



Influence of Teacher's Qualification on Teaching Environmental Education at the Universal Basic Education (Ube) Levels in Akwa Ibom State, Nigeria

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Abstract

This study investigated Influence of Teachers' qualification on Teaching of Environmental Education at the UBE Level in Akwa Ibom State. An Ex-post Facto design was adopted for the study. The purpose of this study is to investigate how teachers' qualification (teacher's communication competence, knowledge of subject matter, teachers' classroom management, teachers capacity to work with other teachers and teachers evaluation capacity) influences the teaching of Environmental Education at the UBE level in Akwa Ibom State, Nigeria. The study research question was on "how does teachers' qualification (teacher's communication competence, knowledge of subject matter, teachers' classroom management, teacher's capacity to work with other teachers and teacher's evaluation capacity) influence the teaching of Environmental Education?" One hypothesis was used to guide the study. The researcher designed a 10 items questionnaire titled Teachers Qualification and Teaching of Environmental Education Questionnaire (TQTEEQ) and administered for data collection. Proportionate stratified random sampling was used to select the sample size of the teachers. A sample of 450 teachers was used from the 3 education zones of the state. The reliability estimate of the instruments was established through Cronbach Alpha Reliability Method with reliability index of 0.78-0.81. ANOVA was the statistical techniques employed to test the null hypothesis. The hypothesis was tested at .05 level of significance. The result of the analysis shows the calculated F-ratios at .05 alpha level as follows: TCC (32.23*), KSM (51.92*), TCM (11.22*), TCWS (67.77*) and TEC (196.09*). From the obtained results, the calculated F-ratios of the five sub-variables are each (significant) higher than the critical F-ratio of 3.02 at .05 alpha level with 2 and 447 degrees of freedom. With these results, the null hypothesis was therefore rejected for each of the sub-variable of teachers' communicative competence (TCC), knowledge of subject matter (KSM), teachers' classroom management (TCM), teachers' capacity to work with other teachers (TCWT) and teachers' evaluation capacity (TEC) were all significant. This means that there is significant influence of teachers' qualification on the teaching of EE in the UBE level in Akwa Ibom state. By these findings, the study recommended among others that learner friendly school can be influenced by the teachers 'qualification.

Keywords: Teachers, qualification, Teaching, Environmental Education

Introduction

Teaching Environmental Education at the lower level of our educational system is a herculean task. To do this, a lot of factors must be considered, some of these factors include the professional training the teacher possess, the pedagogic knowledge of the subject matter, and instructional delivery process. Teacher Educational qualification is a pre-requisite requirement for meeting the

objectives of the teaching profession with a view of actualizing the UBE curriculum. Teacher's qualification as a variables used in this study include teacher's communication competence, knowledge of subject matter, teachers' classroom management, teachers capacity to work with other teachers and teachers evaluation capacity

Every other factor could be seen as ancillary, but teaching qualification is one of the most important factors in improving students' achievement in the teaching of Environmental Education. A teacher who holds the right qualification could have a good communication competence towards the students and could be a sure ground for knowledge of subject matter. This could give the teacher the capacity to work with students and generate change in behavior towards the environment. It also relates to creativity needed for quality productive engagement in the teaching profession. Teachers' certification status and degree in area of specialization are very significant and positively correlated with evaluation competence which also breeds students learning outcomes.

Wild and Schulze, (2021) posited that the actualization of teaching environmental education can be achieved through teaching by a teacher who has gone through the teacher training process and is qualified to impart knowledge that brings about change in behavior, mould and reforms characters, inculcate discipline and the right value as well as equip an individual for sustainable environmental friendliness (Kingsley, 2019). The quality of education is determined by the quality of teachers.

A teacher is the person who discovers, or orders, directs, transmits, disseminates, appraises and administers knowledge, skills, values and attitudes in any teaching and learning setting by virtue of his qualification (Wild & Schulze, 2021; Okemakinde, Adewuyi & Alabi, 2013). Okemakinde, et al., (2013) also mentioned that one attribute of a competent teacher is a very good academic qualification which breeds very good knowledge of the content of the subject matter. These qualities and knowledge are lacking in some of the teachers in the schools today (Shah & Udgaonkar, 2018; Akor & Osaye, 2019).

Raúl, Adiel, María , Adela, Beatriz, and Jorge, (2025) cited the study carried out by Bamidele and Adekola (2017) who examined the effects of teachers' professional qualifications and teaching experience on students' academic achievement in basic science in junior secondary school in Ibarakpa region in Oyo state, found out that there is significant difference in the achievement of students taught by high qualification level teachers and those students taught by low qualification level teachers. The study also found that there is a significant difference in the achievement of students taught by long time experienced teachers and short time experienced teachers. This implies that teachers with high level of qualification in education are likely to perform their duties maximally.

Teachers already serving need to be retrained to acquire more competences and improve their skills. This could be done through in-service training workshops. Practicing teachers need retraining to update their knowledge in a dynamic world of ours, so as to be relevant in the profession. An obsolete teacher loses touch with realities of life and will gradually lose his status as a professionally trained teacher without good qualification (Osaigbovo, 2013; Abubakar, et al., 2019).

Akpan and Ita (2015) investigated the relationship between teachers' professional development for better qualification and quality Universal Basic Education. The study area was Lagos State. Three hypotheses were formulated to guide the study. Correlation design was used for the study and simple random sampling technique was used to select 500 teachers from the primary and junior secondary schools for the study. Data for the study were collected by the use of a researchers' developed instrument titled "Teacher Professional Development and Quality Universal Basic Education Questionnaire (TDPQUBEQ)". The instrument was a 4-point Likert type scale and consisted of 20 items. The reliability coefficient was .85, using Cronbach Alpha reliability method. Pearson product moment correlation statistics was used for data analysis. The findings of the study revealed that teacher participation in induction programme, and seminars/workshop significantly related to quality Universal Basic Education in Lagos State. Premised on these findings, it was

recommended that the government and relevant agencies should intensify effort on the provision for teachers' professional development through in-service education to enhance sustainable quality Universal Basic Education.

Achor, Eje and Odaudu, (2018) found that the teacher is not just an expert in content and pedagogic mastery but also skilled as diagnostician of learners, human learning process, motivation and development. What this entails is that teachers are not just experts in their subject areas and how this knowledge are to be transmitted but also are authorities in understanding the learner, his developmental milestones, personality, belief systems and motivation by virtue of their qualifications (Nezhad & Vahedi, 2011; Achor, et al., 2018).

Amadi, (2022) and Usman, (2010) in their respective studies defined qualified a teacher as one who is professionally trained with certification and/or licensed by the state with the requisite pedagogic knowledge, knowledge of subject matters and instructional strategies to deliver piece of instruction. The qualified teacher should or must have gone through intensive teachers training programme for duration of either 3 years for NCE or 4 years for a bachelor degree from any institution or a postgraduate degree. The author also quotes the Pakistan ministry of education officials who described a qualified teacher as one who possesses knowledge of: the subject matter, human growth and development, ethical values, instructional planning and strategies, assessment, learning environment and skillful use of information technologies (Abubakar, Noordin & Razali, 2019).

Wandera, Winston, and Khithey (2019) investigated the influence of teachers' professional qualifications on pupils' performance at Kenya certificate of primary education examination in English subject in Kenya. The study showed that the teachers' academic qualification significantly influences pupils' performance.

Akwam, Odeh and Ochai (2023) investigated professional qualification and experience as determinants of supervisory practices of head teachers of public primary schools in South East Nigeria. The sample of the study was 5,453 and selected using proportionate stratified random and convenience sampling techniques. The findings of study revealed that there is significant difference

between the mean responses of the head teachers on supervisory practices based on experienced. The study concludes that the professional qualification and work experience are determinant of supervisory practices of head teachers in public primary schools in south East Nigeria.

The variables used to measure teacher's qualifications in this study include: teachers communication competence, knowledge of subject matter, teachers classroom management skills, teachers capacity to work with other teachers and teachers evaluation capacity were used as composite variables.

In a similar vein, In a contrary opinion, Kola and Sunday (2015) believed that qualification as a single factor did not make teachers competent in their areas of specialization rather; it was the combination of teachers' motivational factors and qualifications that made them qualified and competent teachers. However, the National Policy on Education N. P. E. (2004) declared that educational qualification of teachers has effective impact on the teaching-learning process. It further stated that the success of the whole educational system was dependent on the availability of professionally qualified teachers and stressed that teacher education should continue to place major emphasis on all educational planning, because no education system can rise above the quality of its teachers. The NPE showed to this end, the centrality of the role of qualified teachers on the entire education system. The implication was that the quality of a nation's education could only be as high as the qualification of its teachers (Toro, Camacho-Minuche, Pinza-Tapia & Paredes, 2019).

However, Nwokocha (2013), listed authentic certificates accepted for teaching in Nigeria educational system to be as follows: Nigerian Certificate of Education (NCE), B.Sc Ed, B.A. Ed, M.Ed and Ph.D. Those without educational training but are graduates were required to possess a Post Graduate Diploma in Education as added value to their initial qualifications. As far as the provision of human and material resources are concerned, Abdullahi, (2022) opined that for UBE to succeed, adequate provision should be made to produce sufficient qualified teachers and make them relevant within the limit of their area of specialization (Toro, et al.,2019; Margarita & Leonidas, 2021).

Koki (2024) found that teacher's communication competences: Effective communication serves as the backbone of successful education and training. While content knowledge is crucial, the ability to convey information clearly and engage learners meaningfully often determines whether learning objectives are achieved. Educators and trainers who master essential communication skills create environments where knowledge transfer happens naturally, questions flow freely, and understanding deepens through dialogue. Hajj-Hassan, Chaker and Cederqvist, (2024) study found that communication in educational settings goes beyond simply relaying information. It creates connections between educators and learners that foster trust, engagement, and receptivity to new ideas.

Rashidi and Rafieerad, (2020) found that when communication channels are clear and effective, learning becomes a collaborative journey rather than a one-way transmission of facts. The educational environment presents unique communication challenges that differ from everyday conversations. Educators must explain complex concepts to diverse learners with varying levels of background knowledge, learning styles, and motivations. They must also assess understanding through skillful questioning and attentive listening, adapting their approach based on learner responses (Álvarez-Arregui, et al. 2021).

Hajj-Hassan, et al. (2024) further posited that verbal communication forms the primary mode of instruction in most educational settings. The way educator's articulate concepts, explain procedures, and respond to questions directly impacts learner comprehension and retention. Effective educators prioritize clarity above all else. This means using language appropriate to the audience's level, defining specialized terminology, and organizing information in logical sequences. Precision in language helps prevent misunderstandings that can lead to misconceptions or knowledge gaps. Consider the difference between saying "The mitochondria is important for cells" versus "The mitochondria functions as the powerhouse of the cell by generating energy through cellular respiration." The second statement provides specific, actionable knowledge rather than a vague generalization.

Rodríguez-Martín, (2021) also found that how something is said often matters as much as what is said. Effective educators vary their vocal tone, volume, and pace to emphasize key points, maintain interest, and accommodate different processing speeds. Monotonous delivery, regardless of content quality, often results in disengagement and reduced retention. Strategic pauses after important points allow learners to process information and formulate questions. Similarly, speeding up during familiar content while slowing down for complex concepts helps maintain engagement while ensuring comprehension of difficult material. Esu (2017) observed that active listening in educational settings demonstrates respect for learners while providing valuable insight into their understanding and concerns. Key techniques include:

- Full attention: Maintaining eye contact, eliminating distractions, and observing nonverbal cues.
- Paraphrasing: Restating learner contributions in different words to confirm understanding.
- Clarifying questions: Asking targeted questions to resolve ambiguities or deepen understanding.
- Withholding judgment: Receiving ideas openly before evaluating their accuracy or relevance.
- Note-taking: Recording key points or questions for later reference and follow-up.

When educators demonstrate these behaviors, they not only gather valuable information but also model effective listening skills for learners to emulate.

Studies have shown that teachers' professional training before service and on the training (pre-service and in-service and professional development/PD) is widely recognised as a key lever for improving teaching competence (Toro, et al. 2019; Álvarez-Arregui, et al. 2021). Teachers qualification is defined here as the combination of subject knowledge, pedagogical skill, classroom management, and adaptive use of resources in the teaching and learning process. Recent syntheses and meta-analyses show that professional development (PD) produces reliably positive but typically modest classroom and student learning gains; the size of impact depends heavily on the teachers

professional development design (duration, content-focus, active learning, and coaching/mentoring)(Margarita & Leonidas, 2021).

Achor, Eje and Odaudu, (2018) posited that pedagogical knowledge (PK) and pedagogical content knowledge (PCK) are central constructs in teacher expertise, generally referred to as teachers knowledge of subject matter. Pedagogical knowledge refers to general principles and strategies of classroom teaching (classroom management, assessment, lesson planning, instructional approaches). Pedagogic content knowledge (PCK) coined and popularized by Lee Shulman in the mid-1980s captures the specialized blend of subject-matter knowledge and pedagogy. The teacher's ability to represent, explain and sequence domain ideas so learners can understand them (e.g., selecting analogies, using particular representations, anticipating student difficulties). Shulman's original formulations established PCK as a distinctive, practice-oriented knowledge base for teaching (Shulman, 1986).

Subject-matter knowledge (SMK) concerns depth and breadth of understanding of environmental sciences, policy, and interdisciplinary linkages. Strong SMK allows teachers to respond to students' misconceptions, connect concepts across disciplines, and contextualize learning. Prior research reports that university lecturers often have good SMK but may lack the pedagogic tools to translate it into effective learning experiences. Strong subject-matter expertise enhances teachers' confidence and ability to handle complex student inquiries and to design authentic learning experiences (Zeichner, 2005). In EE, deep content knowledge supports linking theory to field practice.

Teachers' subject-matter knowledge (SMK) in Environmental Education (EE) encompasses factual knowledge about ecosystems, climate science, sustainability concepts, and place-based/local environmental issues is widely recognised as a prerequisite for high-quality EE service delivery (the practical translation of curriculum into learning experiences, community engagement, assessment and stewardship activities). International policy guidance frames

Empirical and review evidence indicates PCK is strongly associated with instructional decisions and student learning, but it is complex to measure and develop. Subject-specific studies

(especially in mathematics and science) show that teachers' PCK predicts the quality of their explanations, diagnostic questioning, and ability to respond to student thinking; interventions and targeted professional development can improve elements of PCK, though effect sizes and durability vary by design. Recent systematic reviews and meta-analyses synthesize intervention studies and map how PD features (practice-based tasks, classroom-embedded coaching, and sustained cycles of reflection) is linked to stronger PCK outcomes. Nevertheless, reviews note gaps: inconsistent operational definitions, limited longitudinal work, and few large-scale randomized trials in diverse contexts (Fukaya, 2024; Hajj-Hassan, Chaker & Cederqvist, 2024).

Teaching competence comprises lesson delivery, assessment literacy, clarity, and classroom management. Classroom management in EE can be distinct because pedagogies often require field activities and groupwork, which call for proactive risk management and logistics skills. Effective classroom management and use of varied teaching strategies (problem-based learning, fieldwork, service learning) are associated with improved student engagement and learning outcomes in environmental education (O'Neill, Kelly, McCormack & Azevedo, (2024). Teaching competence is an integrated set of knowledge, skills, and dispositions that enable effective instruction depends fundamentally on strong classroom management. Across recent syntheses and empirical studies, classroom management (clear routines, proactive behavior systems, strong teacher–student relationships, and instructional time management) is repeatedly identified as one of the largest, most reliable levers for improving classroom climate and student learning (Larasaty, Rohmat, Somantri & Fitriana, 2024).

Communication is the bridge that connects teachers and students, allowing them to understand each other's needs, goals, and challenges. Effective communication goes beyond simply giving instructions or answering questions. It involves creating a dialogue that is two-way—teachers listen, understand, and respond to students' needs, and students feel comfortable sharing their thoughts and concerns. Open communication encourages active participation and enhances the overall learning experience. When students can freely ask questions, share ideas, or clarify doubts,

they are more likely to engage with the material and absorb the content being taught. Teachers can encourage this by fostering an environment where students feel that their input is not only welcome but also valued.

Feedback is a key component of effective communication. It helps students understand what they're doing well and where they need to improve. But feedback should be constructive, specific, and actionable. Rather than simply saying "good job" or "try harder," provide insights into what the student did well and offer clear suggestions for improvement. This approach makes feedback more meaningful and motivates students to keep striving for success.

To create an atmosphere of open dialogue and constructive feedback, teachers can:

- Encourage questions: Let students know that it's okay to ask questions and seek clarification.
- Offer positive reinforcement: Acknowledge progress and achievements to build students' confidence.
- Use a variety of feedback methods: In addition to verbal feedback, consider using written comments, peer reviews, or one-on-one conferences to make feedback more personalized and accessible.

In every classroom, the relationship between teachers and students plays a crucial role in the learning process. It's not just about lectures and textbooks—it's about creating a connection that fosters trust, respect, and open communication. When a teacher builds a positive relationship with their students, it transforms the classroom into a thriving environment where learning is more effective and engaging. This blog post explores how teachers can build these relationships and the significant impact they have on the overall educational experience. At the heart of any successful teacher-student relationship lies mutual respect and trust. These two elements are foundational because they create a safe space where students feel valued and teachers can guide them effectively. Without these, students might not feel motivated to participate or engage in classroom activities, and teachers may struggle to connect with their students.

Teachers' working relationship with other teachers involves mutual respect for each other. Mutual respect ensures that all teachers see each other as equals, despite the inherent power imbalance in the classroom and school settings. This doesn't mean teachers should have the same level of authority over other teachers, but it does mean their opinions, feelings, and perspectives are acknowledged. When colleagues teachers feel respected, they are more likely to open up, share their thoughts, and engage in the learning process.

Trust among teachers is equally crucial, without which any school or classroom relationship will remain surface-level. Trust builds over time as teachers demonstrate their commitment towards colleagues and their students' well-being and academic growth. When colleagues trust fellow teachers, they feel safe to ask questions, admit confusion, and seek help without fear of judgment. This openness is a key ingredient for better learning outcomes.

Larasaty, et al. (2024) in their study posited that in practical terms, teachers can foster mutual respect and trust by:

- Listening actively to each other: Show genuine interest in what they have to say, even if it's not directly related to the teacher.
- Maintaining fairness: Treat all teachers equally and avoid favoritism. This builds respect and trust among the entire school.
- Being transparent: Share expectations clearly, and be honest about what other teachers and the students need to do to succeed.

Improving students' relationships with teachers has important, positive and long-lasting implications for both students' academic and social development. Solely improving students' relationships with their teachers will not produce gains in achievement. However, those students who have close, positive and supportive relationships with their teachers will attain higher levels of achievement than those students with more conflict in their relationships.

Purpose of the study

The main purpose of this study is to investigate how teachers' qualification influences teaching of Environmental Education at the UBE level in Akwa Ibom State, Nigeria. Specifically, this study is designed to investigate;

1. How teachers' qualification influence teaching of Environmental Education.

Statement of hypotheses

For the purpose of this study, the following null hypotheses were proposed:

1. There is no significant influence of teachers' qualification on teaching of Environmental Education.

Methodology

Expose Facto research design was adopted. The study was conducted in Akwa Ibom State. The sample size of the study consisted of 450 UBE teachers across the three education zones of the state. A self-developed questionnaire was used as instrument for data collection titled Teachers Qualification and Teaching Environmental Education Questionnaire (TQTEEQ) designed by researchers. The questionnaire has two sections (A and B). Section A consisted of personal data while section B consisted of 10 items in the form of four-point Likert scale of Strongly Agree – SA, Agree – A, Disagree – D, and Strongly Disagree – SD was designed to elicit information from the respondents to indicate their level of agreement or disagreement with the item. The instrument was validated by three experts while Cronbach Alpha was used to test the reliability and the coefficient yielded 0.89. The copies of the questionnaire were administered by the researchers with three research assistants trained for the purposed. The data collected for the study were analysed using one-way analysis of variance (ANOVA) and independent t-test.

Results

There is no significant influence of teachers' higher qualification on teaching of EE.

The independent variable in this hypothesis is teachers qualification categorized into B.Sc./B.Ed., M.Ed. and Ph.D., while the dependent variable is teaching of EE in terms of the five sub-variables of TCC, KSM, TCM, TCWS and TEC. The statistical analysis therefore deployed to

test this hypothesis was the one-way analysis of variance (ANOVA). The results of the analysis are presented in Table 1.

The upper part of Table 1 shows the sizes, means and standard deviations of the three groups based on their qualification. The actual results of ANOVA show calculated F-ratios at .05 alpha level as follows: TCC (32.23*), KSM (51.92*), TCM (11.22*), TCWS (67.77*) and TEC (196.09*).

From the obtained results, the calculated f-ratios of the five sub-variables are each (significant) higher than the critical F-ratio of 3.02 at .05 alpha level with 2 and 447 degrees of freedom. With these results, the null hypothesis was therefore rejected for each of the sub-variable of communicative competence, knowledge of subject matter, classroom management, capacity to work with students and evaluation capacity. This means that there is significant influence of teachers' qualification on the teaching of EE in all the five sub-variables of the dependent variable.

Given the significant F-ratio for the five sub-variables, a multiple comparison analysis using Fisher's Least Square Difference (LSD) was done to determine exactly which group; B.Sc./B.Ed., M.Ed. and Ph.D. differed significantly from others in favor of the five sub-variables, the results of the analysis is presented in Table 2. The pattern of the influence of teachers' highest qualification on the teaching of EE is as follows:

i. TCC

The significant mean difference of 2.23650 and 1.95161 indicate that the teaching of EE of teachers with Ph.D. is significantly higher than those of teachers with M.Ed and B.Sc. Furthermore, the teaching of EE of teachers with Ph.D is significantly higher than those with M.Ed.

ii. KSM

The significant mean difference of 1.27035, 0.90304 and 2.17339 indicate that the teaching of EE of teachers with Ph.D. is significantly higher than those with B.Sc./B.Ed. and M.Ed. However, the teaching of EE of teachers' with B.Sc./B.Ed. is significantly higher than those of teachers with M.Ed.

iii. TCM

The significant mean difference of 0.53488, 1.02682 and 0.49194 indicates the teaching of EE of teachers' with Ph.D. is significantly higher than those of teachers with B.Sc./B.Ed. and M.Ed. More so, the teaching of EE of teachers with M.Ed. is significantly higher than those of teachers with B.Sc./B.Ed.

Table 1: Analysis of variance of influence of teachers' qualification on their teaching of Environmental Education

Sub variables of teachers qualifications	Group		N	$\bar{X}$	SD	
Teacher communicative competence	1.	B.Sc/ B.Ed,	86	22.96	2.56	
	2.	M.Ed	240	23.25	2.38	
	3.	PhD	124	25.20	2.33	
	Total		450	23.73	2.57	
Knowledge of the subject matter	4.	B.Sc/ B.Ed,	86	20.89	1.53	
	5.	M.Ed	240	19.62	2.39	
	1.	PhD	124	21.79	1.17	
	Total		450	20.46	2.18	
Teacher classroom management	1.	B.Sc/ B.Ed,	86	20.96	1.49	
	2.	M.Ed	240	21.50	1.87	
		PhD	124	21.99	.63	
	Total		450	21.53	1.58	
Teachers capacity to work with teachers	1.	B.Sc/ B.Ed,	86	17.34	1.28	
	2.	M.Ed	240	17.12	1.61	
		PhD	124	17.79	1.47	
	Total		450	17.73	1.73	
Teachers' evaluation capacity	1.	B.Sc/ B.Ed,	86	19.56	2.43	
	2.	M.Ed	240	22.62	1.11	
		PhD	124	23.20	.75	
	Total		450	22.20	1.90	
Sub variables of teachers qualifications	Source of variation	Sum of squares	Df	Mean square	F-ratio	Sig
Teacher communicative competence	Between groups	374.145	2	187.07	32.23*	.00
		2593.855	447	5.80		
	Within groups	2968.00	449			
	Total					
Knowledge of the subject matter	Between groups	405.73	2	202.86	51.92*	.00
		1746.26	447	3.90		
	Within groups	2152.00	449			
	Total					
Teacher classroom	Between	54.11	2	27.05	11.22*	.00

management	groups	1077.88	447	2.41		
	Within	2152.00	449			
	groups					
	Total					
Teachers capacity to work	Between	313.11	2	156.83	67.77*	.00
with teachers	groups	1034.33	447	2.31		
	Within	1348.00	449			
	groups					
	Total					
Teachers' evaluation capacity	Between	762.70	2	381.35	196.09*	.00
	groups	869.29	447	1.94		
	Within	1632.00	449			
	groups					
	Total					

* P <.05; critical F_{2,447} = 3.02

Table 2: Results of Fisher's least significant difference (LSD) multiple comparison analysis of the significant influence of teachers' teaching qualifications on their teaching of Environmental Education (EE) concept at the UBE level (Knowledge of the subject matter, Teacher classroom management and Teachers' evaluation capacity)

Dependent Variable	(I) Qualification	(J)	Mean Difference		Sig.
		Qualification	(I-J)	Std. Error	
TCC	B.Sc./B.Ed.	M.Ed.	-.28488	.30274	.347
		Ph.D.	-2.23650(*)	.33804	.000
	M.Ed.	B.Sc./B.Ed.	.28488	.30274	.347
		Ph.D.	-1.95161(*)	.26641	.000
KSM	Ph.D.	B.Sc./B.Ed.	2.23650(*)	.33804	.000
		M.Ed.	1.95161(*)	.26641	.000
	B.Sc./B.Ed.	M.Ed.	1.27035(*)	.24840	.000
		Ph.D.	-.90304(*)	.27736	.001
	M.Ed.	B.Sc./B.Ed.	-1.27035(*)	.24840	.000
		Ph.D.	-2.17339(*)	.21859	.000
TCM	Ph.D.	B.Sc./B.Ed.	.90304(*)	.27736	.001
		M.Ed.	2.17339(*)	.21859	.000
	B.Sc./B.Ed.	M.Ed.	-.53488(*)	.19516	.006
		Ph.D.	-1.02682(*)	.21791	.000
	M.Ed.	B.Sc./B.Ed.	.53488(*)	.19516	.006
		Ph.D.	-.49194(*)	.17174	.004

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TCWS	Ph.D.	B.Sc./B.Ed.	1.02682(*)	.21791	.000
		M.Ed.	.49194(*)	.17174	.004
	B.Sc./B.Ed.	M.Ed.	2.22384(*)	.19117	.000
		Ph.D.	1.55851(*)	.21346	.000
	M.Ed.	B.Sc./B.Ed.	-2.22384(*)	.19117	.000
		Ph.D.	-.66532(*)	.16823	.000
TEC	Ph.D.	B.Sc./B.Ed.	-1.55851(*)	.21346	.000
		M.Ed.	.66532(*)	.16823	.000
	B.Sc./B.Ed.	M.Ed.	-3.05523(*)	.17526	.000
		Ph.D.	-3.63185(*)	.19569	.000
	M.Ed.	B.Sc./B.Ed.	3.05523(*)	.17526	.000
		Ph.D.	-.57661(*)	.15423	.000
	Ph.D.	B.Sc./B.Ed.	3.63185(*)	.19569	.000
		M.Ed.	.57661(*)	.15423	.000

However, the teaching of EE of teachers with Ph.D is significantly higher than those of teachers with M.Ed.

iv. TEC

The significant mean difference of 3.05523, 3.03185 ad 0.57661 indicates that the teaching of EE of teachers with Ph.D. is significantly higher than those of teachers with B.Sc./B.Ed. and M.Ed. is significantly higher than those of teachers with B.Sc./B.Ed.

Discussion of findings

The result of the study show calculated F-ratios at .05 alpha level as follows: TCC (32.23*), KSM (51.92*), TCM (11.22*), TCWS (67.77*) and TEC (196.09*).

From the obtained results, the calculated F-ratios of the five sub-variables are each (significant) higher than the critical F-ratio of 3.02 at .05 alpha level with 2 and 447 degrees of freedom. With these results, the null hypothesis was therefore rejected for each of the sub-variable of communicative competence, knowledge of subject matter, classroom management, capacity to work with students and evaluation capacity. This means that there is significant influence of teachers' qualification on the teaching of EE in all the five sub-variables of the dependent variable.

The findings are in line with the view of Akpan and Ita (2015), Maguire, Dillon and Mahony (2011). Osaigbovo (2013), the authors pointed out that an obsolete teacher loses touch with realities of life and will gradually lose his status as a professionally trained teacher without good qualification. Nezhad & Vahedi (2011) also posited that the teacher is not just an expert in content and pedagogic mastery but also an authority by virtue of his qualifications. All these findings are in line with the fact that teachers' qualification is significant to teaching of EE.

Conclusion

This study has demonstrated the relative influence of teachers' qualification on teaching of Environmental Education. The data generated from this research point to the critical role of teachers' qualification in determining the teaching of Environmental Education. Most prominent indication is that teachers' qualification is significant on all the five sub variables employed for the study.

Recommendations

On the basis of the findings of this study, the following recommendations were made

1. Learner friendly school can be influenced by the teachers teaching qualification. Those with high teaching qualification understand and maneuver with teaching of Environmental Education. On this note, a learner-friendly school, the acceptance level of teachers with high teaching qualification should be the criteria for teaching EE.
2. Teachers who are expected to be effective in teaching of EE at UBE level have to be trained for different educational purposes, so that they can acquire experience required to implement the curriculum.
3. Seminars and workshops should to be organized for teachers. Also, government should intensify efforts in effective supervision of teachers to acquaint them with new ideas in the implementation of the Universal Basic Education programme.

References

- Abdullahi, N. J. K. (2022). Curriculum management strategies and effective implication of Universal Basic Education in Nigeria. *International journal of learning and instruction*. 2(74), 55-70.

- Abubakar, N. I., Noordin, N. & Razali, A. (2019). Improving oral communicative competence in English using project-based learning activities. *English Language Teaching*, 12 (4), 73-84. Published by Canadian Center of Science and Education. Retrieved 1st November, 2019 from URL: <https://doi.org/10.55539/elt.v12n4p73>
- Achor, E.E., Eje, E.E., & Odaudu, R. E. (2018). Training needs of basic science teachers in Benue State, Nigeria. *Journal of Research in Curriculum and Teaching*, 10 (2), 110-117.
- Akpan, C. P. and Ita, A. A. (2015). Teacher professional development and quality. *Universal Basic Education in Lagos State, Nigeria*, 3(9), 65-76.
- Akor, V. E. and Osaye, O. J. (2019). Teacher quality effects on senior secondary school students: Implication for Agricultural Science- Teachers in Rivers State, Nigeria. *Nigerian journal of Contemporary Studies*. Vol 3. No. 1
- Akwan, N. J., Odeh, R. C. & Ochai G. (2023). Professional Qualifications and Experience as Determinants of Supervisory Practices of Head Teachers of Public Schools in South East Nigeria. *International Journal of Research and Innovation in Social Science*. 7(3), 219-227.
- Álvarez-Arregui, E., Pérez-Navío, A. & Rodríguez-Martín, A.A., (2021). Pedagogical Leaders and the Teaching—Learning Processes in COVID-19 Times *International Journal of Environmental Research and Public Health*, 18 (2021) <https://doi.org/10.3390/ijerph18157731>
- Amadi, S. (2022). Teachers' Educational Qualification and Competence as Correlates to Students' Academic Performance of Public Senior Secondary Schools in South-South, *Journal of Education and Society*, 12(3), 3234–3248, June 2022.
- Awodjii, O. A., Ogbudinkpa, I., C., Agharanya M. C. (2020). Teacher professional development: A Panacea to quality education in Nigeria. *International Journal of Educational Management*. 18(1), 11-23.
- Enukoha, O. I. (2011). Cross River State Pre-sumit Education: Some Considerations. A paper presented at Cross River State Pre-sumit on Education on 2-3rd March, 2011.
- Esu, A. E. (2017). Occupational Socialization and Teacher Education (EDC 857). Unpublished lecture notes of Teacher Education Unit, Calabar: University of Calabar.
- Federal Government of Nigeria, FGN (2004). National policy on education. Lagos: NERDC Press.
- Fukaya, T. (2024). *A systematic review and meta-analysis of intervention studies on mathematics and science PCK*. *Frontiers in Education*, 9:1435758. <https://www.frontiersin.org/articles/10.3389/feduc.2024.1435758>.
- Hajj-Hassan, M., Chaker, R., & Cederqvist, A.-M. (2024). *Environmental education: A systematic review on the use of digital tools for fostering sustainability awareness*. *Sustainability*, 16(9), 3733. <https://doi.org/10.3390/su16093733>.
- Kingsley, C. E. (2019). Teacher variables and teaching of environmental education at universal basic education (UBE) level in Cross River State, Nigeria. *Journal of Environmental and Tourism Education (JETE)*. 2(2), 35-49.

- Koki, A. T. A. (2024). Assessment of classroom lesson presentation competence level of qualified and unqualified university lecturers in North East, Nigeria. *Journal of Human, Social and Political Science Research*. 6(6), 172-179.
- Kola, A. J & Sunday, O. S. (2015). A review of teachers' qualification and its implication on students academic achievement in Nigerian schools. *International journal of educational research and information science*. 2(2) 10-15.
- Larasaty, D., Rohmat, D., Somantri, L., & Fitriana, A. N. (2024). *Teacher's role in enhancing students' environmental literacy: A systematic literature review 2019–2024*. *Jurnal Pendidikan MIPA*, 25(3), 1133–1150.
- Maguire M., Dillon, J., and Mahony, P. (2011). Reforming teachers and their works. In J. Dillon and M. Maguire (eds). *Becoming a Teacher: issues in Secondary Education* Open University Press: UK: CPI Group Ltd. Co.
- Margarita, C. & Leonidas, K., (2021). Developing teacher assessment skills: The impact of the dynamic approach to teacher professional development, *Studies in Educational Evaluation*, 70, 101051, <https://doi.org/10.1016/j.stueduc.2021.101051>.
- N.P.E (2004). National policy on education. Federal Government of Nigeria.
- Nezhad, A. S. and Vahedi, M. (2011). The role of educational psychology in teacher education programmes. *Journal of social and behavioral sciences* 30 (17), 327-330. Retrieved from [http:// www.sciencedirect.com](http://www.sciencedirect.com).
- Nwokocha, A. M. (2013). The role of certification and licensing in improving teacher quality. *Nigerian journal of Professional Teachers*. 3, 1-9.
- Offorma, G. C. (2011). Re-engineering teacher education in Nigeria for quality service delivery. *Journal of Educational Studies and Research*, 6(2), 1-14.
- Okemakinde, T., Adewuyi, J. O. & Alabi, C. O. (2013). The place of teacher in national development in Nigeria.: *European journal of Humanities and Social Science*. 19(1).
- O'Neill, D., Kelly, R., McCormack, O., & Azevedo, N. H. (2024). *A systematic review on education outside the classroom: Lessons for science EOC practices*. *Sustainability*, 16(13), 5346. <https://doi.org/10.3390/su16135346>.
- Osaigbovo, J. A. (2013). Teacher education and professionalizing teaching in nigeria for national development. *Journal of Teacher Perspective (JOTEP)*, 7(1), 13-26.
- Rashidi, N. & Rafreerad, M. (2020). Analyzing patterns of classroom interaction in EFL classroom in Iran. *The journal of Asia TEFL*. 7(3), 93-120.
- Raúl, G-F., Adiel, R.-C., María C. M.D., Adela, Beatriz, S-Á., Jorge, L. D.S., (2025). Teachers' teaching and professional competences assessment, Evaluation and Program Planning, 103, 102396, <https://doi.org/10.1016/j.evalprogplan.2023.102396>.
- Shah, S. R. & Udgaonkar, U. S. (2018). Influence of gender and age of teachers on teaching: Students perspective. *International Journal of Current Microbiology and Applied Sciences* 7 (1), 2436-2441.

- Shulman, L. S. (1986). *Those who understand: Knowledge growth in teaching*. Educational Researcher.
- Toro, V., Camacho-Minuche, G., Pinza-Tapia, E. & Paredes, F. (2019). The use of communicative language teaching approach to improve students' oral skills. *English Language Teaching*, 12 (1), 110-118. Canadian Center of Science and Education Publishers.
- Wandera, N. S., Winston, J. A. & Khithey, R. I. (2019). Influence of teachers' academic qualification on pupils' performance of Kenya certificate of primary education examination in English subject in Kenya. *Journal of research and method in education.*, 9(3), 1-7.
- Wild, S & Schulze, L., (2021). Re-evaluation of the D21-digital-index assessment instrument for measuring higher-level digital competences *Studies in Educational Evaluation*, 68, 10.1016/j.stueduc.2021.100981