Teaching and Learning in the Humanities and Social Sciences: Perspectives of Competence

# Teaching and Learning in the Humanities and Social Sciences: Perspectives of Competence

Edited by

A. F. Odunuga J. S. Ojewumi

A Publication of Adeyemi Federal University of Education Ondo, Nigeria

#### Published by

School of Arts and Social Sciences Adeyemi Federal University of Education, Ondo, Nigeria

> © School of Arts and Social Sciences Adeyemi Federal University of Education Ondo, Nigeria 2023

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of the copyright owners.

ISBN 978-978-86217-1-8

Produced and Printed by **EBONY BOOKS & KREATIONS** 3, Gbolasere Street, Ologuneru Ibadan, Oyo State © 0802 208 2826, 0803 404 4405, 0905 710 6805 ebonykreations1@gmail.com

### Foreword

I feel privileged to be requested to write the foreword to this book entitled: *Teaching and Learning in the Humanities and Social Sciences: Perspectives of Competence,* a publication put together by the School of Arts and Social Sciences, Adeyemi Federal University of Education, Ondo, Nigeria. The contributors to this book are seasoned scholars in their various fields with solid academic standing. Each of them has unveiled the most salient points in the emerging issues in multidimensional pedagogical perspective.

The three-module book, has been broken down into units, which no doubt provides a clear discussion of each of the topics. Of great interest are the first five units of the first module which engaged critical areas of teaching profession. The second module centres on lesson planning and methodology of teaching courses in Arts and Social sciences. Module three focuses on instructional materials for teaching and learning. This ranges from improvisation to utilisation of materials that could be gainfully used in the teaching of courses in Economics, Theatre Arts, History, Geography and Political science in Nigeria school system.

I wish to commend and congratulate the Dean and her team for coming up with this noble idea and nurturing it to fruition. The quality, readability and language used to convey ideas in this book will appeal to students, educational practitioners and general readers.

I therefore, strongly recommend the book as a special and general text for students at all levels as well as practising teachers in tertiary educational institutions.

Professor Olufemi A. Ojebiyi Faculty of Education University of The Gambia The Gambia.

V

# Contents

Foreword		ν
List of Co	ntributors	ix
MODUI	E 1: ETHICS OF TEACHING PROFESSION AND TEACHERS' COMPETENCE	
Unit 1:	Teaching Profession in Nigeria and its Professional Codes of Ethics	3
Unit 2:	A Critical Analysis of the Ethics of Teaching Profession	18
Unit 3:	Professional Codes of Ethics in Teaching	36
Unit 4:	Music Teachers' Professional Competence and Compliance with Ethical Codes	48
Unit 5:	Teachers Competence in Research Writing: A Systematic Approach	65
MODUL	E 2: LESSON PLANNING AND METHODOLOGY OF TEACHING	
Unit 1:	Principles and Methods of Preparation of Lesson Plan in Religious Studies	85
Unit 2:	Pedagogy and Teachers' Competence in the Effective Teaching of Geography in Nigerian Schools	96
Unit 3:	Effective Music and Theatre Teaching in Africa's 21st Century: The Vidal Approach	110
Unit 4:	Teaching Music Composition in Nigerian Tertiary Music Education	124
Unit 5:	Indigenous Method of Teaching in African Societies	149

— vii

# MODULE 3: UTILIZATION OF INSTRUCTIONAL MATERIALS

Improvisation of Instructional Materials for Teaching and Learning of Economics in Nigerian Senior Secondary Schools	167
Utilization of Instructional Materials in Teaching and Learning Theatre Arts in Nigerian Tertiary Institution: Prospects and Challenges	189
Utilization of Instructional Materials for History Teaching and Learning in Nigerian Schools: Prospects and Challenges	202
Utilization of Instructional Materials in Teaching and Learning of Geography in Secondary Schools	220
Selection, Utilization and Educational Values of Instructional Materials for Teaching and Learning Political Science in Nigerian Schools	231
	251
	Teaching and Learning of Economics in Nigerian Senior Secondary Schools Utilization of Instructional Materials in Teaching and Learning Theatre Arts in Nigerian Tertiary Institution: Prospects and Challenges Utilization of Instructional Materials for History Teaching and Learning in Nigerian Schools: Prospects and Challenges Utilization of Instructional Materials in Teaching and Learning of Geography in Secondary Schools Selection, Utilization and Educational Values of

viii —

## **List of Contributors**

#### MODULE 1: ETHICS OF TEACHING PROFESSION AND TEACHERS' COMPETENCE

- 1. Adebowale Babajide TUGBIYELE & Gloria Nnena JOHN Department of Social Studies Adeyemi Federal University of Education, Ondo
- 2. Ifedolapo OLANIPEKUN Ph.D Department of Economics Adeyemi Federal University of Education, Ondo
- 3. Tosin A. OMOLADE Ph.D Department of Geography Adeyemi Federal University of Education, Ondo
- 4. Adeola Funmilayo ODUNUGA PhD Department of Music Adevemi Federal University of Education, Ondo
- 5. Ismail K. ODENIYI Department of Islamic Studies Adeyemi Federal University of Education, Ondo

#### MODULE 2: LESSON PLANNING AND METHODOLOGY OF TEACHING

- 1. Gabriel Kehinde OJETAYO Ph.D Department of Religious Studies Adeyemi Federal University of Education, Ondo
- 2. Oluwaseunfunmi Mercy OLALEYE & Abiodun Ade OGUNBOYE Department of Geography Adeyemi Federal University of Education, Ondo

ix

3. Adeolu ABE Ph.D. Department of Theatre and Creative Arts Adeyemi Federal University of Education, Ondo

> & Paulina Omagu ADEOLU-ABE Ph.D. Department of Music Federal College of Education, Abeokuta

- 4. Christian ONYEJI Ph.D Professor of Music Composition Department of Music University of Nigeria Nsukka, Enugu State
- 5. Ebenezer Oluwatoyin AYEYEMI Department of Music Adeyemi Federal University of Education, Ondo

# MODULE 3: UTILIZATION OF INSTRUCTIONAL MATERIALS

- Johnson Sunday OJEWUMI Ph.D. & Akinwumi SHARIMAKIN Ph.D Department of Economics, Adeyemi Federal University of Education, Ondo.
- Charles A. OGAZIE Ph.D, Babajide D. AROGUNMASA
  & B. IMASAGBOR
  Department of Theatre and Creative Arts
  Adeyemi Federal University of Education, Ondo
- 3. R. O. ADU-PETERS Ph.D & F. E. BABATUNDE Department of History Adeyemi Federal University of Education, Ondo
- 4. A. O. ADEWOLU Department of Geography Adeyemi Federal University of Education, Ondo

#### Х

5. Gbenga OLOTU & Oludare O. MOSUNMOLA Department of Political Science Adeyemi Federal University of Education, Ondo.

xi

\_

### UNIT 2

## Pedagogy and Teachers' Competence in the Effective Teaching of Geography in Nigerian Schools

Oluwaseun Mercy OLALEYE & Abiodun Ade OGUNBOYE

#### Introduction

There is a growing concern about the standard of teacher preparation on a global scale. Therefore, issues relating to teacher preparation and professional competencies have drawn more attention in recent literature (Urban et al., 2018; Havia et al., 2022). Quality education, as proposed in Sustainable Development Goals 4 (Ojewumi, 2020), can be achieved only when classrooms are occupied by well-trained and professionally competent teachers. When it comes to the teaching of geography, pedagogy and teachers' competence should be at the forefront of the discussion. This is because, as with any field of study, teachers need to be competent in the subject matter, understand what instructional method to use and also take to cognizance the role the learners have to play in the method of instruction delivery in order to aid effective learning. Although teachers' knowledge of a range of teaching practices, strategies, and methods used to enhance students' learning, assessment, and classroom management, in one subject, could be transferred and used in another subject that is closely related, there are restrictions to applying one's knowledge of how specific topics, problems, or issues are organized, represented, and tailored (Shulman, 1987). This is not to say that pedagogical knowledge and skills are not only important, they are equally critical in ensuring that teachers are able to teach effectively. This unit will explore the relationship between pedagogy, teachers'

96

competence, and the teaching of geography.

In any field of knowledge, two important concepts are pedagogy and teachers competence. Pedagogy can be understood as the art and science of teaching while competence can be seen as the ability to perform a certain task at a certain competency level. According to Popoola (2013), a teacher is someone who should be qualified to instruct in a particular subject, a teacher's effectiveness in utilising instructional systems is crucial to both teaching and learning. In addition, pedagogical competence is a concept that discusses one's proficiency with learning management. In general, pedagogical competence refers to the collection of potential behaviors that enables the effective manifestation of a variety of activities in the classroom. It is a minimal standard that professionals ought to meet in order to deliver effective instruction.

When it comes to the teaching of geography, a sound understanding of both pedagogy and teachers competence is essential for two reasons. Firstly, geography is a complex subject that demands a high level of professional knowledge and understanding from teachers if they are to be able to teach it effectively. Secondly, geography is an important subject that has a significant impact on the students' understanding of the world around them. It is therefore vital that teachers have the necessary knowledge and skills to teach it in a way that is meaningful and engaging for students. In the field of teaching, pedagogy is of utmost importance. It refers to the art and science of teaching and how teachers can be competent in delivering knowledge to their students. This, however, is not limited to the teaching of geography but it could be applied in any field of study. It is important that these geography teachers undergo continuous professional development so that they are updated with the latest teaching methods and strategies. In this way, they are able to effectively engage their students in the learning process.

When exploring the concept of teachers' competence in the teaching of geography, there are three domains which have to be taken into consideration: content knowledge, pedagogical knowledge and professional knowledge. In terms of content

97

knowledge, it is important that teachers are aware of the geographical concepts and have a clear understanding of the subject matter. In terms of pedagogical knowledge, it is essential that teachers are able to plan and deliver quality instruction by using various teaching strategies and tools. As for professional knowledge, it is important that teachers keep up to date with new developments in the field of geography and are able to apply this knowledge in the classroom.

The teaching of geography has long been recognized as a complex and multi-faceted process. As a result, exploring the notion of teachers' competence in this domain has been an ongoing concern for scholars in the field. A range of literature exists that explores this concept from different perspectives. One perspective is provided by Shulman (1987) who defined field knowledge as "a form of knowing that derives from participation in a particular intellectual domain and is mediated by the structures of that domain and the conventions of its practice". For Shulman, pre-service teachers' pedagogical competence for teaching minor subjects is not wellstudied. He argues that teacher education programs should provide opportunities for pre-service teachers to develop their knowledge in the subject they will be teaching.

Teacher competence is a complex construct and there are numerous theories which explore it in detail. Some of these theories focus on the cognitive aspects of teacher competence, while others consider the affective and socio-cultural dimensions. Despite the diversity of perspectives, there is a general consensus that teacher competence is not a static construct, but rather it evolves over time as teachers engage in practice. This unit seeks a study of teachers' competence in the effective teaching of geography in Nigerian schools. The specific objectives are to:

- 1. Examine the basic concepts of pedagogy and teachers' competence in the effective teaching of Geography.
- 2. Analyze the criteria for examining pedagogical competence in Geography.
- 98

- 3. Evaluate the underlying factors responsible the different types of pedagogical approaches.
- 4. Analyze the relationship between digital technologies and learning outcomes.
- 5. Examine the challenges facing effective teaching of Geography in Nigerian schools.

## **Criteria of Examining Pedagogical Competence**

Liakopoulou (2011) held the view that the fundamental prerequisite of pedagogical competence is the sum of the criteria used to 'measure' pedagogical competence as defined at any given time. The concept of "professional knowledge" is complicated and can be broken into two broad terms of amplitude and content. Amplitude as a vardstick to pedagogical competence could further account for four other categories - personality traits of the teacher cultivated through their initial and continuous training (Whitty, 1990); teaching and pedagogical skills in the knowledge of theoretical principles and research findings that result in a variety of techniques and strategies that teachers can choose from and structure according to circumstances, as well as the acquisition of the skills necessary to save time and resources for more important aspects of their work.(Oser et al., 2006; Beyer, 2002); a specialized body of knowledge that can help teachers' effectiveness if it can aid in pedagogical and teaching practice (Shulman, 1987) and lastly, attitudes and beliefs about education, learning, and the teacher's job that influence how students choose, assess, and comprehend knowledge as well as how they apply it to their lives (Zeichner and Liston. 1996).

On the terms of measuring pedagogical competence on the terms of content, Liakopoulou (2011) posited that the conditions and framework in place, on the one hand, and teachers' individual experiences, viewpoints, and needs, on the other, define the body of knowledge that could ensure their competence. As a result, it is very challenging to define this knowledge a priori. However, there are some knowledge areas that are essential for all teachers, or at

99

least for many of them, in order to perform the fundamental duties of their position. These include general pedagogical knowledge, pedagogical approach to the subject taught, knowledge of the students, knowledge of teaching methodology, knowledge of the curriculum, knowledge of context, and knowledge of "self." However, the totality of distributed knowledge cannot be the definition of pedagogical knowledge. A thorough understanding of this body of knowledge is what matters.

# Examining the Different Types of Pedagogical Approaches

When it comes to teaching geography as it is in other disciplines of learning, there are different approaches that can be adopted in order to facilitate learning. These approaches can be broadly divided into three categories: transmission, inquiry, and social constructivist. Transmission pedagogy involves the teacher transmitting knowledge to the students through lectures and direct instruction. Inquiry pedagogy, on the other hand, encourages students to ask questions and explore the topic at hand for themselves. Finally, social constructivist pedagogy focuses on students working together to understand concepts of geography. Each of these approaches has its own advantages and disadvantages. Transmission pedagogy is often seen as being more effective in terms of covering a large amount of material in a short period of time. Inquiry pedagogy can be more effective in terms of developing students' critical thinking skills, while social constructivist pedagogy can help develop teamwork skills. When it comes to pedagogical approaches, there are a few different ones that one should be aware of. Constructivist pedagogy, for example, uses group work in small sizes so that students can share their ideas and learn from each other. This type of pedagogy is based on the idea that knowledge is constructed through experience and social interaction. Collaborative pedagogy, on the other hand, rejects students learning in isolation. In this approach, students work together to construct knowledge, sharing their ideas and working towards a common goal. This type of pedagogy is often seen in

100

cooperative learning groups. The last type of pedagogical approach we'll discuss is teacher-centered pedagogy. As the name suggests, this approach is teacher-driven, with the teacher taking on a more authoritative role. In this approach, the teacher is responsible for delivering information to students and assessing their understanding.

# The Implications of Pedagogy for Learning Outcomes

When it comes to the pedagogical implications of teaching geography, there are two key points one should consider. Firstly, teaching geography relies on the effective use of appropriate methods and techniques in order to maximize learning outcomes. Secondly, teachers need to develop and maintain a high level of competence in their teaching approaches. This is particularly relevant when it comes to instruction that involves the use of Information and Communication Technology tools.

When teachers possess a strong understanding of pedagogy, they are better equipped to deliver an effective learning experience within their classroom environment. They can leverage technology to facilitate interactive lessons that keep students engaged and allow them to explore new concepts with confidence. Furthermore, they are able to create meaningful assessments that measure a student's actual understanding of the material instead of just memorizing facts and figures. As such, it is essential that teachers have a thorough understanding of pedagogical approaches in order to maximize the potential for successful learning outcomes when teaching geography.

It is evident that pedagogy has a direct effect on the learning outcomes of students and that the pedagogical knowledge base of teachers, as well as the knowledge dynamics of the teaching profession, can negatively affect learning outcomes. A lack of teachers' competence in delivering instruction, for example, can have serious implications for student success in geography studies. On a positive note, however, pedagogy in education helps students develop cognitive skills and provides them with an understanding

-101

of their own growth and development process. This is particularly evident in the nine claims of effective pedagogy which focus on longer-term views of learning as they relate to personal growth and development. By understanding these principles and applying them to instruction, teachers can maximize their own effectiveness in the classroom while providing students with valuable life skills that will help them succeed in their future studies.

### How Digital Technologies Can Enhance Learning Outcomes

- 1. Individualised Instruction: Digital technologies are very pertinent to aiding the teaching and learning outcomes in recent times and more importantly in the study of Geography, technology has a huge role to play. Firstly, they can be used as an individually tailored instruction to ensure that the student understands the material at an individual level. This could involve the use of online resources such as interactive maps and quizzes to ensure understanding.
- 2. Facilitating Group Discussion: Digital technologies can be used to facilitate group discussion and collaboration between students in a virtual environment. This could involve online group projects or online activities such as forum discussions or chat rooms where geography topics can be discussed. This is mostly used in higher institutions of learning, particularly during the COVID-19 pandemic where movement and large gatherings were restricted. To a large extent, it sufficed for the usual tripartite modal of learning that involves the classroom, as the online platforms now represented the classroom.
- 3. Research Work in Geography: Digital technologies can also support projects based on field research, such as using technology-based tools for collecting geographical data and analysis. These tools include satellite imagery, Global Positioning System (GPS), aerial photography, and Geographic Information
- 102 -

Systems (GIS). These are professional tools that require in-depth knowledge on usage, processing and handling.

- 4. Promoting Learning Outcomes in Geography: Digital technologies have the potential to greatly enhance learning outcomes in geography and provide students with more opportunities for engaging with their subject matter. Digital technologies can be used to create engaging learning experiences for students, as well as help them develop problem-solving skills. Educators are finding that when technology is used in an effective way, it can accelerate student learning and help achieve better learning outcomes. To achieve this goal, three components need to be taken into consideration: curriculum, pedagogy, and teacher professional development.
- 5. Enhancing Teachers' Pedagogical Knowledge and Skills: Integrating technology into the curriculum requires teachers to be familiar with the content they are teaching and have the necessary pedagogical knowledge to effectively use the technology in their lessons. Teachers should also have the skills to assess student's performance using digital tools and feedback accordingly. Additionally, providing teachers with resources and training that focus on teaching through technology can help them become more proficient in using digital tools in their lessons. This can also provide a platform for teachers to collaborate with peers and share best practices.
- 6. Provision of Room for Students' Creativity and Innovations: By leveraging digital technologies, teachers can create engaging geography lessons that will allow students to explore new concepts and ideas more effectively, hence deepening their interest in the subject matter. Thus, investing in teacher training and professional development programs that promote the utilization of technology would be beneficial for both educators and students alike.



## Challenges of Using Digital Technologies in Teaching and Learning Geography

The effective teaching of geography can present several challenges, both for educators and students. Here are some key challenges that teachers may encounter:

- i. Abstract Nature of Geography: Geography often deals with abstract concepts such as spatial relationships, ecosystems, and human-environment interactions. These abstract concepts can be challenging for students to grasp, requiring teachers to find creative ways to make them more tangible and relatable.
- ii. Conceptual Complexity: Geography encompasses a wide range of topics, including physical geography, human geography, cultural geography, and more. Each subfield has its own complex concepts and theories, making it essential for teachers to break down information into manageable and understandable parts.
- iii. Keeping Pace with Changing World: Geography is inherently dynamic, with constant changes in political boundaries, environmental conditions, population trends, and technological advancements. Teachers need to stay updated with the latest information and integrate current events into their lessons to ensure relevancy.
- iv. Visualizing Spatial Relationships: Understanding spatial relationships is crucial in geography, but visualizing and comprehending maps, graphs, and other spatial representations can be challenging for some students. Teachers need to employ effective visualization techniques and provide ample opportunities for map reading and interpretation.
- v. Multidisciplinary Nature: Geography overlaps with various disciplines, including history, sociology, economics, and environmental science. Integrating these interdisciplinary connections can be demanding for teachers, as they must
- 104

possess a broad knowledge base and develop integrated teaching strategies.

- vi. Limited Time and Resources: Geography is often taught as part of a broader curriculum, which means teachers may have limited time to cover all the necessary topics in depth. Additionally, schools may have limited resources, such as maps, globes, and technology, making it challenging to provide hands-on experiences and engage students effectively.
- vii. Overemphasis on Memorization: In some educational systems, geography is taught through rote memorization of facts, rather than emphasizing critical thinking and spatial analysis skills. This approach can hinder students' understanding and enthusiasm for the subject, requiring teachers to promote inquiry-based learning and critical thinking.

# Remedies for Overcoming Challenges Facing the Effective Teaching of Geography in Nigeria

- i. Professional Development: Encourage ongoing professional development for geography teachers. Provide opportunities for training, workshops, and conferences to enhance their knowledge and pedagogical skills. This can help teachers stay updated with the latest teaching techniques and content knowledge.
- ii. Curriculum Review and Integration: Review the geography curriculum to ensure it aligns with current trends, research, and real-world applications. Integrate interdisciplinary connections by highlighting the relationship between geography and other subjects like history, economics, and environmental science. This can enhance students' under-standing and make the subject more engaging.
- iii. Hands-on Learning and Field Trips: Organize field trips to geographical sites, such as national parks, historical landmarks,

-105

or local communities, to provide students with practical experiences. Incorporate hands-on learning activities, such as map reading, data collection, and analysis, to make geography more tangible and relevant.

- iv. Use of Technology and Multimedia: Leverage technology to enhance geography instruction. Incorporate interactive maps, Geographic Information Systems (GIS), satellite imagery, and online resources to engage students and facilitate visualizations of spatial concepts. Encourage the use of multimedia tools for presentations and virtual field trips.
- v. Inquiry-Based Learning: Foster inquiry-based learning approaches to promote critical thinking and problem-solving skills. Encourage students to explore and investigate real-world geographical issues, conduct research, analyze data, and present their findings. This approach can enhance students' engagement and understanding of geography.
- vi. Community Engagement: Connect with local communities and organizations to bring geography to life. Collaborate with experts, guest speakers, and community resources to provide students with real-world perspectives and experiences. Encourage projects that involve community mapping, environmental conservation, or urban planning.
- vii. Adequate Resources: Advocate for adequate resources and materials for teaching geography, such as maps, globes, atlases, and digital resources. Collaborate with school administrators, policymakers, and relevant stakeholders to ensure the availability of necessary teaching aids and technologies.
- viii. Assessments and Feedback: Develop appropriate assessments that evaluate students' understanding of geography concepts and skills. Provide constructive feedback to students to guide their learning and improvement. Implement varied assessment methods, such as projects, presentations, and hands-on activities, to assess students' understanding beyond traditional exams.



ix. Collaboration and Networking: Encourage collaboration and networking among geography teachers, both locally and globally. Facilitate opportunities for teachers to share best practices, exchange resources, and engage in professional discussions. This can create a supportive community of educators dedicated to improving geography education.

### Conclusion

This unit has highlighted a number of key factors that contribute to teachers' competence in teaching geography. The most important of these are teacher knowledge and understanding of the subject, as well as the ability to engage students in active learning. In addition, teachers' own personal experiences of geography can play an important role in their teaching. The findings of the study have important implications for teacher education and professional development. Teachers must be given the opportunity to deepen their knowledge and understanding of geography, and to learn how to engage students in active learning. In addition, ongoing professional development is necessary to ensure that teachers are kept up to date with the latest developments in the field of geography education. It is evident that in order to teach geography effectively, both the pedagogy and the teachers' competence must be taken into account. This is not only true for geography, but for any other subject that is taught. The research institute calls for further research in this area so that the best possible teaching methods can be implemented.

### Recommendations

Getting the best from the teaching-learning environment is important to both the teachers and students. The stability therefore is of utmost importance as it encourages an involvement of students on one part and an improvement of teachers on the other part. This paper therefore recommends that to overcome these challenges, teachers can employ various strategies, such as using interactive technology,

-107

incorporating real-world examples, conducting field trips, promoting group discussions, and providing hands-on experiences. Creating a supportive and engaging learning environment can help students develop a deeper appreciation for geography and enhance their understanding of the world around them.

#### References

- Beyer, L. (2002). The Politics of Standards and the Education of Teachers, *Teaching Education*, 13 (1), 305-316.
- Biddulph, M., Lambert, D.M and Balderstone, D. (2015). Learning to Teach Geography in the Secondary School: A Companion to School Experience.
- Havia, J., Lutovac, S., Komulainen, T., & Kaasila, R. (2022). Pre-service Subject Teachers' Lack of Interest in Their Minor Subject: Is It a Problem? *International Journal of Science and Mathematics Education*, 19 (1) 0123456789. https://doi.org/10.1007/s10763-022-10277-3
- Liapoukoulou, M. (2011). Teachers' Pedagogical Competence as a Prerequisite for Entering the Profession. *European Journal of Education*. Blackwell Publishing. 46 (4).
- Meijer, P. C., Verloop, N. & Beijaard, D. (2001) Similarities and differences in teachers' practical knowledge about teaching reading comprehension. *The Journal of Educational Research*. 94. 171-184.
- Mishra, P., & Koehler, M. J. (2006). Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge. *Teachers College Record: The Voice of Scholarship in Education*. 108(6), 1017-1054.
- Obadaki, Y.Y., & Omowumi, Y.K. (2013). Comparative Study of Gender Difference Performance in Geography: A Case Study of Some Selected Schools in Zaria Inspectorate Division of Kaduna state, Nigeria. *Educational Research and Review*, 8(5), 179-185.
- Ojewunmi, E. A. (2020). United Nations Sustainable Development Goals. International Journal of Innovative Science and Research Technology, 5(7), 1504-1510.
- Oser, F. et al. (2006) Competence-Oriented Teacher Training: Old Research Demands and New Pathways, Rotterdam, Sense Publisher.
- Popoola AA (2013). Teacher pedagogical competence in teaching and learning in perception of Teachers' knowledge, attitude and teaching skills as predictor of academic performance in Nigerian secondary schools. *Educational Research and Review* 2(9):165-171.
- Shulman, L. S. (1986). Those who understand: knowledge growth in teaching. *Journal of Educational Research*, 4-14.



- Shulman, L. S. (1987). Knowledge and Teaching: Foundations of the New Reform. *Harvard Educational Review*, 57(1), 1-22.
- Urban, E. R., Navarro, M., & Borron, A. (2018). TPACK to GPACK? The examination of the technological Pedagogical Content Knowledge framework as a model for global integration into college of agriculture classrooms. *Teaching and Teacher Education*, 73(1). 81–89. https://doi.org/10.1016/j.tate.2018.03.013.
- Whitty, G. (1996). Professional competences and professional characteristics: the Northern Ireland approach to the reform of teacher education, D. Hustler& D. Mcintyre (eds) *Knowledge and Competence* David Fulton, London.
- Zeichner, K. & Liston, D. (1996) *Reflective Teaching: an introduction*. Lawrence Erlbaum Associates, New Jersey.