4.274a	2	2.137	.181	.835	
Intercept	292.204	1	292.204	24.712	.000	
Pretest	1.249	1	1.249	.106	.747	
Group	2.159	1	2.159	.183	.627	
Error	437.501	37	11.824			
Total	8479.000	40				
Corrected Total	441.775	39				

a. R squared = .010 (Adjusted R squared = .044)

Table 3 shows that the calculated f(.106) = .183 with calculated level of

Significance 0.627 computed at critical level of significance 0.05. Since the calculated level of significance (0.627) is greater than the critical level of significance (0.05), hypothesis is therefore accepted. This implies that, there is nosignificant difference between the performance of learners taught using inquiry method and those students taught using conventional method.

### Discussion of Result

The result from the analysis revealed that, the use of inquiry method in adult literacy class in Ilorin metropolis as one of the method to stimulate teaching per excellent."The method provides me with the opportunity to discover new ideas and facts by myself" had positive impact on the learner's performance. This finding agrees with that of Abdulraheem and Asan (2006), which indicated that inquiry-based learning goes beyond gathering facts. It engages students in deeper learning, so the shift from gathering concrete facts to investigating complex and abstract ideas and relationships that promotes inquiry. Inquiry based-learning is a strategy about student exploration of knowledge. "The method helps me to develop reflective thinking in problems-solving" which had a greater impact in learners thinking ability.

From the foregoing, the finding is in accordance with the work of Dewey (2015) which says that inquiry method is a teaching towards ideas and helping students to make connections between the generalizations that they are studying and what is going on in the world today as well, reflecting the importance of relevance to modern democratic life. "The method increases my intellectual engagement and understanding". This finding lend support to Lorine (2007) which indicated that Inquiry teaching method is when students experience the wonder of exploration and the quest for understanding. It involves questioning, seeking answers, and constructing new understandings. "The method has led me to do it yourself". With the activities engaged by the students they become an independent of their learning process. This finding in accordance with the work of Elizabeth (2012) who noted that in inquiry based learning, the direction of the learning is being controlled by the students. They take more responsibility for their learning, and ensure they remain on task and motivated. Chad (2004) reports that inquiry method is often defined as a seeking of truth, information or knowledge, is a complex process where students attempt to convert information into useful knowledge through a structure of identifying "real" questions, finding resources to gather information in answering the "real" question, interpreting the information and reporting the findings. "The method helps me to be more independent of my thought and decisions". This statement is also supported by Aggaral (1982; 94) who submits that, the method is a process in which a person uses his ability to solve problems that confront him.

## Conclusion

This paper examined the impact of inquiry method of teaching adult learners for effective learning outcome. The findings of this study invariably indicated that, using inquiry method for teaching among the adults should not be undermined because of the curiosity nature of the adults and going by their experiences, who often wish to do things on their own as the method engages learners in playing active roles during teaching and learning process. In view of this, the method fosters deep understanding and assimilation of the subject matter as it involves the process of learning by doing.

# Recommendation

Based on the findings therefore, teaching in adult literacy class using inquiry method should not be underestimated, but be considered to achieve effectiveness in teaching-learning.

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