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STAKEHOLDERS' PERCEPTION ON THE TECHNOLOGY LEADERSHIP ROLE OF SOCIAL STUDIES TEACHERS IN ZARIA EDUCATION ZONE, KADUNA STATE, NIGERIA

BY

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Abstract

This study investigated stakeholders' perception of the technology leadership role of social studies teachers in Zaria Education Zone, Kaduna State, Nigeria. In an era where technology is pivotal to educational transformation, understanding how key stakeholders perceive the teacher's role as a technology leader is crucial for effective policy implementation and professional development. The study adopted a descriptive survey research design. The population comprised all 180 stakeholders in the zone, specifically 121 social studies teachers, 41 principals, and 18 curriculum inspectors. A proportional stratified random sampling technique was used to select a sample of 122 stakeholders. A self-developed, validated questionnaire titled "Stakeholders' Perception of Teacher Technology Leadership Questionnaire" (SPTLCQ) was used for data collection. The reliability of the instrument was established using Cronbach's alpha, yielding a coefficient of 0.88. Data were analyzed using descriptive statistics (mean and standard deviation) to answer the research questions and inferential statistics (Analysis of Variance - ANOVA and independent samples t-test) to test the null hypotheses at a 0.05 level of significance. The findings revealed that, overall, stakeholders hold a positive perception of the technology leadership role of social studies teachers. However, a statistically significant difference was found among the perceptions of principals, inspectors, and teachers, with principals and inspectors holding higher expectations than the teachers' self-perceptions. Furthermore, the study found no significant difference in the perception of social studies teachers based on their years of teaching experience. The study concludes that while the groundwork for teacher technology leadership exists, a gap remains between policy expectations (held by principals and inspectors) and classroom reality (perceived by teachers). It was recommended, among others, that targeted professional development be provided to bridge this perception gap and empower teachers to fully embrace their roles as technology leaders in the 21st-century classroom.

Keywords: Technology leadership, Social studies education, Stakeholder perception, Technology and Teacher

Introduction

The 21st century is characterized by the pervasive influence of digital technology across all sectors of human endeavor, with education being no exception. The integration of technology into teaching and learning processes has transitioned from a peripheral luxury to a central component of effective pedagogy and school administration (Adeoye & Adegoke, 2021). The global educational landscape is shifting towards creating technology-enabled learning environments that foster critical thinking, collaboration, creativity, and digital citizenship. In this paradigm, the role of the teacher is evolving from a mere disseminator of information to a facilitator of learning, a curriculum designer, and, critically, a technology leader within their sphere of influence (Joiner et al., 2020). Technology leadership in education is often associated with administrative positions like principals and ICT coordinators. However, recent scholarship argues for a distributed leadership model, where teachers are empowered as leaders in their own right, championing the effective use of technology at the classroom level (Bello & Olatunde, 2022). A teacher acting as a technology leader models the use of digital tools, guides colleagues, innovates pedagogical practices with technology, and advocates for resources that enhance student learning outcomes. This classroom-level leadership is considered fundamental for the sustainable and meaningful integration of technology into the school's culture (Yusuf, 2019).

In Nigeria, the Federal Government has articulated a clear vision for technology integration in its National Policy on Education and various ICT-in-Education masterplans (Federal Ministry of Education, 2019). These policies underscore the need for teachers to be digitally literate and competent in using technology to deliver instruction. However, the translation of policy into practice has been fraught with challenges, including inadequate infrastructure, limited funding, and a significant gap in teacher training and continuous professional development (Ibrahim & Musa, 2023). Social Studies, as a curriculum subject, is uniquely positioned to benefit from and drive technology integration. Its core mandate is to equip learners with the knowledge, skills, and values required for responsible citizenship in a complex and interconnected world (Ogunbiyi & Ajayi, 2021). Technology offers powerful tools for achieving this mandate, such as virtual field trips to historical sites, simulations of democratic processes, access to global perspectives on social issues, and digital platforms for civic engagement. A Social Studies teacher who embodies technology leadership can transform the subject from a static, textbook-based discipline into a dynamic, inquiry-driven exploration of the human experience (Lawal, 2020).

The perception of key stakeholders—principals who provide administrative support, curriculum inspectors who ensure quality and adherence to standards, and the teachers themselves—is a powerful determinant of the success of any educational initiative. Perceptions shape expectations, influence resource allocation, and affect the motivation and professional identity of teachers (Danjuma & Aliyu, 2022). If principals and inspectors view teachers as key technology leaders, they are more likely to provide the necessary autonomy, resources, and support. Conversely, if teachers do not perceive this role as integral to their

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professional identity, they are less likely to take initiative beyond basic technology use. A misalignment in perception among these stakeholder groups can create significant barriers to progress. This study focuses on Zaria Education Zone in Kaduna State, a region with a rich educational history but one that also reflects the broader national challenges of technology integration.

Statement of the Problem

Despite the clear mandates in national policies and the acknowledged potential of technology to revolutionize Social Studies education, there appears to be a disconnect between policy ideals and classroom realities in Nigeria. Many Social Studies teachers remain passive users of technology rather than proactive leaders and innovators (Ibrahim & Musa, 2023). While systemic issues like infrastructure are well-documented, a less-explored but critical factor is the role of stakeholder perception. It is unclear how key educational stakeholders (principals, inspectors, and the teachers themselves) in Zaria Education Zone perceive the technology leadership responsibilities of the Social Studies teacher. Do principals and inspectors view Social Studies teachers as pivotal technology leaders, or do they relegate this role to ICT specialists? How do Social Studies teachers perceive their own capacity and responsibility in this domain? A divergence in these perceptions could lead to a lack of targeted support, misaligned professional development, and a general stagnation in pedagogical innovation. Without a clear, shared understanding of the teacher's role as a technology leader, efforts to integrate technology meaningfully into the Social Studies curriculum may be superficial and ineffective. This study, therefore, seeks to empirically investigate the perceptions held by these three crucial stakeholder groups, identify potential gaps, and provide data-driven insights to inform policy and practice in Zaria Education Zone.

Objectives of the Study

The main objective of this study is to investigate stakeholders' perception of the technology leadership role of social studies teachers in Zaria Education Zone, Kaduna State. The specific objectives are to:

i. Determine the differences in the mean perception scores of principals, curriculum inspectors, and social studies teachers regarding the technology leadership role of social studies teachers.
ii. Ascertain the difference in the mean perception scores of social studies teachers regarding their technology leadership role based on their years of teaching experience.

Research Questions

The following research questions were formulated to guide the study:

i. What is the difference in the mean perception scores of principals, curriculum inspectors, and social studies teachers regarding the technology leadership role of social studies teachers in Zaria Education Zone?
ii. What is the difference in the mean perception scores of male and female social studies teachers regarding their technology leadership role in Zaria Education Zone?

Null Hypotheses

The following null hypotheses were formulated and tested at the 0.05 level of significance:

H_{o1}: There is no statistically significant difference in the mean perception scores of principals, curriculum inspectors, and social studies teachers regarding the technology leadership role of social studies teachers in Zaria Education Zone.

H_{o2}: There is no statistically significant difference in the mean perception scores of social studies teachers regarding their technology leadership role based on years of teaching experience (9 years or less vs. 10 years or more).

Methodology

The study adopted a descriptive survey research design. This design is appropriate because the study aims to collect data to describe and interpret the existing perceptions of a specific population concerning the technology leadership role of Social Studies teachers without manipulating any variables. It allows for the systematic collection of data from a sample to make generalizations about the entire population of stakeholders in the study area. The study was conducted in Zaria Education Zone of Kaduna State, Nigeria. Zaria Zone is one of the educational zones in the state and comprises several Local Government Areas. It is a significant hub of educational institutions, including primary schools, secondary schools, colleges of education, and Ahmadu Bello University. This diverse educational landscape provides a rich context for examining perceptions related to educational technology and leadership. The zone is representative of urban and semi-urban settings in Northern Nigeria, facing both opportunities and challenges in technology integration. The population for this study consisted of all key stakeholders directly involved in the supervision and implementation of the Social Studies curriculum in public senior secondary schools in Zaria Education Zone. The target population was 180 individuals, comprising: All 121 Social Studies teachers in the zone. All 41 principals of the public senior secondary schools in the zone. All 18 Social Studies curriculum inspectors from the Zonal Education Quality Assurance office.

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A sample size of 122 respondents was selected from the population of 180, representing 67.8% of the total population. This sample size is considered adequate for a survey study of this nature. A proportional stratified random sampling technique was used to ensure that each subgroup (stratum) of the population was adequately represented in the sample.
The sample was distributed as follows:

- Teachers: A proportion of 67.8% of 121 teachers = 82 teachers.
- Principals: A proportion of 67.8% of 41 principals = 28 principals.
- Inspectors: A proportion of 67.8% of 18 inspectors = 12 inspectors.

The specific individuals from each stratum were selected using a simple random sampling technique (balloting without replacement).

The instrument used for data collection was a structured questionnaire developed by the researcher, titled "Stakeholders' Perception of Teacher Technology Leadership Questionnaire" (SPTLCQ). The questionnaire was divided into three sections:
Section A: This section collected demographic data of the respondents, such as their role (Teacher, Principal, Inspector), gender, and years of experience.
Section B: This section contained 20 items designed to measure the perception of stakeholders regarding the technology leadership role of Social Studies teachers. The items covered dimensions such as a) Pedagogical Innovator, b) Peer Mentor, c) Resource Manager, and d) Digital Citizenship Facilitator. A 4-point Likert scale was used with the following response options: Strongly Agree (SA=4), Agree (A=3), Disagree (D=2), and Strongly Disagree (SD=1). A midpoint of (4+3+2+1)/4=2.50 was used as the criterion for decision-making on the research questions. The face and content validity of the instrument (SPTLCQ) were established by submitting the draft questionnaire to three experts: one expert in Social Studies Education, one in Educational Technology, and one in Test and Measurement, all from Ahmadu Bello University, Zaria. Their critiques, suggestions, and recommendations regarding the clarity of items, relevance to the research objectives, and appropriateness of the language were incorporated into the final version of the instrument. A pilot test was conducted using 20 stakeholders (12 teachers, 5 principals, 3 inspectors) in a different but similar education zone (Sabon Gari Zone) to determine the internal consistency of the instrument. The data collected were analyzed using Cronbach's alpha reliability method. The analysis yielded a reliability coefficient of 0.88, which was considered high and indicated that the instrument was reliable for the study.

The researcher, with the help of two trained research assistants, personally administered the 122 copies of the questionnaire to the sampled respondents in their respective schools and offices. The purpose of the study was explained to the respondents, and they were assured of the confidentiality of their responses. The direct administration method was used to ensure a high return rate and provide an opportunity to clarify any ambiguities respondents might have. All 122 copies of the questionnaire were completed and retrieved, representing a 100% return rate. The data collected were analyzed using both descriptive and inferential statistics. Research Question 1 and 2 were answered using mean (M) and standard deviation (SD). A criterion mean of 2.50 was used for decision making. A mean score of 2.50 and above was interpreted as a positive perception (Agree), while a mean score below 2.50 was interpreted as a negative perception (Disagree). The null hypotheses were tested at a 0.05 alpha (α) level of significance. Hypothesis 1 (H_{01}), which compared the perceptions of three independent groups (teachers, principals, inspectors), was tested using a one-way Analysis of Variance (ANOVA). Hypothesis 2 (H_{02}), which compared the perceptions of two independent groups of teachers (based on experience), was tested using an independent samples t-test. All analyses were performed using the Statistical Package for the Social Sciences (SPSS) version 25.0.

Results

This section presents the analysis of the data collected from the respondents. The presentation is organized according to the research questions and hypotheses that guided the study.

Answering the Research Questions

Research Question 1: What is the difference in the mean perception scores of principals, curriculum inspectors, and social studies teachers regarding the technology leadership role of social studies teachers in Zaria Education Zone?

To answer this question, the mean and standard deviation of the perception scores for each stakeholder group were calculated. The results are presented in Table 1.

Table 1: Mean and Standard Deviation of Perception Scores by Stakeholder Group

Stakeholder Group	N	Mean (M)	Std. Deviation (SD)	Remark
Social Studies Teachers	82	2.95	0.58	Positive Perception
Principals	28	3.48	0.45	Positive Perception
Inspectors	12	3.55	0.41	Positive Perception
Overall	122	3.13	0.59	Positive Perception
Criterion Mean = 2.50				

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The results in Table 1 show that all three stakeholder groups have a positive perception of the technology leadership role of Social Studies teachers, as their mean scores (Teachers M=2.95, Principals M=3.48, Inspectors M=3.55) are all above the criterion mean of 2.50. However, there are observable differences in the mean scores. Inspectors reported the highest perception (M=3.55), followed closely by principals (M=3.48), while Social Studies teachers reported the lowest self-perception (M=2.95). This indicates that while teachers view this role positively, their perception is less strong than the expectations held by their administrative and quality assurance supervisors.

Research Question 2: What is the difference in the mean perception scores of social studies teachers regarding their technology leadership role based on their years of teaching experience?

To answer this question, the 82 sampled teachers were categorized into two groups: those with 9 years or less of experience and those with 10 years or more. Their mean perception scores were then calculated and are presented in Table 2.

Table 2: Mean and Standard Deviation of Teachers' Perception Scores by Years of Experience

Years of Experience	N	Mean (M)	Std. Deviation (SD)	Remark
9 years or less	45	3.01	0.62	Positive Perception
10 years or more	37	2.87	0.53	Positive Perception
Total	82	2.95	0.58	Positive Perception
Criterion Mean = 2.50				

Table 2 reveals that both groups of teachers hold a positive perception of their technology leadership role, with mean scores of 3.01 and 2.87, both above the 2.50 criterion. There is a slight difference in the mean scores, with teachers having less experience (9 years or less) reporting a slightly higher perception (M=3.01) compared to their more experienced colleagues (M=2.87). However, this difference is minimal.

Testing the Null Hypotheses

Hypothesis 1 (H_{01}): There is no statistically significant difference in the mean perception scores of principals, curriculum inspectors, and social studies teachers regarding the technology leadership role of social studies teachers.

This hypothesis was tested using a one-way Analysis of Variance (ANOVA). The results are presented in Table 3.

Table 3: ANOVA Summary for Difference in Perception among Stakeholder Groups

Source of Variation	Sum of Squares	df	Mean Square	F-statistic (F)	Significance (p)	Decision
Between Groups	8.592	2	4.296	15.31	.000	Reject H_{01}
Within Groups	33.387	119	0.281			
Total	41.979	121				
Significance level α=0.05						

The ANOVA results in Table 3 show an F-statistic of F(2,119)=15.31 and a p-value of p=.000. Since the p-value (0.000) is less than the alpha level of 0.05, the null hypothesis is rejected. This means there is a statistically significant difference in the mean perception scores of principals, inspectors, and Social Studies teachers regarding the technology leadership role of the teachers. To determine where the significant difference lies, a Post-Hoc (Tukey HSD) test was conducted. The results indicated a significant difference between teachers (M=2.95) and both principals (M=3.48) and inspectors (M=3.55). However, there was no statistically significant difference between the perceptions of principals and inspectors. Hypothesis 2 (H_{02}): There is no statistically significant difference in the mean perception scores of social studies teachers regarding their technology leadership role based on years of teaching experience. This hypothesis was tested using an independent samples t-test. The results are presented in Table 4.

Table 4: Independent Samples t-test for Teachers' Perception by Years of Experience

Group (Years of Experience)	N	Mean (M)	Std. Deviation (SD)	df	t-value (t)	Sig. (2-tailed) (p)	Decision
9 years or less	45	3.01	0.62	80	1.15	.254	Fail to Reject H_{02}
10 years or more	37	2.87	0.53				
Significance level α=0.05							

The t-test results in Table 4 yielded a t-value of t(80)=1.15 with a p-value of p=.254. Since the p-value (0.254) is greater than the alpha level of 0.05, the null hypothesis is not rejected (is accepted). This indicates that there is no statistically significant difference in the perception of Social Studies teachers regarding their technology leadership role based on their years of

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teaching experience. The slight difference observed in the mean scores in Table 2 is not statistically significant and could be due to chance.

Discussion of the Findings

The findings of this study provide critical insights into the dynamics of technology integration and teacher leadership in the context of Social Studies education in Nigeria. The first major finding that all stakeholder groups hold a positive perception of the teacher's technology leadership role is encouraging. It aligns with the national policy direction (Federal Ministry of Education, 2019) and suggests a collective readiness for a paradigm shift where teachers are seen as agents of technological innovation. This widespread positive view serves as a crucial foundation upon which effective professional development and policy implementation can be built. It indicates that the resistance to technology is not one of principle but likely one of practice and capacity.

However, the second finding, which is the core of this study, reveals a significant perception gap. The rejection of the first null hypothesis (H01) shows that principals and inspectors have significantly higher expectations than teachers' self-perceptions. This finding resonates with the work of Yusuf (2019), who noted a disconnect between administrative vision and teacher practice. This gap can be interpreted in several ways. From the perspective of principals and inspectors, their higher perception may be driven by policy documents, ministerial directives, and the need to demonstrate compliance and school improvement. They view the "ideal" teacher as a technology leader. From the teachers' perspective, their lower (though still positive) self-perception may be a more realistic reflection of their daily classroom challenges: lack of resources, limited training, large class sizes, and an overloaded curriculum (Ibrahim & Musa, 2023). This perception gap is problematic; if teachers do not feel equipped or empowered to meet the high expectations of their supervisors, they may experience burnout, anxiety, or disengage from innovative practices. It highlights a failure in the system to adequately bridge the gap between policy and practice, as espoused by the Distributed Leadership Theory which posits that leadership practice is a product of the interaction between leaders, followers, and the situation.

The third finding, that there is no significant difference in perception based on years of experience, was somewhat surprising. It contradicts a common assumption that younger; "digital native" teachers would have a significantly more positive view of their technology leadership role than their older, "digital immigrant" colleagues. The acceptance of the second null hypothesis (H02) suggests that the challenges and enabling factors related to technology leadership in the Zaria school system affect all teachers relatively equally, regardless of their age or length of service. This could imply that systemic issues, such as the quality of pre-service training, the availability of in-service professional development, and the provision of school-level infrastructure, are more dominant factors than individual demographic characteristics. Both novice and veteran teachers feel similarly positioned regarding their roles as technology leaders, pointing towards a systemic, rather than generational, issue. This finding aligns with Danjuma and Aliyu (2022), who argued that school culture and available support systems are more influential than individual teacher attributes in shaping technology use.

Conclusion

This study set out to investigate stakeholders' perception of the technology leadership role of Social Studies teachers in Zaria Education Zone. The study concludes that while there is a general consensus among teachers, principals, and inspectors that Social Studies teachers should be technology leaders, a significant gap exists between the expectations of management (principals and inspectors) and the self-perception of the teachers. This discrepancy is a major impediment to the effective and sustainable integration of technology in Social Studies education. Furthermore, the challenges and perceptions related to this role are systemic, affecting teachers across all experience levels. To move from policy to impactful practice, it is imperative to close this perception gap by empowering teachers and aligning stakeholder expectations through targeted, practical support.

Recommendations

Based on the findings and conclusion of this study, the following recommendations are made:

i. Instead of only setting high-level expectations, agencies should collaborate with schools to develop a clear, realistic, and context-specific framework for teacher technology leadership. This framework should outline specific competencies, provide self-assessment tools for teachers, and link leadership activities to career progression and recognition.
ii. Principals should move beyond just holding high expectations and actively foster a distributed leadership culture. This includes involving Social Studies teachers in technology planning, providing them with autonomy to experiment with new tools, and creating platforms (like professional learning communities) where they can mentor peers and share best practices.
iii. Training programs should be redesigned to go beyond basic digital literacy. They must focus on developing leadership skills, such as pedagogical innovation, peer coaching, and change management. This will help bridge the perception gap by building the confidence and capacity of teachers to meet the expectations placed upon them.

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References

Adeoye, F. A., & Adegoke, B. A. (2021). *Digital transformation in Nigerian education: Policy, practice, and challenges*. University of Lagos Press.

Bello, S. K., & Olatunde, A. A. (2022). Distributed leadership and its impact on technology integration in secondary schools in Northern Nigeria. *Journal of Educational Leadership and Policy*, *14*(2), 45-61.

Danjuma, I., & Aliyu, R. (2022). Teacher perception as a mediator for technology adoption in public schools in Kaduna State. *Nigerian Journal of Educational Technology*, *5*(1), 88-102.

Federal Ministry of Education. (2019). *National policy on information and communication technologies (ICT) in education*. FME Press.

Ibrahim, H., & Musa, B. (2023). From policy to reality: Challenges of technology integration in Social Studies classrooms in Bauchi State, Nigeria. *Journal of Social Studies Education Research*, *14*(1), 112-135.

Joiner, R., Joyce, S., & Johnson, L. (2020). *Teacher as a digital leader: A framework for the 21st century*. Routledge.

Lawal, T. (2020). The role of technology in fostering digital citizenship through the Social Studies curriculum. *African Journal of Social Studies*, *10*(3), 22-39.

Mwangi, C., & Ochieng, P. (2021). The influence of principal's technology leadership on teacher ICT self-efficacy in public secondary schools in Kenya. *International Journal of Education and Development using ICT*, *17*(2), 145-160.

Ogunbiyi, O., & Ajayi, K. (2021). Revitalizing Social Studies education for national development in Nigeria: The place of technology. *Lagos Education Review*, *18*(1), 55-70.

Sheninger, E. (2019). *Digital leadership: Changing paradigms for changing times* (2nd ed.). Corwin Press.

Spillane, J. P. (2006). *Distributed leadership*. Jossey-Bass.

Yusuf, M. O. (2019). An investigation of principals' technology leadership practices in secondary schools in Southwestern Nigeria. *Malaysian Online Journal of Educational Technology*, *7*(4), 1-15.