



QUALITIES OF INSTRUCTIONAL DESIGN FOR INNOVATIVE TEACHING AND TRANSFORMATION IN TEACHERS' EDUCATION IN KOGI STATE, NIGERIA

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ABSTRACT

This study explores the qualities of instructional design that foster innovative teaching and transformative outcomes in teacher education within Kogi State, Nigeria. Instructional design is crucial for shaping effective teaching practices and enhancing the learning experience for future educators. As educational demands evolve, particularly in the context of Kogi State's unique socio-cultural landscape, high-quality instructional design becomes essential for equipping teachers with the skills necessary to engage learners actively and adapt to modern teaching environments. The research employs a correlational design to examine the impact of instructional design qualities on innovative in teaching and transformation in teachers' education. A sample of 300 participants was drawn from various teacher education institutions across Kogi State. Data were collected using a structured questionnaire measuring the qualities of instructional design, innovative teaching practices, and transformative education indicators. The findings reveal a strong positive relationship between the qualities of instructional design and innovative teaching ($r = 0.745, p < 0.001$), indicating that enhanced instructional design significantly improves innovative teaching practices. Similarly, the study finds a moderate to strong positive correlation between instructional design qualities and transformative outcomes in education ($r = 0.664, p < 0.001$), suggesting that effective instructional frameworks contribute to the professional growth and adaptability of educators. These results highlight the critical role that well-structured instructional design plays in preparing teachers who can respond to the demands of contemporary classrooms. The study emphasizes the need for continuous professional development in instructional design for educators and recommends that policymakers integrate instructional design standards into teacher education curricula. By addressing these areas, Kogi State can enhance the quality of its teacher preparation programs, fostering both innovative and meaningful transformation in education.

KEYWORDS: Instructional Design, Innovative Teaching, Transformative Education and Teacher Education.

INTRODUCTION

Instructional design plays a pivotal role in shaping the quality and effectiveness of teaching and learning processes, particularly in teacher education. It encompasses the systematic development of instructional materials, activities, and assessments aimed at facilitating meaningful learning experiences. In the context of teachers' education, high-quality instructional design is essential to equip future educators with innovative teaching skills and the ability to adapt to dynamic educational environments (Ukwandu & Onyeneke, 2021). Innovative teaching refers to the use of novel and creative pedagogical strategies that enhance learner engagement, critical thinking, and problem-solving skills. It encourages teachers to move beyond traditional methods, integrating technology, collaborative learning, and learner-centered approaches. Quality instructional design provides the framework necessary to implement these innovative practices effectively (Omolewa, 2024).

Transformation in teachers' education involves a profound change in the knowledge, attitudes, and competencies of educators, enabling them to respond to evolving educational demands. Transformative teacher education fosters reflective practices, cultural responsiveness, and adaptability, which are crucial for nurturing future-ready educators. Instructional design qualities that support transformation focus on flexibility, inclusiveness, and continuous improvement (Duru-Uremadu, 2024). Globally, there has been increasing attention on improving teacher education through the integration of instructional design principles that promote innovative and transformation. Nkom (2022) observed that well-designed instructional frameworks can lead to enhanced teaching



outcomes, better learner engagement, and sustained professional development among teachers. However, the extent to which these qualities influence teacher education varies across contexts (Adeoye, 2023).

In Nigeria, teacher education faces numerous challenges including outdated curricula, limited access to resources, and resistance to change. These issues hinder the adoption of innovative teaching methods and slow down transformative processes in teacher training programs. As such, the role of instructional design becomes even more critical in addressing these challenges to improve educational quality (Nkom, 2020). Kogi State, like many other Nigerian states, has been striving to enhance the quality of its teacher education programs. Recent reforms emphasize the need for innovative and transformation to align with global educational trends. However, empirical evidence on how instructional design qualities impact these goals within the state remains scarce, limiting the ability of policymakers and educators to make informed decisions (Mejiuni, 2023).

However Ireh (2023) noted that instructional design in Nigerian teacher education has predominantly focused on curriculum content and delivery methods, with limited attention to its specific qualities and their direct effects on innovative and transformation. Moreover, studies tend to generalize findings across broad regions without focusing on localized contexts such as Kogi State, which has unique socio-cultural and educational dynamics (Mohammed & Ashiru, 2022). Furthermore, existing literature often overlooks the interrelationship between the qualities of instructional design and their dual impact on both innovative teaching and transformative outcomes. Understanding this relationship is vital to designing teacher education programs that are both forward-thinking and responsive to systemic changes in education (Olugbade & Olurinola, 2024).

The rapid advancement of educational technologies and pedagogical theories globally necessitates instructional designs that are adaptable and forward-looking. Teacher education programs must, therefore, integrate these qualities to produce educators capable of fostering innovative classrooms and leading transformative educational change (Obanya, 2022). This study is significant because it seeks to fill the knowledge gap concerning the specific qualities of instructional design that promote innovative and transformation in teacher education within Kogi State. Focusing on this context, the study will provide actionable insights relevant to educators, administrators, and policymakers seeking to enhance teacher preparation (Omolewa, 2021).

In addition, the curriculum development, professional training, and resource allocation in teacher education institutions, ensuring that instructional designs are not only theoretically sound but also practically effective in producing innovative and transformative educators (Adeoye, 2023). Despite the acknowledged importance of instructional design, the gap in localized empirical research on its qualities and impacts on innovative teaching and transformation in Kogi State's teacher education remains unaddressed (Ajasin, et al., 2023). This study aims to bridge this gap by providing evidence-based analysis specific to the state's educational context. Although instructional design is recognized globally for its role in enhancing teacher education, limited empirical studies focus on its specific qualities affecting innovative and transformation in the Nigerian context, particularly in Kogi State. This lack of localized data restricts effective program development and policy formulation to support innovative and transformative teaching practices.

STATEMENT OF THE PROBLEM

Teacher education in Nigeria, including Kogi State, has long struggled with outdated instructional methods and curricula that fail to adequately prepare educators for the demands of modern classrooms. Despite efforts to introduce innovative and transformative practices, many teacher education programs remain largely traditional, limiting the development of critical skills necessary for 21st-century teaching. According to the Nigeria Education Data Survey (2022), only 35% of teacher training institutions across the country have integrated innovative teaching methodologies into their curricula, highlighting a significant gap in preparing teachers for dynamic educational environments. Quality instructional design is essential for fostering innovative and transformation in teacher education, yet in Kogi State, there is limited empirical evidence on how instructional design qualities impact these outcomes. This lack of localized research has resulted in a weak understanding of which instructional design elements are most effective in promoting innovative teaching practices and transformative change. Consequently, teacher education programs may continue to apply generic approaches that do not address the unique challenges and opportunities within Kogi State's educational landscape.

The gap in empirical data and contextual understanding poses a serious challenge for policymakers and educators seeking to improve teacher education in Kogi State. Without evidence-based insights, it is difficult to design and implement instructional frameworks that can effectively stimulate innovative and transformation. This problem is underscored by recent educational reports indicating that only 28% of teachers trained in Kogi State feel



adequately prepared to employ innovative instructional strategies, reflecting an urgent need to investigate how instructional design qualities influence these critical outcomes. There is a lack of empirical research specifically examining the qualities of instructional design that impact innovative and transformation in teacher education within Kogi State. This gap limits the ability to develop targeted interventions that address the state's unique educational needs.

OBJECTIVES OF THE STUDY

The purpose of the study is to examine qualities of instructional design for innovative teaching and transformation in teachers' education in Kogi State, Nigeria. The study aim to;

1. Examine the impact of qualities of instructional design on innovative teaching in teachers' education in Kogi State, Nigeria
2. Examine the impact of qualities of instructional design on transformation in teachers' education in Kogi State, Nigeria

RESEARCH QUESTIONS

1. What is the impact of qualities of instructional design on innovative teaching in teachers' education in Kogi State, Nigeria
2. What is the impact of qualities of instructional design on transformation in teachers' education in Kogi State, Nigeria

METHODOLOGY

This study employed a correlational research design to investigate the impact of qualities of instructional design on innovative teaching and transformation in teachers' education in Kogi State, Nigeria. This design was appropriate because it allowed the researcher to examine the strength and direction of the relationships between the instructional design qualities and the educational outcomes without manipulating any variables. The study was conducted in Kogi State, targeting teachers and trainee teachers in selected colleges of education and universities offering teacher education programs. The population consisted of approximately 1,200 individuals involved in teacher education across the state, providing a suitable scope for examining the variables of interest.

A sample of 300 participants was drawn using a stratified random sampling technique to ensure representation from different institutions and teaching experience levels. This method helped achieve a balanced and diverse sample reflective of the broader population, which enhanced the generalizability of the findings. Data were collected through a structured questionnaire developed by the researchers, which included items measuring the qualities of instructional design, innovative teaching practices, and indicators of transformation in teacher education. The instrument demonstrated good reliability with a Cronbach's alpha of 0.82. The collected data were analyzed using the Pearson Product-Moment Correlation (PPMC) to determine the strength and significance of the relationships between the qualities of instructional design and the two dependent variables: innovative teaching and transformation in teacher education.

RESULTS

Research Question One: What is the Impact of Qualities of Instructional Design on Innovative Teaching in Teachers' Education in Kogi State, Nigeria?

Table 1: Analysis on the responses of the relationship between Qualities of Instructional Design and Innovative Teaching in Teachers' Education in Kogi State, Nigeria

Variable	Mean	SD	N	Df	r-cal	p	Remark
Innovative Teaching	36.60	14.23	300	298	.745	.000	Significant
Qualities of Instructional Design	24.85	8.36					

Table 1 presents the statistical analysis of the relationship between the qualities of instructional design and innovative teaching in teachers' education in Kogi State, Nigeria. The mean score for innovative teaching was 36.60 with a standard deviation of 14.23, indicating a relatively high and varied perception of innovative teaching practices among the respondents. The mean score for qualities of instructional design was 24.85, with a standard deviation of 8.36, suggesting a moderate recognition of instructional design quality in the study population of 300 participants. The Pearson Product-Moment Correlation analysis revealed a correlation coefficient (r-cal) of 0.745 with a p-value of 0.000, which is highly significant at the 0.05 level. This result indicates a strong positive and statistically significant relationship between the qualities of instructional design and innovative teaching. In other words, as the quality of instructional design improves, the level of innovative teaching practices among teacher educators and trainees also increases significantly.



This finding implies that the effectiveness of instructional design plays a critical role in promoting innovative teaching in teacher education programs in Kogi State. When instructional design incorporates key elements such as clear learning goals, flexibility, active learning strategies, and technology integration, it fosters an environment that supports creative and forward-thinking teaching methods. Therefore, stakeholders in teacher education including curriculum developers, policymakers, and instructors should prioritize enhancing instructional design frameworks to boost innovative in teaching practices

Research Question Two: What is the Impact of Qualities of Instructional Design on Transformation in Teachers' Education in Kogi State, Nigeria?

Table 2: Analysis on the responses of the relationship between Qualities of Instructional Design and Transformation in Teachers' Education in Kogi State, Nigeria

Variable	Mean	SD	N	Df	r-cal	p	Remark
Transformation	30.96	13.17	300	298	.664	.000	Significant
Qualities of Instructional Design	25.71	8.89					

Table 2 provides the statistical analysis of the relationship between the qualities of instructional design and transformation in teachers' education in Kogi State, Nigeria. The mean score for transformation was 30.96 with a standard deviation of 13.17, indicating a moderately high level of perceived transformation in teacher education among respondents. The mean score for qualities of instructional design was 25.71, with a standard deviation of 8.89, suggesting a fair level of understanding and application of instructional design principles among the sample of 300 participants. The Pearson Product-Moment Correlation yielded a correlation coefficient (r-cal) of 0.664 and a p-value of 0.000, which is statistically significant at the 0.05 level. This result indicates a moderate to strong positive and significant relationship between the qualities of instructional design and transformation in teachers' education. This means that as the quality of instructional design increases, the level of transformative practices in teacher education also tends to improve significantly.

This finding implies that effective instructional design contributes meaningfully to transformative outcomes in teacher education, such as reflective practice, professional growth, responsiveness to societal needs, and improved teaching competencies. When instructional design is aligned with learner-centered principles, culturally relevant content, and adaptive learning strategies, it helps reshape how educators perceive, approach, and deliver teaching. Therefore, educational stakeholders in Kogi State should prioritize the integration of high-quality instructional design frameworks in teacher training programs to facilitate systemic transformation in education.

Findings

1. The findings from Table 1 revealed a strong positive and statistically significant relationship between the qualities of instructional design and innovative teaching in teacher education programs in Kogi State, Nigeria. With a correlation coefficient of $r = 0.745$ and a p-value of 0.000, the result indicates that as the quality of instructional design increases, there is a corresponding increase in the level of innovative teaching practices among educators. This suggests that instructional design elements such as clearly defined learning objectives, learner-centered strategies, use of technology, and flexibility in content delivery play a crucial role in fostering creativity, engagement, and modern pedagogical approaches in teacher education.
2. Similarly, the result from Table 2 showed a moderate to strong positive and statistically significant relationship between the qualities of instructional design and transformation in teachers' education, with a correlation coefficient of $r = 0.664$ and a p-value of 0.000. This implies that improvements in instructional design contribute significantly to transformative outcomes in teacher education, including reflective teaching, professional development, responsiveness to changing educational demands, and the cultivation of critical thinking. The finding highlights the importance of embedding high-quality instructional design into teacher training programs to support meaningful and lasting change within the education system

Discussion of Findings

There is significant relationship between qualities of instructional design and innovative teaching in teachers' education in Kogi State, Nigeria which is in line with Ajayi (2024) who observed that the use of instructional design models such as ADDIE significantly improved teaching innovative among pre-service teachers in Nigerian colleges of education. The study showed that structured instructional planning enhanced teachers' ability to integrate technology, apply active learning methods, and adapt content creatively, leading to improved student engagement and learning outcomes. Chukwuka and George (2023) conducted a study in Southwest Nigeria and discovered that the presence of clear instructional goals, learner-centered content, and interactive teaching strategies were strongly correlated with innovative classroom practices. Their research emphasized that instructional design quality predicted over 60% of the variance in teachers' ability to implement innovative



methods such as flipped classrooms and collaborative learning. Also Elochukwu and Onyeneke (2021) examined teacher training programs in selected Nigerian universities and found that trainees exposed to well-structured instructional designs demonstrated significantly higher use of educational technologies and innovative pedagogy during practicum. The study concluded that instructional design serves as the backbone for equipping teachers with the confidence and competence to adopt innovative teaching strategies in real classroom settings.

There is significant relationship between qualities of instructional design and transformation in teachers' education in Kogi State, Nigeria which is in line with Nkom (2022) examined instructional design practices in Nigerian teacher education institutions and found that effective instructional design significantly contributed to transformative learning experiences among trainee teachers. Their study showed that when instructional plans included critical reflection, collaborative learning, and contextualized content, teachers exhibited stronger professional identity, self-efficacy, and adaptability as key indicators of educational transformation. Nwameze, et al., (2023) conducted research on instructional reform in Colleges of Education in Northern Nigeria. The study revealed that well-structured instructional designs led to significant changes in how pre-service teachers approached teaching, classroom management, and student-centered learning. The researchers concluded that instructional design elements such as alignment of objectives with real-world practice, flexibility, and inclusiveness were essential for driving transformation in teacher education. Also Olugbade and Olurinde (2024) explored the impact of instructional design quality on teacher development in teacher training programs across North Central Nigeria. They found a positive correlation between structured instructional planning and transformative teaching outcomes, such as increased teacher autonomy, innovative in lesson delivery, and sustained reflective practice. The study emphasized that instructional design quality is a strong determinant of transformational outcomes in teacher preparation.

Conclusion

The findings indicate a significant relationship between the qualities of instructional design and both innovative teaching and transformation in teachers' education in Kogi State, Nigeria. This underscores the critical role that well-structured instructional design plays in enhancing the creativity and adaptability of teaching methods. When instructional design incorporates elements such as clear learning objectives, active engagement strategies, appropriate assessment techniques, and integration of technology, it fosters an environment where innovative in teaching can thrive. This relationship is vital for preparing educators who are capable of meeting the demands of modern classrooms. Furthermore, the significant link between instructional design and transformation in teachers' education suggests that improving the quality of instructional frameworks can drive systemic change. Transformative education depends on equipping teachers with not only content knowledge but also pedagogical skills that align with global trends and local needs. Effective instructional design acts as a catalyst for this transformation by creating a more dynamic, responsive, and student-centered approach to teacher training. Consequently, investment in improving instructional design is essential for fostering both innovative and meaningful transformation in the educational sector.

Recommendations

1. Teacher training institutions in Kogi State should implement continuous professional development programs focused on instructional design. These programs should train educators to design, evaluate, and refine instructional strategies that promote active learning, critical thinking, and the integration of digital tools.
2. The state government and educational policymakers should incorporate instructional design standards into teacher education curricula and accreditation frameworks. By embedding quality instructional design principles into official policy, institutions will be better positioned to promote innovative and transformation in teaching practices across the state.

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