# A Study of Relationship between Pedagogical Knowledge and Practice among Senior Secondary School Civic Teachers in Osun State Nigeria

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***Abstract:*** **- The study determined the adequacy level of pedagogical knowledge as well as pedagogical practice of senior secondary school Civic teachers in Osun State. It also examined the relationship between pedagogical knowledge as well as pedagogical practice of senior secondary school Civic teachers and finally determined the influence of educational qualification and year of experience on pedagogical practice of senior secondary school Civic teachers in Osun State.The study adopted the correlational research method. Multistage sampling procedure was employed in selecting a sample size of 100 Civic teachers. Two instruments were designed and validated before use. Two research questions were raised and answered and three hypotheses were tested and verified. The results among others showed that 80% of Civic teachers had adequate level of pedagogical knowledge whereas 18% of Civic teachers demonstrated good level of pedagogical practice. The results equally showed that there was a significant relationship between the pedagogical knowledge and pedagogical practice of senior secondary school Civic teachers ($\chi^2 = 13.490$; $p < 0.05$). The study concluded that a cordial harmony existed between pedagogical knowledge and pedagogical practice of senior secondary school Civic teachers. This is keen to ensuring effective teaching and learning.**

***Keywords:*** **Relationship, Pedagogical knowledge, Pedagogical practice, Civic teachers**

## I. INTRODUCTION

Civic education as a discipline is taught from primary one to senior secondary school in Nigerian schools. Hodges (2008) saw Civic education as a course of study that introduces learner to the process of democratic socialization by promoting support for democratic behaviours, values, and citizens. Adeyemi (2019) corroborating National Policy on Education FRN (2014) was of the view that youth are one of the greatest assets that any nation can have. Not only are they legitimately regarded as the future leaders, they are potentially and actually the greatest investment for a country's development. They serve as a good measure of the extent to which a country can reproduce as well as sustain itself. The extent of their vitality, responsible conduct and roles in the society is positively correlated with the development of their country. No wonder Adeyemi (2019) was of the view that Civic education curriculum programme is pivotal to the development of contents that are geared towards the enhancement of national values through the teaching of Civic education. Civic education programme has become an increasingly important means for countries to educate citizens about their rights and responsibilities. Increasing pluralism within states has encouraged the development of Civic education programmes that go beyond simple patriotic models of citizenship requiring uncritical loyalty to the nation state.

Researchers predicted that teachers' actions would have the most direct influence on student learning. While process product-researchers were able to identify numerous behaviours that predicted student achievement, individual correlations were low and no combination of practices achieved superior results (Brophy & Good, 1986). Additionally, while these results were helpful in thinking about instruction, they lacked a theoretical lens to unify the findings.While teacher knowledge is certainly a component of teacher professionalism, professional competence involves more than just knowledge. Skills, attitudes, and motivational variables also contribute to the mastery of teaching and learning. Blömeke and Delaney (2012) proposed a model that identifies cognitive abilities and affective-motivational characteristics as the two main components of teachers' professional competence.Teachers' knowledge is not only knowing things (facts , properties) but also knowing how to identify and solve professional problems and in more general terms how to construct knowledge (Lloyd & Wilson, 1998) . Thus, teachers' knowledge has been recognized as an increasingly complex phenomenon.

The pedagogical 'knowledge base' of teachers includes all the required cognitive knowledge for creating effective teaching and learning environments. Shavelson& Stern (1981) suggested that this knowledge can be studied and identifying the content of this knowledge base, however, is a complex issue. Alter &Coggshall (2009) conceptualize the teaching profession as a 'clinical practice profession' and compares it to the medical profession. Some argue that decision-making is actually a basic teaching skill – decisions are made regularly by teachers while processing cognitively complex information about the student in order to decide alternatives for increasing their understanding. There is a clear distinction between declarative ('knowing that') and procedural knowledge ('knowing how') from cognitive psychology as a theoretical basis. This approach is relevant as it focuses on understanding how knowledge is related to behaviour, or in other words, the quality of teaching performance.

The first key study on teacher knowledge (Shulman, 1987) categorized teacher knowledge into 7 categories, among which were the concepts of:

- *general pedagogical knowledge* (principles and strategies of classroom management and organization that are cross-curricular).
- *contextual knowledge* including understanding how student variations, such as student prior conceptions, impact instructional decisions and
- *Pedagogical content knowledge* (the knowledge which integrates the content knowledge of a specific subject and the pedagogical knowledge for teaching that particular subject).

This latter was considered as the most fundamental element of teachers' knowledge and has been studied widely since. Some models of general pedagogical knowledge combine pedagogical and psychological aspects, whereas others don't make psychological aspects explicit (Carrol,1963; Slavin,1984). Psychological components account for the fact that learning occurs in a social context and learning success depends on the general cognitive and affective characteristics of individual students.

A review of the different models describing teachers' decision-making shows that factors influencing teachers' decisions include antecedent conditions such as students, the nature of the instructional task, the classroom, and the school environment, which combine with teachers' characteristics and cognitive processes to impact the pedagogical decision made. Decision-making is a cyclic process as pedagogical decisions in turn impact antecedent conditions (Blömeke& Delaney, 2012). Empirical research investigating how teacher knowledge is used in decision-making seems to be suggesting that in order to make informed pedagogical decisions, teachers must be able to analyze and evaluate specific learning episodes, in combination with contextual and situational factors, and to be able to connect all this information to their specialist knowledge of the teaching-learning process in order to guide subsequent teaching actions. Thus, making good pedagogical decisions hinges on the quality of the pedagogical knowledge held by the teacher.

The importance of general pedagogical knowledge as proposed by Brown and Mclntyre (1993) are as follows:

i) It helps the teacher to create a relaxed and enjoyable atmosphere in the classroom.
ii) It helps the teacher in retention of control in the classroom.
iii) It allows the teacher to present his work in a way that interest and motivates the pupils.
iv) It allows the teacher to provide conditions that make pupils understand his work.
v) It helps the teachers in management of lessons introduction.
vi) It helps the teacher to build confidence and trust of pupils.

*Statement of the Problem*

Predictors of teacher quality have typically included factors such as class size, certification, type of qualification, degrees earned, or years of experience. Another less studied indicator of teacher quality is the pedagogical knowledge of teachers. This study focuses on the pedagogical knowledge base of teachers and the knowledge dynamics in the teaching profession in order to examine their implications for the instructional process and to derive evidence-based suggestions for educational policy.Therefore, this study intends to examine teachers' knowledge of teaching methods, their current practices and relationship between them. As professionals in their field, teachers can be expected to process and evaluate new knowledge relevant for their core professional practice and to regularly update their knowledge base to improve their practice and to meet new teaching demands.

*Objectives of the study*

The objectives of this study are to:

i. determine the adequacy level of pedagogical knowledge of senior secondary school Civic teachers in Osun State;
ii. determine the adequacy level of pedagogical practice of senior secondary school Civic teachers;
iii. examine the relationship between pedagogical knowledge and pedagogical practice of senior secondary school Civic teachers; and
iv. determine the influence of educational qualification on pedagogical practice of senior secondary school Civic teachers.
v. determine the influence of years of experience on pedagogical practice of senior secondary school Civic teachers.

*Research Questions*

The following research questions were designed to guide the study:

i. What is the adequacy level of pedagogical knowledge of senior secondary school Civic teachers in Osun State?
ii. What is the adequacy level of pedagogical practice of senior secondary school Civic teachers in Osun State?

*Hypotheses*

**$H_{01}$:** There is no significant relationship between pedagogical knowledge and practice of senior secondary school Civicteachers.
**$H_{02}$:** There is no significant influence of educational qualification on pedagogical practice of senior secondary school Civicteachers.
**$H_{03}$:** There is no significant influence of years of experience on pedagogical practice of senior secondary school Civicteachers.

## II. METHODOLOGY

The study employed correlational research design. Multistage sampling procedure was employed in selecting a sample size of 100 Civic teachers. Two senatorial districts were selected using simple random sampling technique. Five Local Government Areas were then selected from each of the senatorial district through simple random sampling technique. Five senior secondary schools were randomly selected from each Local Government Area making a total of fifty (50). Two Civic education teachers were then selected from each of the schools using simple random sampling technique in a school where they are more than two.

Two instruments were designed and validated before use. The instruments are Teacher's Pedagogical Knowledge Questionnaire and Classroom Observation Checklist.Teacher's Pedagogical Knowledge Questionnaire (TPKQ) had two sections. Section A was on Socio-demographic variables of Civic teachers while Section B consisted of eleven (11) items on pedagogical knowledge variables in which teachers are expected to indicate 'Not at all'; 'Partially' and 'Fully' with values '0'; '1' and '2' respectively.The maximum point is 22 while the lowest point is 0. The second instrument is titled: Classroom Observation Checklist (COC). It consisted of 25 items of three options by which the researcher indicates the extent at which the Civic teachers put into practice the identified 25 variables related to teaching practices. Observation was then taken by the researcher indicating the extent at which the teachers use the identified teaching variables in the classroom by ticking Not at All; Partially and Most of the Time. Most of the Time attracts 2 points, Partially attracts 1 point and Not at All attracts 0 point. The maximum point is 50 while the minimum point is 0.

The two instruments were validated before used. TPKQ was trial-tested and validated using a sample of 30 senior secondary school Civic teachers from co-education public schools that were not part of the sample that participated in the study. Cronbach Alpha coefficient was used to establish construct validity and internal consistency of the instrument which was found to be 0.79. The same procedure was carried out for COC using Cronbach Alpha coefficient to also establish construct validity and internal consistency of the instrument which was found to be 0.81. Five research assistants were trained to assist in the administration of the instruments. Two research questions were raised and answered and three hypotheses were tested and verified. Data collected were analyzed using frequency count, simple percentage and Chi-square statistics.

## III. RESULTS

**Research Question 1:** What is the adequacy level of pedagogical knowledge of senior secondary school Civic teachers in Osun State?

Table 1: Socio-Demographic Variables of the Secondary School CivicTeachers

| Variables | Level | Frequency (f) | Percentage (%) |
|---|---|---|---|
| | Male | 44 | 44.0 |
| | Female | 50 | 50.0 |
| **Gender** | No Response | 6 | 6.0 |
| | Total | 100 | 100.0 |
| | 20-30yrs | 17 | 17.0 |
| | 31-40yrs | 55 | 55.0 |
| | 41-50yrs | 17 | 17.0 |
| **Age** | 51-60yrs | 10 | 10.0 |
| | No Response | 1 | 1.0 |
| | Total | 100 | 100.0 |
| | Married | 70 | 70.0 |
| | Single | 22 | 22.0 |
| | Divorced | 1 | 1.0 |
| **Marital Status** | Widowed | 5 | 5.0 |
| | No Response | 2 | 2.0 |
| | Total | 100 | 100.0 |
| | OND/NCE | 16 | 16.0 |
| | B. Sc./B.A/B.Ed/B. Tech/ HND | 66 | 66.0 |
| **Educational Qualification** | M.Sc./M.Ed. | 8 | 8.0 |
| | PGDE | 10 | 10.0 |
| | Total | 100 | 100.0 |
| | Christianity | 57 | 57.0 |
| | Islam | 42 | 42.0 |
| **Religion** | Traditional | 1 | 1.0 |
| | Total | 100 | 100.0 |
| **Years of Teaching Experience** | Less than 5yrs | 29 | 29.0 |
| | 5-10yrs | 41 | 41.0 |
| | 11yrs and Above | 30 | 30.0 |
| | Total | 100 | 100.0 |

In order to answer this research question, teachers' response to 11 items measuring teachers' pedagogical knowledge was scored such that a Not at All response was allotted 0, Partially response as 1 and Fully response as 2. These responses were then summed to form a composite score on pedagogical knowledge. The minimum and maximum scores obtainable respectively were 0 and 22. Therefore, teachers' score of 0-10 was adjudged as Low level, scores of 11-15 as Partial and scores of 16-22 as Adequate. This categorization was then subjected to descriptive analysis of frequency and percentage. The result is presented in Table 2.

Table 2: Adequacy Level of Pedagogical Knowledge of Secondary School Teachers in Ife Central Local Government Area of Osun State

| Level of Pedagogical Knowledge | Score Range | Frequency (f) | Percentage (%) |
|---|---|---|---|
| Low | 0-10 | - | - |
| Partial | 11-15 | 12 | 12.0 |
| Adequate | 16-22 | 88 | 88.0 |
| **Total** | | **100** | **100.0** |

Table 2 shows the adequacy level of pedagogical knowledge of secondary school teachers in Osun State. It can be seen that 12.0% of the teachers had partial level of pedagogical knowledge while 80.0% of the teachers had adequate level of pedagogical knowledge. Indication is shown from this result that the majority of the teachers possessed adequate level of pedagogical knowledge.

**Research Question 2:** What is the adequacy level of pedagogical practice of senior secondary school Civic teachers in Osun State?

In order to answer this research question, teachers' assessment scores on Classroom Observation Checklist on Teaching Method used by teachers were summed to form a composite score on pedagogical practice. This checklist contains 25 items measuring teachers' pedagogical practices which was scored such that Not at All was allotted 0, Partially as 1 and Most of the Time as 2. The minimum and maximum scores obtainable respectively were 0 and 50. Therefore, teachers' score of 0-20 was adjudged as Poor level, scores of 25-35 as Fair and scores of 36-50 as Good. This categorization was then subjected to descriptive analysis of frequency and percentage. The result is presented in Table 3.

Table 3: Adequacy Level of Pedagogical Practice of Senior Secondary School Civic Teachers in Osun State

| Level of Pedagogical Practice | Score Range | Frequency (f) | Percentage (%) |
|---|---|---|---|
| Poor | 0-24 | 20 | 20.0 |
| Fair | 25-35 | 62 | 62.0 |
| Good | 36-50 | 18 | 18.0 |
| Total | | 100 | 100.0 |

Table 3 shows the adequacy level of pedagogical practice of senior secondary school Civicteachers in the samples schools. It can be seen that 20.0% of the teachers had poor level of pedagogical practice, 62.0% had fair while 18.0% of the teachers demonstrated good level of pedagogical practice. Based on the result of the assessment of Civicteachers' pedagogical practice, it can be concluded that most of the Civicteachers in senior secondary school in Osun State demonstrated fair level of pedagogical practice.

*Hypotheses*

**$H_{01}$:** There is no significant relationship between pedagogical knowledge and practice of senior secondary school Civicteachers.

In order to test this hypothesis, teachers' level of pedagogical knowledge was cross tabulated with their respective pedagogical practice. Chi-square was also obtained to determine the significant or otherwise of the relationship. The result is presented in Table 4

Table 4: Chi-square Analysis of Significant Relationship between Pedagogical Knowledge and Practice of Senior Secondary School CivicTeachers

| Pedagogical Knowledge | Pedagogical Practice | | | Total | $\chi^2$ | df | p |
|---|---|---|---|---|---|---|---|
| | Poor | Fair | Good | | | | |
| Partial | 4(33.3%) | 2(16.7%) | 6(50.0%) | 12(100.0%) | 13.490 | 2 | .001 |
| Adequate | 16(18.2% | 60(68.2%) | 12(13.6% | 88(100.0%) | | | |
| Total | 20(20.0%) | 62(62.0%) | 18(18.0%) | 100(100.0%) | | | |

Table 4 shows the relationship between level of pedagogical knowledge and practice of senior secondary school teachersin Osun State. It can be observed that a Chi-square test result indicated that there exists a significant relationship between the pedagogical knowledge and practice of senior secondary school teachers $\chi^2 = 13.490$, df = 2, p = .001. Since the p-value is less than .05 thresholds, we therefore reject the stated null hypothesis. This result concludes that there is significant relationship between the pedagogical knowledge and pedagogical practice of senior secondary schoolCivic teachers in Osun State.

**$H_{02}$:** There is no significant influence of educational qualification on pedagogical practice of senior secondary school Civicteachers.

In order to test this hypothesis, teachers' educational qualification was cross tabulated with their respective pedagogical practice. Chi-square was also obtained to determine the significant or otherwise of the influence. The result is presented in Table 5.

Table 5: Chi-square Analysis of Influence of Educational Qualification on Pedagogical Practice of Senior Secondary School CivicTeachers

| Educational Qualification | Pedagogical Practice | | | Total | $\chi^2$ | df | p |
|---|---|---|---|---|---|---|---|
| | Poor | Fair | Good | | | | |
| OND/NCE | 3(18.8%) | 9(56.3%) | 4(25.0%) | 16(100.0%) | | | |
| B. Sc./B.A/B.Ed/B. Tech/ HND | 13(19.7%) | 43(65.2%) | 10(15.2%) | 66(100.0%) | 2.207 | 6 | .900 |
| M.Sc./M.Ed. | 2(25.0%) | 5(62.5%) | 1(12.5%) | 8(100.0%) | | | |
| PGDE | 2(20.0%) | 5(50.0%) | 3(30.0%) | 10(100.0%) | | | |
| Total | 20(20.0%) | 62(62.0%) | 18(18.0%) | 100(100.0%) | | | |

Table 5 shows the influence of educational qualification on pedagogical practice of senior secondary school Civic teachers in Osun State. It can be observed that a Chi-square test result indicated that educational qualification has no significant influence on pedagogical practice of teachers with $\chi^2 = 2.207$, df = 6, p = .900. Since the p-value is greater than .05 thresholds, we therefore do not reject the stated null hypothesis. This result concludes that there is no significant influence of educational qualification on pedagogical practice of senior secondary school Civic teachers in Osun State.

**$H_{03}$:** There is no significant influence of years of experience on pedagogical practice of senior secondary school Civicteachers.

In order to test this hypothesis, teachers' years of experience were cross tabulated with their respective pedagogical practice. Chi-square was also obtained to determine the significant or otherwise of the influence. The result is presented in Table 6.

Table 6: Chi-square Analysis of Influence of Educational Qualification on Pedagogical Practice of Senior Secondary School CivicTeachers

| Years of Experience | Pedagogical Practice | | | Total | $\chi^2$ | df | p |
|---|---|---|---|---|---|---|---|
| | Poor | Fair | Good | | | | |
| Less than 5yrs | 7(24.1%) | 15(51.7%) | 7(24.1%) | 29(100.0%) | | | |
| 5-10yrs | 4(9.8%) | 28(68.3%) | 9(22.0%) | 41(100.0%) | | | |
| 11yrs and Above | 9(30.0%) | 19(63.3%) | 2(6.7%) | 30(100.0%) | 7.767[a] | 4 | .100 |
| Total | 20(20.0%) | 62(62.0%) | 18(18.0%) | 100(100.0%) | | | |

Table 6 shows the influence of educational qualification on pedagogical practice of senior secondary school Civicteachers in Osun State. It can be observed that a Chi-square test result indicated that educational qualification has no significant influence on pedagogical practice of the teachers with $\chi^2 = 7.767$, df = 4, p = .100. Since the p-value is greater than .05 thresholds, we therefore do not reject the stated null hypothesis. This result concludes that there is no significant influence of years of experience on pedagogical practice of senior secondary school Civic teachers in Osun State.

## IV. DISCUSSION

Based on the findings of this study, majority (80%) of the senior secondary school Civic teachers inOsun State possessed adequate level of pedagogical knowledge. This is in line with Mishra & Koehler (2006) who opined that teachers must know about the content they are going to teach and how the nature of knowledge is different for various content areas. Hill, Rowan, & Ball (2005) also opined that teacher quality itself is an important factor in determining gains in student achievement. The study also established that the most (62.0%) of the Civicteachers in senior secondary schools in Osun State

demonstrated fair level of pedagogical practice. This was supported by Riley (2003) who pointed out that teacher centred, whole group instruction remains the dominant pedagogical form, but approach using concrete materials seems to be on increase.Findings also revealed that there was a significant relationship between the pedagogical knowledge and pedagogical practice of senior secondary school Civic teachers in Osun State. This is in line with Popoola and Odili (2011) who opined that teachers' pedagogical knowledge in Mathematics correlated significantly with practice.

The study further showed that there was no significant influence of educational qualification on pedagogical practice of senior secondary school Civic teachers in Osun State. This finding is consistent with Okebukola (2005) who opined that most of the graduate teachers lacked practical laboratory and teaching as well as computer skills, displayed poor classroom management and control skills and were unable to communicate effectively. However, there was no significant influence of years of experience on pedagogical practice of senior secondary school Civicteachers in Osun State. This indicated that years of experience has no bearing on teachers' pedagogical practice. This might be as a result of teachers, irrespective of their years of experience, updating their knowledge on pedagogical practices through seminars, conferences, workshops and other forms of academic trainings.

## V. CONCLUSION

It is concluded that Civic education teachers possess the pedagogical knowledge with fair practices. Also, a cordial harmony existed between pedagogical knowledge and pedagogical practice of senior secondary school Civic education teacher. This is keen to ensuring effective teaching and learning.

## VI. RECOMMENDATIONS

Sequel to the findings of this study, it is recommended that there should be regular monitoring and supervision of teachers in all schools by the government officials to ensure that teachers are put on their toes in adopting appropriate practices in the course of teaching and learning. Government and policy makers should also consider how the curriculum, teaching strategies, and technologies fit together to support student learning. Conclusively, there should be continuous professional development to update teachers in both content and methods of teaching.

## VII. LIMITATION TO THE STUDY

Considering the sample size used for the study, 100 Civic education teachers may not be sufficient to make generalization for the entire senior secondary schools in Osun State.

## VIII. SUGGESTIONS FOR FURTHER STUDIES

The study could be replicated in other states of the federation in order to confirm or refute its findings and to have a broader scope for generalization. Also, the study could be carried out at primary as well as junior secondary school levels since Civic education is also taught at these levels of education.

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