



---

**NIGERIAN ONLINE JOURNAL OF  
EDUCATIONAL SCIENCES AND  
TECHNOLOGY**

[nojest.unilag.edu.ng](http://nojest.unilag.edu.ng)

[nojest@unilag.edu.ng](mailto:nojest@unilag.edu.ng)

**EFFECT OF PEDAGOGICAL CONTENT KNOWLEDGE ON TEACHERS'  
PROFESSIONAL DEVELOPMENT AND EFFECTIVE TEACHING OF HISTORY IN  
SENIOR SECONDARY SCHOOLS IN SOUTHWEST NIGERIA**

**IGWE, R. O, OLATUNDE, F. & YUSUF, R. A**

**Department of Arts and Social Sciences Education**

**Faculty of Education, University of Lagos, Akoka, Yaba, Lagos**

**aderasak@yahoo.com**

**To cite this article:**

Igwe, R. O, Olatunde, F. & Yusuf, R. A. (2022). Effect of pedagogical content knowledge on teachers' professional development and effective teaching of history in senior secondary schools in southwest Nigeria. *Nigerian Online Journal of Educational Sciences and Technology (NOJEST)*, 4 (1), 108-123

**This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.**

**Authors alone are responsible for the contents of their articles. The journal owns the copyright of the articles. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of the research material.**



**EFFECT OF PEDAGOGICAL CONTENT KNOWLEDGE ON TEACHERS' PROFESSIONAL DEVELOPMENT AND EFFECTIVE TEACHING OF HISTORY IN SENIOR SECONDARY SCHOOLS IN SOUTHWEST NIGERIA**

**Igwe, R. O, Olatunde, F. & Yusuf, R. A**

Article Infor

**Article History**

Received:

12 January 2022

Accepted:

27 May 2022

**Keywords**

Contextual Knowledge,  
Pedagogical Content  
Knowledge,  
Content Knowledge,  
Pedagogical  
Knowledge,  
Learning Outcome

**Abstract**

*This study investigated the effect of Pedagogical Content Knowledge (PCK) on teachers' professional development and effective teaching on learning of history in senior secondary schools in Southwest Nigeria. This study was guided by Pedagogical Content Knowledge Model of Grossman (1990). The study answered 6 research questions and tested 4 hypotheses. The study adopted descriptive survey and quasi-experimental research design. The sample size of the study consisted of 69 and 12 History teachers randomly selected from 3 states out of 6 states in South-West, Nigeria. The research instruments used were Teachers' Questionnaire Level of Awareness and Possession of Pedagogical Content Knowledge, Teachers' Questionnaire Assessment of PCK Package, Students' Questionnaire Assessment Feedback on PCK Package, History Achievement Test, Interview Schedule for History Teachers, Observation Schedule, and Checklist on Availability of Teaching Materials. The multi-stage sampling technique was adopted. The research questions were answered using mean while hypotheses were tested using t-test at 0.05 level of significance. The findings revealed that the teachers' level of awareness and possession of PCK was very low. The finding also revealed lack of effective teachers as a major factor in the performance gap among students. The study also established that instructional resources are not available for the teaching and learning of history. The study recommended that Pedagogical Content Knowledge should be infused into the history curriculum for Nigerian secondary schools to enhance the teaching and learning of history to boost the performance of students.*

**Introduction**

In recent times, there has been a growing public concern about the teaching and learning of History in Nigerian schools. It is instructive to point out that history from the onset has been used as the mirror in which the society sees itself for re-appraisal, re-examination, and revalidation. History makes room for national identity, settles conflicts, offers citizenship education, provides insight for policy makers, gives a sense of national and international value, as well as provides the very tap root that prevents our culture from being blown away by the new tide of globalization sweeping across the globe. Over the last few decades, the teaching of history has become an important topic of debate

in public and academic circles. The awareness this has generated has led to a focus upon the quality of history teaching in schools, on the content of history curriculum and a general discussion about the purpose of history education (Tailor & Young, 2003). While an attempt has been made in many Western countries to resolve some of these issues with a national history curriculum of sort, here in Nigeria, it is still a contentious issue.

There has never been any controversy about the universal value of history for nation building or the development of an individual, his society or larger community. However, this universal value of teaching and learning of history is under threat and attack in schools as history no longer exists as a core school subject in the Nigerian school curriculum. History has been brazenly and systematically relegated to the background (Omolewa, 2005). What is worrisome is the attempt to wipe off history from school curriculum in recent years. The problem that started from primary and secondary schools also has a reverberating effect in tertiary institutions such that few universities still offer History alone. It has become a trend to offer it with other components like: History and Diplomacy, Strategic Studies, and International Relations to boost enrolment and attract students to the subject. For examples, Department of History in University of Lagos is now known as Department of History and Strategic Studies, in University of Nigeria, Nsukka, it is called History and International Studies just to mention a few (Adesoji, 2009).

The levity at which the subject is handled in the educational system has today impacted negatively with consequential regrets in our quest for development, social justice, and unity as a nation. Without doubt, history is very much required in this computer age or era of globalization to safeguard our rich cultural heritage that is seriously threatened. It is quite evident that history as a subject would equip the students with the knowledge and skill to synthesize past events with the present and future occurrences with a view to enabling them to understand the basis for national unity and global cooperation for human development. Therefore, to motivate and engage students to achieve this, the teaching of history should be interesting, enjoyable, and tailored to meet students' needs. As rightly observed by Tinning, Macdonald, Wright and Hiekey (2001) that high quality teachers strive to make lessons meaningful, purposeful, and enjoyable, as well as reflect on their own practice and the performance of their students.

However, these elements of effective teaching are broadly captured by the notion of Pedagogical Content Knowledge (PCK). PCK is defined as the integration of Content Knowledge and Pedagogical Knowledge (Shulman, 1986). This brings to focus the adequacy and degree of the level of Pedagogical Content Knowledge of history teachers in the teaching and learning of history. To promote learners' understanding and improve learning output, teachers must be well informed in content of History and pedagogy. The point being raised here is that there is a linkage between pedagogical content knowledge of teachers and the learning outcome of the students. This is because the goal of any teaching activity is good learning outcome from the student.

Learning outcome is about the performance of the students in the subjects' study in schools as rightly observed by Gusthart and Sprigings (1989) when analysing the effects of teachers' PCK behaviours in teaching. The authors concluded that expert teachers (i.e., those with high PCK) communicate clearly both the intent and nature of the task and also provide sufficient opportunities for appropriate skill practice resulting in student learning (Gusthardt and Sprigings, 1989). Students' learning outcome can be viewed as all the academic tasks or rigours of student which could be poorly or successfully stated. Ijaduola (2008) asserted that performance cannot be achieved by students' if they are not well tutored. Teachers are expected to meaningfully contribute to students' learning outcome. A good performance of a student is sometimes attributed to higher teacher efficiency. The poor learning outcome of students in history is a cause of concern to the students and the parents; its effect is also grievous on the society.

Several factors have been attributed to poor learning outcomes in History. These include the students' factors, teachers' factors, societal factors, governmental policy and facilities problem, language of instructors, instructional strategies used by the teachers among others. However, controversy still exists among scholars as to what contributes singly or jointly to poor students' learning outcome; among these factors the teachers' factor was found to be dominant in cross-country studies (Anita, Jairo, Odhiambo & Mary, 2013).

Therefore, effective teachers especially History teachers need adequate content knowledge and appropriate pedagogy to convey and reveal the subject matter to the students. Unfortunately, the extant research on the PCK that teachers need to teach various school subjects is modest and uneven, with content areas such as mathematics and sciences holding most of the research whereas other subjects like history have fewer studies (Floden and Maniketti, 2006).

There are few studies that have looked carefully at PCK needed to teach history. In practice, PCK helps teachers to create lessons that advance students' subject matter understanding, notice students' misconceptions, and develop pedagogical responses that support students learning. Such knowledge enables teachers to work in the spaces in which teaching content and students' learning intersect (Monte-Sano and Budano, 2012).

The term Pedagogical Content Knowledge was introduced by Shulman (1986, 1987) in his presidential address to the American Educational Research Association. Shulman defined PCK as the combination of Content Knowledge and Pedagogical Knowledge. Shulman described PCK as the knowledge base for teaching. This according to Shulman consisted of seven categories, three of which were content related (i.e., content knowledge and pedagogical knowledge). The other four categories referred to general pedagogy, learners and their characteristics, educational contexts, and educational purposes. However, many scholars among whom was Grossman have used Shulman's PCK as a starting point and have conceptualized PCK in other ways through a plethora of publications studying and integrating PCK into teacher education programme. This research attempts to focus on Pedagogical Content Knowledge (PCK) as form of knowledge that contributes to teachers' success in supporting student learning. PCK involves both the ways of representing and formulating the subject in a way that makes it comprehensive to learners as observed by Igwe (2002) and Olatunde (2005). Therefore, this study attempts to investigate the effects of PCK on History students learning outcomes through the lens of Grossman's theoretical model.

### **Statement of the Problem**

The persistent decline in students' performance in history is not only frustrating to the students and the parents, but its effects are also equally grievous on the society. It has been noted that students' learning outcomes and academic success are dependent on the effective mastery and delivery of content knowledge and pedagogical knowledge in teaching (Harris and Bain, 2011). For instance, the WAEC Chief Examiner's Report revealed the brazen poor performance of students in History. This may be due to poor or low pedagogical content knowledge employed by History teachers in the teaching of the subject. This of course is of great concern to the stakeholders in the subject. The decline in history performance will lead to lack of interest from students, attrition of history teachers; play down on the importance of history to national and societal development among others. Thus, no one will guide the people from repeating the mistakes of the past (History). History is losing its high status/position among the school subjects. The subject no longer enjoys good patronage from students and there is general apathy from government and public in the teaching and learning of history in senior secondary school (Omolewa, 2015). Moreover, the recent directive by federal government mandating all basic and secondary schools across the country to immediately implement the teaching of history as a standalone subject suggests an existing gap that calls for urgent attention in the teaching and learning of history. Therefore, this research attempts to study the teachers' pedagogical content knowledge and senior secondary school history students' learning outcomes in southwest Nigeria.

### **Objective of the Study**

The purpose of this study to investigate the effect of Pedagogical Content Knowledge on senior secondary school students' learning outcomes in History in South-West Nigeria. Specifically, the study is designed to:

1. ascertain the level of History teachers' possession of pedagogical content knowledge by History teachers in teaching.
2. develop an intervention package for History teachers' professional developmental needs.
3. determine the effects of the intervention package on the teaching-learning process of History.
4. ascertain the extent of availability of instructional resources in the teaching of History.

### **Research Questions**

1. What is the level of History teachers' possession of Pedagogical Content Knowledge in the teaching of History?
2. What are the effects of the intervention package on History teachers' professional developmental needs?
3. What are the effects of the intervention package on the students learning process of History?
4. What is the extent of the level of availability of instructional resources for the teaching and learning of History?

### **Research Hypotheses**

- H<sub>01</sub>: There is no significant effect of the intervention package on History teachers' awareness of PCK in South-West secondary schools.
- H<sub>02</sub>: There is no significant effect of the intervention package on History teachers' possession of PCK in South-West secondary schools.
- H<sub>03</sub>: There is no significant effect of History teachers' awareness and possession of PCK on the teaching learning process of History in South-West secondary schools.
- H<sub>04</sub>: There is no significant effect of History teachers' awareness and possession of PCK on the students' learning outcomes in South-West secondary schools

### **Methodology**

The study adopted both descriptive and quasi-experimental research design. Descriptive survey design was used because of its efficacy in describing the situation of a given situation. In this study, the descriptive survey was used to assess the level of History teachers' awareness and possession of PCK. The quasi experimental was used to demonstrate causality between an intervention and an outcome. In the study, the pretest – post-test quasi-experimental design were used to ascertain the effect of the intervention on teaching and learning process and on students' learning outcome in History. The target population of the study consisted of all the History teachers and students in Senior Secondary Schools in South-West Nigeria.

For this study, the multi-stage sampling technique was adopted. Out of the 6 States (Ekiti, Lagos, Ogun, Ondo, Osun, and Oyo), Lagos was used for the pilot study, and out of the 5 remaining States, three (3) states, vis-à-vis Osun, Ogun, and Oyo States were selected for this study. Out of the three (3) senatorial districts in each State, one senatorial district was selected, and in each of the selected senatorial district, two (2) Local Government Areas (LGAs) were selected randomly. In each LGA, two (2) senior secondary schools were selected making a total of six (6) Local Government Area and twelve (12) senior secondary schools across the 3 selected States. Since the population of students offering History is usually scanty, all students offering History in each of the selected schools were adopted as the sample size for each school, while their teachers were also sampled.

Hence, the total sample size is eighty-one (81) comprising of sixty-nine (69) students and twelve (12) teachers. As this study is quasi-experimental, it is noteworthy that out of the twelve (12) selected senior secondary schools, six (6) selected schools in Oyo, Ogun and Osun were adopted as the Experimental Group, while the remaining six (6) selected schools in Oyo, Ogun and Osun States were adopted as the Control Group (i.e. 2 schools in each for experimental group while 2 schools in each state for control group respectively). Furthermore, sixty-nine (69) students, that is, thirty-six (36) students for experimental and thirty-three (33) students for control groups respectively.

Seven instruments were used for this study. Five out of the seven instruments focused on teachers and two on the students. The instruments are as follows: Teachers' Questionnaire on Level of Awareness and Possession of Pedagogical Content Knowledge (TQAPPCK), Teachers Questionnaire Assessment of PCK Package (TQAPCKP), Students' Questionnaire Assessment Feedback on PCK Package (SQAFPCKP), History Achievement Test for History Students (HAT), Interview Schedule for History Teachers, Observation Schedule, and Checklist on Availability of Teaching Materials

The researcher obtained a letter of introduction from Head of Department of Arts and Social Sciences Education, University of Lagos (See Appendix). The researcher took the letter to various schools selected and sought for permission from principals of those selected schools to have access to the teachers and students before administering the instruments to them. The researcher with the help of two research assistants administered the questionnaires on the respondents (teachers and students). Thirty-seven (37) items of questionnaires for Teachers' Levels of Awareness and Possession of PCK, thirteen (13) items of questionnaires for Teachers' Assessment on PCK Package and twelve (12) items of questionnaires for students were designed and administered on twelve (12) teachers (four teachers from four (4) schools (one teacher from each school) and sixty-nine (69) students overall. Out of this sixty-nine (69) students, thirty-six (36) were used for Experiment Group (EG) while thirty-three (33) were used for Control Group (CG). The researcher distributed the questionnaires with the help of two research assistants who were trained for two weeks by

the researcher for the purpose of research and the modalities for distributing the questionnaires. After the collection of the questionnaires, they were collated by the researcher.

The data collected were analysed using descriptive statistics of frequency counts, percentage, means score and standard deviation to present respondents' demographic data and answer the research questions, while t-test was used to test the research hypotheses with the aid of Statistical Package for Social Scientists (SPSS) 21.0 at 0.05 level of significance.

## **Results**

### **Research Question One**

What is the level of History teachers' possession of Pedagogical Content Knowledge in the teaching of History?

#### **Table 1**

History teachers' possession of Pedagogical Content Knowledge

<b>S/N</b>	<b>ITEM</b>	<b>Mean</b>	<b>SD</b>	<b>Remark</b>
1.	History teachers possess historiography and historical skills	2.33	1.071	<b>LL</b>
2.	History teachers possess the ability to engage their students during lessons	3.58	1.325	<b>HL</b>
3.	History teachers possess the skills to use informal discussion and analysis to teach the students some historical concepts	1.08	0.519	<b>VLL</b>
4.	History teachers possess the ability to identify difficult topics in History	1.08	0.519	<b>VLL</b>
5.	History teachers possess the knowledge of the precolonial period in Nigeria	2.83	1.121	<b>ML</b>
6.	History teachers possess the knowledge of the Nigerian society in the 19th century	3.00	1.129	<b>ML</b>
7.	History teachers are well-versed regarding the British rule and Nigeria reaction (1900-1914)	2.00	1.190	<b>LL</b>
8.	History teachers are well-versed about the decolonisation process in Nigeria	3.58	1.325	<b>HL</b>
9.	History teachers possess the knowledge of Nigeria since independence	2.75	1.214	<b>ML</b>
10.	History teachers possess the knowledge of the military intervention in governance and the post-civil war Nigeria	2.00	1.190	<b>LL</b>
11.	History teachers possess the ability to effectively and efficiently use teaching-learning materials	1.92	1.201	<b>LL</b>
12.	History teachers possess the ability to identify students' areas of misconceptions	3.58	1.315	<b>HL</b>
13.	History teachers possess the ability to understand reason(s) of students' misconceptions	2.58	1.231	<b>ML</b>
14.	History teachers possess the ability to promote students' thinking in History	2.33	1.132	<b>LL</b>
15.	History teachers possess the ability to create solutions to resolve students' misconceptions and alternative conceptions	2.25	1.027	<b>LL</b>
16.	History teachers possess the ability to productively use questions and tasks during lessons	2.08	0.431	<b>LL</b>
17.	History teachers possess the ability to productively use rules and procedures during lessons	2.00	0.577	<b>LL</b>
18.	History teachers possess the skills to effectively use hand-on activities during lessons	3.25	1.155	<b>ML</b>
19.	History teachers possess the ability to connect historical concepts to concrete model problem	3.58	1.124	<b>HL</b>
20.	History teachers possess the skills to adopt activity-based method of teaching during lessons	3.58	1.124	<b>HL</b>
21.	History teachers possess the skills to use inductive and constructive methods of teaching	3.12	1.241	<b>ML</b>
22.	History teachers possess the ability to understand students' reasoning and its basis	3.50	1.001	<b>HL</b>
23.	History teachers possess the skills to form appropriate criterion for students' assessment	3.12	1.241	<b>ML</b>
24.	History teachers possess the ability to assess students' answers in correct manners	3.92	1.532	<b>HL</b>

<b>Average (%)</b>	2.66	1.632	<b>ML</b>
--------------------	------	-------	-----------

**Very High Level (VHL) = 4.5 & above; High Level (HL) = 3.50-4.49; Medium Level (ML) = 2.50-3.49; Low Level (LL) = 1.50 -2.49; and Very Low Level (VLL) = below 1.5**

Table 1 shows that most of the mean scores of the items 1-24 above are less than 3.0 ( $\bar{x} < 3.0$ ). This implies that the majority of the teachers disagreed with most of the items on History teachers' possession of Pedagogical Content Knowledge, as the teachers opined that: History teachers possess historiography and historical skills ( $\bar{x} = 2.33$ ;  $SD = 1.071$ ); History teachers possess the ability to engage their students during lessons ( $\bar{x} = 3.58$ ;  $SD = 1.325$ ); History teachers possess the skills to use informal discussion and analysis to teach the students some historical concepts ( $\bar{x} = 1.08$ ;  $SD = 0.519$ ); History teachers possess the ability to identify difficult topics in History ( $\bar{x} = 1.08$ ;  $SD = 0.519$ ); History teachers possess the knowledge of the precolonial period in Nigeria ( $\bar{x} = 2.83$ ;  $SD = 1.121$ ); History teachers possess the knowledge of the Nigerian society in the 19th century ( $\bar{x} = 3.0$ ;  $SD = 1.129$ ); History teachers are well-versed regarding the British rule and Nigeria reaction (1900-1914) ( $\bar{x} = 2.0$ ;  $SD = 1.19$ ); History teachers are well-versed about the decolonization process in Nigeria ( $\bar{x} = 3.58$ ;  $SD = 1.325$ ); History teachers possess the knowledge of Nigeria since independence ( $\bar{x} = 2.75$ ;  $SD = 1.214$ ); History teachers possess the knowledge of the military intervention in governance and the post-civil war Nigeria ( $\bar{x} = 1.92$ ;  $SD = 1.201$ ); History teachers possess the ability to effectively and efficiently use teaching-learning materials ( $\bar{x} = 2.33$ ;  $SD = 1.208$ ); History teachers possess the ability to identify students' areas of misconceptions ( $\bar{x} = 3.58$ ;  $DA = 1.315$ ); History teachers possess the ability to understand reason(s) of students' misconceptions ( $\bar{x} = 2.58$ ;  $SD = 1.231$ ); History teachers possess the ability to promote students' thinking in History ( $\bar{x} = 2.33$ ;  $SD = 1.132$ ); History teachers possess the ability to create solutions to resolve students' misconceptions and alternative conceptions ( $\bar{x} = 2.25$ ;  $SD = 1.027$ ); History teachers possess the ability to productively use questions and tasks during lessons ( $\bar{x} = 2.08$ ;  $SD = .431$ ); History teachers possess the ability to productively use rules and procedures during lessons ( $\bar{x} = 2.00$ ;  $SD = .577$ ); History teachers possess the skills to effectively use hand-on activities during lessons ( $\bar{x} = 3.25$ ;  $SD = 1.155$ ); History teachers possess the ability to connect historical concepts to concrete model problem ( $\bar{x} = 3.58$ ;  $SD = 1.124$ ); History teachers possess the skills to adopt activity-based method of teaching during lessons ( $\bar{x} = 3.58$ ;  $SD = 1.124$ ), History teachers possess the skills to use inductive and constructive methods of teaching ( $\bar{x} = 3.12$ ;  $SD = 1.241$ ); History teachers possess the ability to understand students' reasoning and its basis ( $\bar{x} = 3.50$ ;  $SD = 1.001$ ); History teachers possess the skills to form appropriate criterion for students' assessment ( $\bar{x} = 3.12$ ;  $SD = 1.241$ ), History teachers possess the ability to assess students' answers in correct manners ( $\bar{x} = 3.92$ ;  $SD = 1.532$ ). Summarily, it could be inferred from the above analysis that to a great extent, the level of History teachers' possession of Pedagogical Content Knowledge in the teaching of History is on the average, as the average scores ( $\bar{x} = 2.66$ ;  $SD = 1.632$ ) shows that the teachers agreed to a medium level with the items.

### Research Question Two

What is the effect of the intervention package on History teachers' professional developmental needs?

**Table 2**

Effects of the intervention package on History teachers' professional developmental needs

S/N	ITEM	Mean	SD	Remark
1	Content and performance standards in History	3.67	1.905	GE
2	Student assessment practices	3.67	1.710	GE
3	Classroom management practices	3.33	1.163	ME
4	Knowledge and understanding of the subject matter	3.67	1.781	GE
5	Knowledge and understanding of instructional practices (knowledge mediation)	3.67	1.781	GE
6	ICT skills necessary for modern teaching	3.00	1.121	ME
7	Teaching students with special learning needs	3.00	1.013	ME
8	Student discipline and behaviour problems	3.67	1.781	GE
9	School management and administration	3.67	1.710	GE
10	Teaching in a multicultural setting	3.67	1.781	GE
11	Teacher's role to facilitate students' own inquiry	3.67	1.781	GE
12	Ability to build instructions around problems with clear and correct answers	2.67	1.212	ME



13	Ability to build instructions around ideas that most students can grasp quickly	3.50	1.197	GE
	<b>Average (%)</b>	3.67	1.354	GE

**Greatly Embedded (GE) = 3.5 & above; Moderately Embedded (ME) = 2.50-3.49; Poorly Embedded (PE) = 1.50-2.49; Not Embedded (NE) = below 1.5**

Table 2 shows that most of the mean scores of the items 1-13 above are greater than 2.5 ( $\bar{x} > 2.5$ ). This implies that most of the teachers agreed with items 1-13 on effects of the intervention package on History teachers' professional developmental needs. Hence, the teachers opinions on the level to which their professional developmental needs were embedded in the intervention package are: Content and performance standards in History ( $\bar{x} = 3.67$ ; SD=1.905), Student assessment practices ( $\bar{x} = 3.67$ ; SD=1.710), Classroom management ( $\bar{x} = 3.33$ ; SD=1.163), Knowledge and understanding of the subject matter ( $\bar{x} = 3.67$ ; SD=1.781), Knowledge and understanding of instructional practices (knowledge mediation) ( $\bar{x} = 3.67$ ; SD=1.781), ICT skills necessary for modern teaching ( $\bar{x} = 3.00$ ; SD=1.121), Teaching students with special learning needs ( $\bar{x} = 3.00$ ; SD=1.013), Student discipline and behaviour problems ( $\bar{x} = 3.67$ ; SD=1.781), School management and administration ( $\bar{x} = 3.67$ ; SD=1.710), Teaching in a multicultural setting ( $\bar{x} = 3.67$ ; SD=1.781), Teacher's role to facilitate students' own inquiry ( $\bar{x} = 3.67$ ; SD=1.781), Ability to build instructions around problems with clear and correct answers ( $\bar{x} = 2.67$ ; SD=1.212), and Ability to build instructions around ideas that most students can grasp quickly ( $\bar{x} = 3.50$ ; SD=1.197). Summarily, it could be inferred from the above analysis that the History teachers' professional developmental needs are to a large extent embedded into the intervention package. This implies that the intervention package can enhance the professional developmental needs of History teachers, as the average scores ( $\bar{x} = 3.67$ ; SD=1.354) shows that the teachers greatly agreed with the items.

### Research Question Three

What is the effect of the intervention package on the teaching-learning process of History?

**Table 3**

Students' perceptions on the effects of the intervention package on the teaching-learning process of History

S/N	ITEM	Mean	SD	Remark
1	The teacher stimulated my interest in the subject	1.83	1.102	YES
2	The teacher managed classroom time and pace well	1.79	1.182	YES
3	The teacher was organized and prepared for every class	1.71	1.113	YES
4	The teacher encouraged discussions and responded to questions	1.64	.643	YES
5	The teacher demonstrated in-depth knowledge of the subject matter	1.70	1.321	YES
6	The teacher appeared enthusiastic and interested	1.81	1.001	YES
7	The teacher used a variety of instructional methods to reach the objectives of the topic	1.82	1.121	YES
8	The teacher challenged students to do their best work	1.93	1.043	YES
9	Information about the assessment was communicated clearly by the teacher	1.74	1.132	YES
10	The teacher's feedback showed how to improve my work	1.93	1.223	YES
11	Students contributed constructively during in-class activities	1.57	1.301	YES
12	Students are achieving the learning outcomes	1.62	1.241	YES
	<b>Average (%)</b>	1.75	1.241	YES

**Yes = 1.50 and above; No = Below 1.5**

Table 3 shows that most of the mean scores of the items 1-12 above are greater than 1.5 ( $\bar{x} > 1.5$ ). This implies that most of the students agreed with items 1-12 on the effects of the intervention package on the teaching-learning process of History. Hence, the students agreed that the teacher stimulated their interest in the subject ( $\bar{x} = 1.83$ ; SD=1.102); the teacher managed classroom time and pace well ( $\bar{x} = 1.79$ ; SD=1.182); the teacher was organized and prepared for every class ( $\bar{x} = 1.71$ ; SD=1.113); the teacher encouraged discussions and responded to questions ( $\bar{x} = 1.64$ ; SD=.643); the teacher demonstrated in-depth knowledge of the subject matter ( $\bar{x} = 1.70$ ; SD=1.321); the teacher appeared enthusiastic and interested ( $\bar{x} = 1.81$ ; SD=1.001); the teacher used a variety of instructional methods to reach

the objectives of the topic ( $\bar{x}$  =1.82; SD=1.121); the teacher challenged students to do their best work ( $\bar{x}$  =1.93; SD=1.043); Information about the assessment was communicated clearly by the teacher ( $\bar{x}$  =1.74 SD=1.132); the teacher's feedback showed how to improve my work( $\bar{x}$  =1.93; SD=1.043); Students contributed constructively during in-class activities( $\bar{x}$  =1.57; SD=1.301) and Students are achieving the learning outcomes( $\bar{x}$  =1.62; SD=1.241).

Summarily, it could be inferred from the above analysis that the intervention package to a great extent has a large impact on the teaching-learning process of History. This implies that the intervention package is a viable means of enhancing the teaching-learning process of History, as the average scores ( $\bar{x}$  =1.75; SD=1.241) shows that the students greatly agreed with the items.

#### Research Question Four

#### What is the extent of availability of instructional resources for the teaching and learning of History?

**Table 4: Instructional Resources Availability**

S/N	Item	Mean	STD	Remark
1.	Computer Room	1.03	.211	Not available
2.	Computer Systems	1.75	.822	Inadequately available
3.	Internet Facilities	1.07	.342	Not available
4.	Filing cabinet	1.09	.215	Not available
5.	Projector	1.78	.311	Inadequately available
6.	Video Machine/Video Clips	1.79	.311	Inadequately available
7.	Films Clips/CD/DVD	1.01	1.001	Not available
8.	Picture/Photographs	1.13	.021	Not available
9.	Cuttings from newspapers	1.03	.211	Not available
10.	Cultural artefacts (Dress codes, craftsetc)	1.09	.422	Not available
11.	Audiotape	1.07	.563	Not available
12.	Products of local craft e.g., footwear/pottery, beads/cloth/tie and dyeing etc	1.21	1.001	Not available
13.	Calendar/Diary	1.36	1.013	Not available
14.	Map	1.29	.982	Not available
15.	Textbooks/Journals	1.41	.782	Not available
16.	Television/Radio	1.13	.664	Not available
17.	Mini history museum	2.31	.363	Inadequately available
18.	Library	2.17	.642	Inadequately available

**Adequately Available (AA) = 2.5 & above; Inadequately Available (IA) = 1.50-2.49; Not Available (NA) = below 1.0**

Table 4 shows the availability of resources in the twelve (12) selected senior secondary schools in Southwest. Most of the schools did not have computer room ( $\bar{x}$  =1.03; SD=0.211). Most of them did not have enough computer systems, because most of the systems are not working perfectly ( $\bar{x}$  =1.75; SD=0.822). They did not have internet facilities ( $\bar{x}$  =1.07; SD=0.342). There was no file cabinet in most of the schools ( $\bar{x}$  =1.09; SD=0.215). Many of the schools did not have enough projector ( $\bar{x}$  =1.78; SD=0.311). Most of them did not have enough video machine/video clips ( $\bar{x}$  =1.79; SD=1.182). More so, the mean scores showed that most of them did not have film clips/CD/DVD, Picture/Photographs; Cuttings from newspapers; Cultural artefacts (Dress codes, crafts etc) ; Audio-Tape; Products of local craft e.g. footwear/pottery, beads/cloth/tie and dyeing etc.; Calendar/Diary; Map; Textbooks/Journals; and Television/Radio. Most of them did not have enough mini history museum ( $\bar{x}$  ==2.31; SD=0.363), and most of them did not also have enough library ( $\bar{x}$  =2.17; SD=0.642). Summarily, the table's remark reveals that Computer Room; Internet Facilities; Projector, film clips/CD/DVD; picture/photographs; cutting from newspapers; cultural artifacts; audiotape; products of local crafts; calendar/diary; map; textbooks/journals; and television/radio, were **not available** in most of the selected senior secondary schools. Computer systems, file cabinets, video machines/video clips, mini history museum, and library were **inadequately available** in most of the selected senior secondary schools. Hence, the answer to the research question five is that to a great extent, instructional resources are not available for the teaching and learning of History in the senior secondary schools in Lagos State.

### Test of Hypotheses

The hypotheses one and two are tested using one-sample t-test, hypothesis three with independent samples t-test, while the fourth hypothesis is tested with Analysis of Variance (ANOVA), with the aid of the Statistical Package for Social Scientists (SPSS 21.0), at 0.05 level of significance.

**Research Hypothesis One:** There is no significant effect of the intervention package on History teachers' awareness of PCK in South-West secondary schools.

**Table 5: One Sample Statistics on the effect of the intervention package on History teachers' awareness of PCK in South-West secondary schools**

One-Sample Statistics						
	N	Mean	Std. Deviation	Std. Error Mean		
There is no significant effect of the intervention package on History teachers' awareness of PCK in South-West secondary schools	12	4.03	.514	.042		
One-Sample Test						
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
There is no significant effect of the intervention package on History teachers' awareness of PCK in South-West secondary schools.	6.133	11	.001	1.03	Lower 2.12	Upper 3.04

It is evident from the result of the analysis in table 4.7 that the mean score ( $M = 4.03$ ,  $SD = 0.514$ ) for the construct is rated above '3.0', a statistically significant mean difference of 1.03, 95% CI [2.12 to 3.04],  $t(11) = 6.133$ ,  $p = .001$ . Hence, it is concluded that there is a significant effect of the intervention package on History teachers' awareness of PCK in South-West secondary schools.

### Research Hypothesis Two

There is no significant effect of the intervention package on History teachers' possession of PCK in South-West secondary schools

**Table 6**

**One Sample Statistics on the effect of the intervention package on History teachers' possession of PCK in South-West secondary schools**

One-Sample Statistics						
	N	Mean	Std. Deviation	Std. Error Mean		
There is no significant effect of the intervention package on History teachers' possession of PCK in South-West secondary schools	12	4.28	1.198	.042		
One-Sample Test						
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
There is no significant effect of the intervention package on History teachers' possession of PCK in South-West secondary schools	4.931	11	.000	1.28	Lower 1.53	Upper 2.98

It is evident from the result of the analysis in table 4.8 that the mean score ( $M = 4.28$ ,  $SD = 1.198$ ) for the construct is rated above '3.0', a statistically significant mean difference of 1.28, 95% CI [1.53 to 2.98],  $t(11) = 4.931$ ,  $p = .000$ . Hence, the null hypothesis that states; "there is no significant effect of the intervention package on History teachers' possession of PCK in South-West secondary schools" is rejected and its alternative is accepted.

### Research Hypothesis Three

There is no significant effect of History teachers' awareness and possession of PCK on the teaching learning process of History in South-West secondary schools

**Table 7:**

Independent t-test Statistics on the effect of History teachers' awareness of PCK on the teaching learning process of History in South-West secondary schools

	Group	N	Mean	STD	MD	df	t	p-val.	Remark
Pre-test	Control	33	1.09	1.162	0.02	67	1.653	.371	Not Significant
	Experimental	36	1.11	1.202					
Post-test	Control	33	1.08	1.322	67	2.215		.006	Significant
	Experimental	36	1.73	1.232					

*Significant at .05 level*

Independent samples t-test analysis was done to determine the effect of History teachers' awareness and possession of PCK on the teaching learning process of History in South-West secondary schools. For the Pre-test, Table 4.9 showed a statistically insignificant difference between the teaching learning process of the Control ( $N=33$ ,  $Mean=1.09$ ,  $SD=1.162$ ;  $Df=67$ ) and Experimental ( $N=36$ ,  $Mean=1.11$ ,  $SD=1.202$ ;  $Df=67$ ). Since  $t=1.653$ ,  $p>0.05$ . It shows an insignificant difference in the effect of History teachers' awareness and possession of PCK on the teaching learning process of History in South-West secondary schools in the pretest. This indicates that the teaching-learning process of both the control and experimental groups before the intervention were not significantly different.

For the Post-test, however, Table 7 showed a statistically significant difference between the Control ( $N=33$ ,  $Mean=1.08$ ,  $SD=1.322$ ;  $Df=67$ ) and Experimental ( $N=36$ ,  $Mean=1.73$ ,  $SD=1.232$ ;  $Df=69$ ). Since  $t=2.215$ ,  $p<0.05$ . It shows a significant effect of History teachers' awareness and possession of PCK on the teaching learning process of History in South-West secondary schools. Hence, the null hypothesis that states; "there is no significant effect of History teachers' awareness and possession of PCK on the teaching learning process of History in South-West secondary schools" is rejected and its alternative is accepted.

### Research Hypothesis Four

There is no significant effect of History teachers' awareness and possession of PCK on the students' learning outcomes in South-West secondary schools

**Table 8:**

One-way ANOVA Statistics on the effect of History teachers' awareness and possession of PCK on the students' learning outcomes in South-West secondary schools

Source	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.422	1	1.422	0.329	0.013
Within Groups	77.778	68	4.321		
Total	79.200	69			

$P < 0.05$ ;  $F(1,68) = 0.329$

The data in Table 8 shows the effects of history teachers' awareness and possession of PCK on the students' learning outcome. As shown in the above table, there is effect of History teachers' awareness and possession of PCK on the students' learning outcomes in South-West secondary schools, as  $F(1,68) = 4.321$  at 0.05 level of significance. Hence, the null hypothesis that states; "there is no significant effect of History teachers' awareness and possession of PCK on the students' learning outcomes in South-West secondary schools" is rejected and its alternative is accepted.

### Discussion of Findings

In recent time, discourse on teachers' pedagogical content knowledge (PCK) has attracted public attention among stakeholders in education. It is a well-known fact that any nation whose government strive to achieve greatness should provide students with highly qualified teachers who are vast in both content knowledge (subject matter) and pedagogical knowledge (instructional). Researchers have shown that pedagogical content knowledge (PCK) is generally accepted as positively impacting teaching quality and students' learning outcomes (Odumosu, Olusesan and

Abel, 2006). Indeed, the findings of this study revealed that lack of effective teachers is a major contributing factor in the performance gap among students.

The findings of the study revealed that the teachers' level of awareness and possession of PCK is low. Even though 50% of the teachers are B.Ed. holders which suggest that they are bachelor's degree holders in education. An indication that they had done required courses in both content and pedagogy, while they understood the concept of content knowledge (History) and pedagogy (methods). However, the concept of pedagogical content knowledge is strange to them. When ask about what is PCK? Many of them are not aware of it. Thereby the possession of it is not encouraging. As the average score on awareness is ( $X=2.3$ ;  $SD = 1.216$ ) that shows teachers' disagreement with the items, while teachers' possession of PCK average score is ( $X = 2.66$ ,  $SD = 1.632$ ) that shows a medium level of possession of PCK. This study supports the findings of Fakeye (2018) and Khan, Hassan, and Clement (2012) that low level of teachers' pedagogical knowledge and apathy to innovation (Kabiru & Sakiyo, 2013) were contributory factors to the poor performance of the students in public examination. From the findings, it was revealed that low level of awareness and possession of PCK by History teachers played a very significant role in the poor learning outcome of students.

Traditionally, teacher education programme especially in different subjects whether History, English language, Social Studies, Mathematics, Chemistry etc, teachers are taught content knowledge and pedagogical knowledge. The link between the two kinds of knowledge is usually lacking (Okanlawon and Akanni, 2009). As Shulman (1987) opined that this kind of knowledge that is lacking is the PCK, which is according to Van Driel, De Jong and Verlop (2002) is acquired largely through experience, discussion with more experienced colleagues' imitation, reflection on things seen and heard, attendance at professional conferences, seminars and reading teachers' journals.

The persistent decline in students' performance in history is not only frustrating to the students and the parents, but its effects are also equally grievous on the society. According to Nwokocha and Amadike (2005), academic performance of students is the yardstick for testing the educational quality of a nation. Therefore, the high rate of students' failure in senior secondary school certificate examination (SSCE) has become a perennial source of worry to all stakeholders in the educational sector in Nigeria. For instance, the WAEC Chief Examiner's Report (2009 – 2013) revealed the brazen poor performances of students in History. This may be due to lack of teachers' pedagogical content knowledge in the subject. As Shulman (1986) noted that that the introduction of the concept of pedagogical content knowledge (PCK) as a possible answer to the so called "missing paradigm" in research and practice of teaching. According to Shulman, teaching was either approached only focusing on content or by exclusively focusing on pedagogy. Shulman believed that neither approach, grasped every aspect of teacher knowledge based. Hence, he defined PCK as that special amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding (Shulman, 1986). Therefore, to reverse this abysmal poor performance of students, history teachers must be tutored in pedagogical content knowledge. Olasehinde-Williams, Yahaya and Owolabi (2017) opined that there is urgent need to reverse this trend because poor performance in SSCE leads to colossal wastage in education investment and reduction in quantity and quality of candidates seeking tertiary education.

The result of the data shows that History teachers' professional development was enhanced by the PCK intervention package. This suggests that teachers have an important role to play in the academic achievement of students. The quality of an educational system depends to a large extent on the quality of teachers in terms of content knowledge competency and pedagogical knowledge delivery. According to Yusuf and Aliyu (2016), professional and experienced teachers should be allowed to teach in Colleges of Education. Joshua (2014) corroborated this view as he rightly observed that teacher quality had significant relationship with students' academic achievement. Therefore, a teacher well trained in PCK will to a greater extent influence students' learning outcomes. Shulman (1986) also assert that teachers needed strong PCK to be the best possible teachers.

Okebukola (2012) corroborated this view that most graduate teachers are not professionals and are inadequately exposed to teaching practice. In his view, the pervasive notion is that only academic degrees make up the bulk of teachers both in-serve and practicing. He stressed that an agenda for reformatting teacher education should go beyond improving teacher pre-service and in-service delivery system to improving the working conditions and welfare of teachers. There is need for the profession to be full of inspiring, innovative, creative, and knowledgeable teachers. Keeping in mind that the quality of teachers is largely dependent on the quality of training (pre-service and in-service) (Okebukola, 2014).

Finding also revealed that instructional resources are not available for teaching and learning as data analysed indicated. However, the relevance of instructional resources in teaching and learning cannot be over emphasized. Instructional resources facilitate teaching and learning process as noted by Bisiriyu (2016) that instructional materials increase the rate of learning, save the teacher time and effort, increase learners' interest, and facilitate quick retention of what is

taught (Bisiriyu, 2016). This view is also supported by Adebule and Ayoola (2015) on the efficacy of the use of instructional materials on the academic performance of students in mathematics. For any successful learning outcome to be achieved in teaching in terms of service delivery and effective implementation, instructional materials constitute an essential aspect and must not be underrated. Therefore, instructional materials must be adequately available in teaching. Also, effective use of instructional materials and resources aid teaching-learning activity.

## Conclusion

PCK plays an important role in classroom activities. It is an educational term that describes several interconnected domains of knowledge and pedagogy that are useful to the teacher in teaching-learning process. The study investigated the effect of Pedagogical Content Knowledge (PCK) on teachers' professional development and effective teaching on learning of history in senior secondary schools. The finding revealed that history teachers' awareness and possession on PCK is very low and not encouraging among other findings. The study therefore shown that improving teachers' PCK will lead to improvement in teachers' instructional practices and consequently students' learning outcomes. Conclusively, the results show that teachers with rich PCK are better teachers.

## Recommendations

Considering the importance of PCK to teaching and learning, the researcher recommends as follows:

1. Pedagogical content knowledge should be integrated into the teaching of History and History curriculum.
2. The Government should address the issue of professionalism of teaching, instructional material, and resources for the effective teaching of History in schools.
3. There should be regular training and retraining of teachers in both content knowledge, pedagogical knowledge as well as pedagogical content knowledge.
4. There is need for the provision of mini-Museums in schools for effective teaching and learning of History.

## References

- Adebule, S. O. & Ayoola, O. O. (2015). Evaluation of instructional materials commonly used in the teaching of Mathematics in senior secondary schools in Ekiti State. *Research on Humanities and Social Sciences*, 5(18), 45 – 76.
- Adesoji, A. O. (2009). Historical scholarship in 20<sup>th</sup> century Nigeria: The quest for relevance in the African Symposium. *An Online Journal of African Educational Research of African*, 9(2), 71 – 84.
- Ajayi, I. A. & Ayodele, O. (2002). Resource factors as correlates of secondary school effectiveness in Ekiti State Nigeria. *Journal of Counselling and Applied Psychology*, 1(1), 109 - 195.
- Akindutire, I. O. (2001). Effect of stress on the teaching performance of secondary school teachers.
- Amadi, E. C. (2007). Inclusive education in Sub-Saharan African problems, experiences and solutions. Retrieved on 12/10/2019 from <https://www.researchgate.net/publication/27468570>
- Anita, K., Jairo, K. M., Odhiambo O. and Mary, E. A. (2013). Influence of teacher characteristics on students' academic achievement among secondary schools in Nandi District, Kenya. *Journal of Education Practice*, 4(2), 222 – 288.
- Ata, B. (2002). The Turkish prospective History teachers' understanding of analogy in History education. *International Journal of Historical Learning Teaching and Research*, 8(1). Retrieved on 22/9/2019 from [www.history.org.uk](http://www.history.org.uk)
- Balogun, A. M. (2010). Challenges of higher education in Nigeria: A manager's perspective. Being a paper presented at the Maiden edition of the Faculty of Education Annual Lecture Series, University Ado Ekiti, March 22<sup>nd</sup>.
- Bisiriyu, A. A. (2016). Instructional materials as correlates of students' academic performance in Biology in senior secondary schools in Osun State. *International Journal of Information and Education Technology*, 6(9), 704.
- Driel, V. & Barry, C. (2010). Teacher professional development focusing on pedagogical content knowledge. *Education Researcher*, 41(1), 26 – 28.
- Durosaro, D. O. (2006). Teacher education in Nigeria: Past, present and future challenges. *Journal of the Oyo State College of Education*, 13(1), 43 – 53.
- Fakaye, D. O. (2018). Teachers' qualification and subject mastery as predictors of achievement in English language in Ibarapa division of Oyo State. *Global Journal of Human Social Science*, 12(3), 45 - 67

- Femanadez, C. (2014). Knowledge base for the teaching and pedagogical content knowledge (PCK): Some useful models and implications for teachers' training. *EBSCO Academic Journal*, 60, 79- 100.
- Floden, R. & Meniketti, M. (2006). Research on the effects of course-work in the arts and sciences and in the foundations of education. In studying teacher education. The report of the AERA panel on research and teacher education (ed.), M. Cochran-Smith and K. M. Zeichner, 261 – 308. Mahwa, NJ: Lawrence Erlbaum Associates.
- FRN (2005). Budget for 2003, 2004 and 2005.
- Gusthardt, J. & Sprigings, E. (1989). Student learning as a measure of teacher effectiveness in physical education. *Journal of Teaching in Physical Education*, 8, 298 – 311.
- Harris, J. & Bain, L. (2011). Pedagogical Content Knowledge for world history teachers: What is it? How might prospective teachers develop it? *The Social Studies*, 102(1), 9 – 17.
- Igwe, R. O. (2000). *Fundamentals of curriculum and instruction*. Lagos: Vitaman Educational Books.
- Igwe, R. O. (2002). *Fundamentals of curriculum and instruction*. Lagos: Vitaman Educational Books.
- Ijadunola, K. O. (2008). Achieving the Millennium Development Goals (MDGs) in Nigeria educational planning option. *Journal of Research in National Development*, 6(2), 28 – 40.
- Joshua, O. O. (2014). Teacher quality and student academic achievement in basic technology in junior secondary schools in South-West, Nigeria. *Journal of Education and Social Research*, 4(3), 35 – 55.
- Kabiru, M. & Sakiyo, F. (2013). Assessment of the trend of secondary school students' academic performance in Sciences, Mathematics and English: Implications for the attainment of the Millennium Development Goals in Nigeria. Retrieved on 22/9/2019 from <http://dx.doi.org/10.14738/assri.22.805>
- Khan, M. D., Shahadat, H., Hasan, M. & Kum, C. C. (2012). Barrier to the introduction of ICT in education in developing countries: The example of Bangladesh.
- Mkpa, B. (1987). *Curriculum development and implementation*. Lagos: Totan Publishers.
- Monte-Sano, S. & Budano, F. (2012). Developing and enacting pedagogical content knowledge for teaching History: An exploration of two novice teachers' growth one three years. *Journal of the Learning Sciences*, 58, 1771 – 2011.
- Nwokocha, A. C. & Amadike, N. N. (2005). A comparative study of academic performance in public and private secondary schools in River State. *Nigerian Journal of Educational Administration and Planning*, 5(2), 188 - 191.
- Odumosu, M. O., Olisama, O. V. & Areelu, F. (2018). The teachers' content and pedagogical knowledge on students' achievement in Algebra. *International Journal of Education and Research*, 6(3), 15 – 29.
- Odumosu, M. O., Olusesan, E. G. & Abel, M. (2006). Promoting the effective of teaching and learning of mathematics using cooperative learning method: A book of reading in honour of Mr. Emmanuel Adetunji Oloyede, 31 – 43.
- Okanlawon, A. K. & Daniel, O. A. (2009). Pedagogical content knowledge: A key factor in teaching and painting. *African Research Review – An International Multi-Disciplinary Journal, Ethiopia*, 3(4), 153 – 163.
- Okebukola, P. A. (2009). The role of higher education in building a knowledge-driven economy. Retrieved on 22/8/2019 from <http://www.researchgate.net/publication/1337934594>
- Okebukola, P. A. (2012). The views of Nigerian teachers in public and private primary schools in the teaching of early literacy in English. Retrieved on 22/8/2019 from <https://doi.org/10.1741-4369.2011.00605x>
- Olasehinde-Williams, F. O., Yahaya, L. A. & Owolabi, H. O. (2017). Depth of teachers' subject content and pedagogical knowledge as predictors of secondary school students' academic achievement in Kwara State, Nigeria. The International Academic Forum. Available at [www.iafor.org](http://www.iafor.org)
- Olatunde, F. (2005). History in the Nigerian school curriculum: Yesterday, today and tomorrow. In Oriafu, S. O., Edozie, G. C. and Ezeh, D. N. (eds). *Curriculum Issues in Contemporary Education*. Benin City: Da-Sylva Influence (pp. 155 – 163).
- Omolewa, M. (2015). Assault on the teaching of history in Nigerian schools. *Guardian*, Thursday 16 July, 2015.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15 (2), 4 - 14.
- Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57, 1 – 22.

- Taylor, T. & Young, G. (2003). *Making history: A guide for the teaching and learning of history in Australian school*. Canton South: Curriculum Corporation.
- Timing, R., Macdonald, D., Wright, J. & Hickey, C. (2001). *Becoming a physical education teacher: Contemporary and enduring issues*. FrenchsForest, NSW: Pearson Education Australia.
- Udogu, M. E., Amechi, C. I. & Njelita, C. B. (2007). Evaluating the level of usage of pedagogical skills by science technology and mathematics teachers in secondary schools for sustainable development. *Proceedings of the 48<sup>th</sup> Annual Conference of Science Teachers Association of Nigeria, 2007*, 116 – 125.
- Van Driel, J. H., De Jong, N. & Verloop, N. (2000). The development of pre-service chemistry teachers' pedagogical content knowledge. *Science Education, 86*, 572 - 590.
- Veal, W. T. & Makinste, G. (1999). Pedagogical content knowledge taxonomies. *Electronic Journal of Science Education*. Retrieved on 3/2/2020 from <http://unr.edu/homepage/crother/ejse/veelmak.html>
- Winaburg, S. & Wilson, L. (2004). Crazy for history. *Journal of American History, 90*, 1401 – 1414.
- Yusuf, O. H. & Aliyu, A. D. (2016). Impact of teachers' qualification and experience on the performance of students in Colleges of Education in Kaduna State, Nigeria. *The Online Journal of Quality in Higher Education, 3(2)*, 371 – 387.