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ASSESSING TECHNOLOGY INTEGRATION COMPETENCE AMONG ART AND SOCIAL SCIENCE TEACHERS IN KEBBI STATE: A CASE STUDY OF SOME SELECTED SECONDARY SCHOOLS

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ABSTRACT

The effective integration of technology in teaching Arts and Social Sciences (A & SS) is crucial for enhancing secondary education outcomes in Nigeria. This study assesses Nigerian teachers' competence in blending technology with A & SS pedagogy, identifying gaps and opportunities for improvement. A mixed-methods approach was employed, involving surveys and interviews with A &SS teachers across select secondary schools. Findings reveal that while teachers show enthusiasm for technology integration, their competence is hindered by inadequate training, limited access to resources, and technical challenges. The study highlights the need for targeted professional development programs, improved infrastructure, and policy support to boost teachers' tech integration skills. Recommendations include regular tech training workshops, provision of digital tools, and establishing tech support systems. This research informs stakeholders on strategies to enhance A & SS teaching and learning through effective technology integration in Nigerian secondary schools.

KEYWORDS: Technology, Art, Social-Sciences, Teacher Education.

1. INTRODUCTION

The rapid advancement of Information and Communication Technology (ICT) has fundamentally transformed virtually every sector of human endeavor, and education is no exception. In the twenty-first century, technology integration in teaching and learning has

evolved from being a peripheral complement to becoming a central pillar of effective pedagogy. Across the globe, educational systems are increasingly recognizing that the competence of teachers in integrating technology into their instructional practice is not merely an added advantage but a critical prerequisite for preparing students for a knowledge-driven, digitally connected world. Technology integration competence refers to a teacher's ability to meaningfully and effectively incorporate digital tools, resources, and platforms into curriculum delivery, lesson planning, student assessment, and classroom management. This goes beyond the mere possession of hardware or internet connectivity; it encompasses the pedagogical, technical, and content knowledge that enables a teacher to use technology purposefully to enhance learning outcomes. Frameworks such as the Technological Pedagogical Content Knowledge (TPACK) model, developed by Mishra and Koehler (2006), and the Substitution, Augmentation, Modification, and Redefinition (SAMR) model have provided scholarly scaffolding for understanding and evaluating how teachers integrate technology across different levels of instructional sophistication. Finally, in Nigeria, the integration of ICT into secondary school education has been a recurring theme in national education policy. The National Policy on Education and various iterations of the National ICT Policy for Education have consistently emphasized the need to equip teachers with the skills and resources necessary to leverage technology for improved learning outcomes. However, the translation of these policy intentions into classroom realities has remained uneven, particularly in states outside the major metropolitan centres. The northern geopolitical regions of Nigeria, including Kebbi State, faced distinctive socio-economic, infrastructural, and professional development challenges that often widen the gap between policy aspirations and practical implementation.

2. LITERATURE REVIEW

2.0 The Concept of Technology Integration

Technology integration in education refers to the purposeful and pedagogically sound incorporation of digital tools, platforms, and resources into the teaching and learning process to enhance instructional delivery and improve student learning outcomes (Koehler and Mishra 2009). According to Earle (2002), technology integration is not about using technology for its own sake but about using it in ways that are aligned with curriculum goals and responsive to learners' needs. This distinction is fundamental: integration implies intentionality, coherence, and pedagogical alignment rather than mere access or sporadic use.

Roblyer and Doering (2013) define technology integration as the process by which teachers embed the use of technology tools and digital resources as natural extensions of their existing instructional strategies. The emphasis here is on seamlessness technology should not disrupt the learning process but should enhance and enrich it. Similarly, Jonassen, Howland, Marra, and Crismond (2008) argue that meaningful technology integration occurs when technology serves as a cognitive tool that supports higher-order thinking, problem-solving, and knowledge construction among learners.

The depth of technology integration varies considerably across classrooms and institutions. Puentedura's (2006) SAMR model conceptualizes integration along a continuum of four levels: Substitution, where technology replaces traditional tools with no functional change; Augmentation, where technology replaces traditional tools with some functional improvement; Modification, where technology allows for significant task redesign; and Redefinition, where technology enables the creation of new tasks previously inconceivable. Higher levels of the SAMR model represent more transformative and educationally meaningful forms of integration.

2.1 Technology Integration Competence Defined

Technology integration competence encompasses the knowledge, skills, dispositions, and practical abilities that enable a teacher to effectively plan, implement, and evaluate technology-enhanced instruction. UNESCO (2018) identifies three progressive levels of teacher ICT competence: knowledge acquisition, knowledge deepening, and knowledge creation. Each requiring progressively more sophisticated technological, pedagogical, and disciplinary understanding.

Koehler and Mishra (2009) capture the multidimensional nature of technology integration competence through the Technological Pedagogical Content Knowledge (TPACK) framework, which posits that effective technology integration requires the intersection of three knowledge domains: content knowledge (CK), pedagogical knowledge (PK), and technological knowledge (TK), along with their compound intersections Pedagogical Content Knowledge (PCK), Technological Content Knowledge (TCK), Technological Pedagogical Knowledge (TPK), and the integrative TPACK. Teachers who possess strong TPACK are not only technically proficient but are able to identify which technologies best serve particular content and learning objectives and how to deploy them within appropriate pedagogical frameworks.

2.2 Technological Pedagogical Content Knowledge (TPACK)

The TPACK framework, originally developed by Mishra and Koehler (2006), building on Shulman's (1986) concept of Pedagogical Content Knowledge (PCK), has become one of the most widely adopted theoretical lenses for understanding and assessing teacher technology integration competence. The framework argues that technology integration cannot be treated as a standalone skill divorced from subject matter and pedagogy; rather, it must be understood as a dynamic interplay among all three knowledge domains.

For Arts and Social Sciences teachers specifically, the TPACK framework draws attention to the unique ways in which technology can be integrated with humanities-based and social scientific content. The application of digital archives, geographical information systems (GIS), interactive timelines, simulation tools, and multimedia storytelling platforms are examples of TCK within these disciplines. Niess (2005) emphasizes that subject-specific TPACK development is more meaningful and lasting than generic technology training, a finding with direct implications for professional development programmes targeting Arts and Social Sciences teachers.

2.3 Policy Framework for ICT Integration in Nigerian Education

Nigeria's commitment to technology integration in education is articulated across several key policy documents. The National Policy on Education (Federal Republic of Nigeria, 2013) explicitly recognizes ICT as a critical tool for enhancing educational quality and mandates its integration across all levels of the educational system. The National ICT Policy for Education (Federal Ministry of Education, 2016) further specifies the responsibilities of schools, teachers, and educational administrators in ensuring effective technology integration, including requirements for teacher ICT training, provision of digital infrastructure, and development of e-learning content.

At the curriculum level, the Nigerian Educational Research and Development Council (NERDC) has revised secondary school curricula to incorporate ICT-related learning outcomes across multiple subject areas, including the arts and social sciences. However, Adomi and Kpangban (2010) note that the gap between curriculum intent and classroom practice remains wide in many Nigerian secondary schools, particularly outside the Lagos–Abuja axis, where institutional capacity and teacher competence are more developed.

2.4 Teacher Technology Competence in Nigerian Secondary Schools

Empirical studies on teacher technology competence in Nigerian secondary schools have consistently revealed significant deficiencies, particularly outside urban centers. Yusuf and Balogun (2011) assessed ICT competence among student teachers in a Nigerian university and found that while most possessed basic computer literacy skills, their competence in applying ICT for instructional purposes was low. The study also found significant gender differences in ICT competence, with male student teachers outperforming their female counterparts on most competence indicators.

Eze, Chinedu-Eze, and Bello (2018) investigated the factors influencing ICT utilization among university lecturers in Nigeria and found that perceived usefulness, ease of use, social influence, and facilitating conditions were all significant predictors of ICT use behavior. Notably, the study found that teachers' intrinsic motivation and beliefs about the relevance of ICT to their subject area were stronger predictors of actual use than access to technology infrastructure, suggesting that attitude change may be as important as hardware provision in improving technology integration rates.

2.5 Technology Integration in Northern Nigerian States

Research specifically focusing on technology integration in northern Nigerian states is considerably less abundant than research from southern states, reflecting broader disparities in research infrastructure and output across the country's geopolitical zones. Nonetheless, available studies paint a consistent picture of low ICT competence among teachers in the region. Musa and Zaria (2019) assessed ICT utilization among secondary school teachers in Sokoto State and found that the majority of teachers used technology only for administrative purposes, such as result computation and recordkeeping, with very limited use for instructional delivery.

Abdullahi (2018) studied ICT integration among secondary school teachers in Kano State and found that infrastructural inadequacy, lack of training, and cultural resistance to technology adoption were the most frequently cited barriers to integration. The study also found that arts and social sciences teachers were significantly less likely to integrate technology into their teaching than their science and mathematics colleagues, attributing this disparity partly to a perception among humanities teachers that their subjects were less amenable to technology enhancement.

In Kebbi State specifically, empirical research on teacher technology integration competence is extremely limited, a gap that the present study directly addresses. The state's distinctive socio-economic profile, characterized by high poverty rates, limited educational infrastructure, and a predominantly rural population, creates a context in which technology integration challenges may be particularly acute (Kebbi State Ministry of Education, 2020).

2.6 The Case for Technology Integration in Arts and Social Sciences

A persistent misconception in many educational systems including Nigeria's is that technology integration is primarily relevant to STEM subjects and that arts and social sciences subjects, by virtue of their humanistic and interpretive character, are less amenable to technology enhancement. This misconception is not supported by the research literature. On the contrary, a growing body of scholarship demonstrates that technology can profoundly enrich the teaching and learning of humanities and social science subjects (Crowe & Van't Hooft, 2006; Hicks et al., 2014).

In history education, digital archives, virtual museum tours, historical mapping tools, and multimedia primary source collections have been shown to deepen students' historical thinking and engagement with the past (Lee & Friedman, 2009). In geography, geographic information systems (GIS), satellite imagery, and interactive mapping platforms have transformed students' ability to analyze spatial patterns and environmental phenomena (Baker & White, 2003). In economics, simulation software, data visualization tools, and interactive economic models enable students to explore complex economic relationships in ways that static textbooks cannot replicate (Becker & Watts, 2001). In literature education, digital storytelling, multimedia annotation tools, and online collaborative writing platforms have opened new possibilities for creative and critical engagement with literary texts (Kist, 2010).

2.7 Barriers Specific to Arts and Social Sciences Technology Integration

Despite the demonstrated potential of technology in arts and social sciences education, several barriers specific to these disciplines have been identified in the literature. Hicks *et al*. (2014) found that social studies teachers in the United States were more likely than teachers in other subject areas to report feeling underprepared to use technology in their teaching, attributing this to a lack of subject-specific technology training in pre-service programs and a scarcity of discipline-appropriate digital resources.

Cuban (2001) observed that arts and humanities teachers frequently reported difficulty in identifying technologies that genuinely enhanced rather than distracted from deep reading,

critical analysis, and discussion the core intellectual activities of their disciplines. This concern reflects a legitimate pedagogical tension between the interactive, multimodal character of many digital tools and the reflective, text-centered traditions of humanities scholarship. However, more recent research suggests that this tension can be productively resolved through careful pedagogical design that leverages technology to support rather than supplant deep disciplinary thinking (Crowe & Van't Hooft, 2006).

3. JUSTIFICATION OF THE STUDY

The Nigerian National Policy on ICT in Education mandates technology integration at all levels of schooling. Yet, without empirical evidence on teachers' actual competence, especially in under-researched states like Kebbi, policymakers lack data to design targeted interventions. This study will provide baseline data to bridge policy and practice. However, most technology integration research focuses on STEM subjects. Art and social science teachers face unique challenges because digital tools for history, geography, civic education, fine arts, and literature are less standardized and less available. Assessing their competence ensures their specific needs are not overlooked in ICT initiatives. Moreover, Kebbi State has a high proportion of rural schools with infrastructural deficits. Documenting competence levels and barriers will highlight urban-rural disparities and guide equitable distribution of training and resources, helping to reduce the digital divide within the state and nationally. Meanwhile, findings of the study will inform teacher training institutions, SUBEB, and the Ministry of Education on the specific ICT skills that art and social sciences teachers are lacking. This ensures future workshops and in-service training are relevant, practical, and subject-focused rather than generic. In addition, technology, when properly integrated, enhances visualization and critical thinking. Identifying competence gaps allows for interventions that directly improve instructional quality and student engagement in these subjects.

4. METHODOLOGY

4.0 Research Design

This study employed **a descriptive survey design** to allow the researcher to systematically describe the current level of technology integration competence among teachers without manipulating any variable. Given that the study is a case study of selected schools in Kebbi State, a cross-sectional approach will be adopted, collecting data at a single point in time from different schools. In addition, the study will be anchored on a **post-positivist paradigm**,

predominantly quantitative with a qualitative component for triangulation. This is appropriate because the study seeks to measure and describe observable phenomena (teachers' technology competence) while acknowledging that findings may be context-dependent.

4.1 Population/Sample and Sampling Technique of the Study

The target population comprises **all art and social science teachers** (covering subjects such as geography, government, history, economics, geography, and civic education) in public secondary schools in Kebbi State. The accessible population was restricted to teachers in the selected schools. A sample of **200 teachers** across at least 10 selected secondary schools was recommended, sufficient for meaningful statistical analysis. However, a **stratified purposive random sampling** technique was employed.

4.2 Instruments for Data Collection

Two instruments were used, a structured questionnaire, which is the primary instrument, developed by the researcher and validated by experts. And **an observation checklist** to directly observe and validate teachers' actual use of technology in lesson delivery. This provides triangulation against self-reported questionnaire data.

4.3 Validity of the Instrument

4.3.1 Content validity was established by submitting the instruments to a panel of experts in educational technology, curriculum studies, and measurement and evaluation for review and corrections. Their inputs was used to revise the instruments before pilot testing.

4.3.2 Face validity was assessed to ensure items are clearly worded and appropriate for the target population.

4.4 Reliability of the instrument

A **pilot test** was conducted with 20 art and social science teachers drawn from secondary schools outside the main sample but within the state. The reliability coefficient was determined using **Cronbach's alpha** method. An alpha coefficient of **0.70 and above** was considered acceptable for the study.

4.5 Method of Data Analysis

The data collected for this study was analysed using both descriptive and inferential statistics. Demographic information obtained from respondents was analysed using frequency counts and percentages and presented in tables. The research questions was answered using Mean ($\bar{x}$) and Standard Deviation (SD). Mean scores was used to determine the level of technology integration competence, extent of technology use, and the influence of institutional and infrastructural factors among Art and Social Sciences teachers in selected secondary schools in Kebbi State.

For the Likert-scale items, a criterion mean of 3.00 was adopted as the benchmark for decision-making. Any item with a mean score of 3.00 and above was regarded as accepted, while items with mean scores below 3.00 was regarded as rejected. Grand mean scores will also be computed for each section to determine the overall level of respondents' perceptions.

The standard deviation was used to determine the degree of dispersion of respondents' opinions from the mean. Data analysis was carried out using the Statistical Package for Social Sciences (SPSS) version 26.0.

Furthermore, inferential statistics was employed to test the null hypotheses at 0.05 level of significance. Independent Samples t-test was used for hypotheses involving two groups (e.g., gender, school type, ICT training), while One-Way Analysis of Variance (ANOVA) was used for hypotheses involving more than two groups (e.g., age, qualification, years of teaching experience, and school location).

5. RESULTS AND DISCUSSION

Out of the 200 questionnaires distributed, 197 (98%) were appropriately completed and returned, while 3 (2%) were invalid due to incomplete information. The 197 valid responses provided a sufficient return rate for the study.

5.0 Demographic and Socio-Economic Characteristics

Table 1: Demographic Characteristics of Respondents.

S/NO.	Variable	Category	Frequency	Percentage (%)
1.	**Gender**	Male	132	67.0
		Female	65	33.0
2.	**Age**	20–29 years	28	14.2
		30–39 years	72	36.5
		40–49 years	61	31.0
		50 years and above	36	18.3
3.	**Highest Educational Qualification**	NCE	48	24.4
		Bachelor's Degree	97	49.2
		PGDE	31	15.7
		Master's Degree	21	10.7
	Total		**197**	**100.0**

Source: Field Survey 2026

The study revealed that 132 (67.0%) of the respondents were male, while 65 (33.0%) were female, indicating that male teachers constituted the majority of the social sciences teachers

in the study area (See item 1 in Table 1). This finding that the majority of social sciences teachers were male suggests that, the teaching workforce in the study area is predominantly male. As a result, the overall findings on technology integration are likely to reflect the experiences and practices of male teachers more than those of their female counterparts. Additionally, it indicates professional development gender imbalance among the teachers.

Regarding age distribution, the largest proportion of respondents, 72 (36.5%), were within the age bracket of 30–39 years, followed by those aged 40–49 years with 61 (31.0%). Respondents aged 50 years and above accounted for 36 (18.3%), while those aged 20–29 years constituted 28 (14.2%) (See item 2 in Table 1). This highest proportion of age bracket (30–39 years), indicates that social sciences teachers in the study area are predominantly in their mid-career stage. This age group is generally considered to be professionally active, adaptable, more likely to embrace technological innovations in teaching and may be better positioned to adopt and integrate digital technologies into classroom instruction.

In terms of educational qualification, the majority of the respondents, 97 (49.2%), possessed Bachelor's degrees, while 42 (21.3%) held NCE qualifications. Respondents with Master's degrees accounted for 31 (15.7%), and PGDE holders were 21 (10.7%) (See item 3 in Table 1). The findings indicate that the respondents were adequately qualified to provide reliable information on technology integration competence. In addition, it indicates that most social sciences teachers in the study area have attained the minimum academic qualification required for professional teaching and the overall findings on technology integration competence are likely to reflect the experiences and capabilities of this group. In other words, the study area is likely to have workable workforce with regard to technology integration in teaching and learning process.

5.1 Category of Teachers, Teaching Experience & Level of ICT Training.

Table 2: Category of Teachers, Teaching Experience & Level of ICT Training.

S/NO.	Variable	Category	Frequency	Percentage (%)
1.	**Subject Area**	Civic Education	32	16.3
		Government	33	16.8
		Economics	30	15.2
		Religious Studies (IRS/CRS)	30	15.2
		Geography	34	17.3
		English/Other Languages	38	19.3
	Total		**197**	**100.0**
2.	**Teaching Experience**	Less than 5 years	31	15.7

S/NO.	Variable	Category	Frequency	Percentage (%)
		5–10 years	55	27.9
		11–15 years	49	24.9
		16–20 years	35	17.8
		Above 20 years	27	13.7
	Total		**197**	**100.0**
3.	**Formal ICT Training**	Yes	115	58.4
		No	82	41.6
	Total		**197**	**100.0**

Source: field Survey 2026

The study revealed that teachers from various Art and Social Science disciplines participated in the study and that those from English and other languages recorded the highest representation of 38 (19.3%), followed by Geography with 34 (17.3%) and Government with 33 (16.8%), Civic Education recorded 33 (16.8%), while Economics and Religious Studies recorded 30 (15.2%) each (See item 1 in Table 2).

Concerning teaching experience, majority of the respondents, 55 (27.9%), had between 5 to 10 years of teaching experience, while 49 (24.9%) had taught for 11–15 years, followed by 16 to 20 years recorded 35 (17.8%), while less than 5 years and above 20 years of teaching experience recorded 31 (15.7%) and 27 (13.7%) of the respondents (See item 2 in Table 2). This indicates that most respondents possessed considerable teaching experience. However, it indicates positive implications for technology integration competence, as relatively early-career teachers are often more familiar with contemporary digital technologies and may have been exposed to ICT-related training during their pre-service education. However, they can demonstrate greater willingness and confidence in adopting technology-enhanced instructional practices.

Finally, the analysis revealed that 115 (58.4%) of the respondents had received formal ICT training, while the remaining 82 (41.6%) had not received such training (See item 3 in Table 2). This finding suggests a potential professional preparation for technology integration among Art and Social Sciences teachers in the study area. This finding that 58.4% of the respondents had received formal ICT training suggests that the majority of Art and Social Sciences teachers possessed the structured professional preparation required for effective technology integration in teaching and learning. However, it further positively scores the importance of continuous professional development and institutional support in equipping teachers with the competencies required for technology-enhanced instruction.

5.2 Technological Integration Competence among Art and Social Sciences Teachers.

Table 3: Technology Integration Competence among Art and Social Sciences Teachers.

S/N	Variable	No. of Items	Grand Mean	Std. Dev.
1	Basic Technological Knowledge	4	4.00	0.83
2	Knowledge of Productivity and Office Application Tools	4	3.89	0.87
3	Knowledge of Internet and Online Educational Resources	4	3.95	0.85
4	Knowledge of Communication and Collaboration Technologies	4	3.78	0.92
5	Knowledge of Subject-Specific and Emerging Technologies	4	3.54	0.96
6	Frequency of Technology Use in Lesson Planning and Preparation	4	3.68	0.89
7	Technology Use During Classroom Instruction	4	3.31	1.02
8	Technology Use for Student Engagement and Collaboration	3	3.24	0.98
9	Institutional Factors Supporting Technology Integration	6	2.96	1.08
10	Infrastructural Factors Supporting Technology Integration	5	2.61	1.11
Overall Grand Mean		**42**	**3.50**	**0.95**

Source: Field Survey 2026

The study revealed that, the respondents (selected Art and Social Sciences Teachers) demonstrated a high level of basic technological knowledge, knowledge of productivity and office application tools, knowledge of internet and online educational resources, knowledge of communication and collaboration technologies, knowledge of subject-specific and emerging technologies, and frequency of technology use in lesson planning and preparation.

The highest mean score (4.00) was recorded for basic technological knowledge, indicating that most teachers possess the fundamental digital skills needed to use technology effectively. Knowledge of productivity and office application tools (3.89) and knowledge of internet resources (3.95) also recorded high mean scores. While, Knowledge of Communication and Collaboration Technologies and Knowledge of Subject-Specific and Emerging Technologies recorded (3.78) and (3.54) respectively (See item 1, 2, 3, 4, & 5 in Table 3). This suggest that the respondents are generally familiar with common digital tools used for teaching and professional activities. In addition, the findings indicate teachers' ability to use common

software applications to support lesson planning, instruction, assessment, communication, and administrative tasks.

However, frequency of technology use in lesson planning and preparation recorded (3.68), technology use during classroom instruction recorded (3.31), technology use for student engagement and collaboration (3.24), institutional factors (2.96), and infrastructural factors (2.61) recorded moderate mean scores (See items 6, 7, 8, 9, & 10 in Table 3). This suggests that although teachers possess the necessary technological knowledge and skills, the actual use of technology in classroom teaching and student engagement is not yet at an optimal level. The findings further indicate that inadequate institutional support and infrastructural facilities may be limiting effective technology integration. In addition, it also indicate the inability of the teachers to integrate technology effectively due to moderate availability of ICT infrastructure in the selected schools.

The overall grand mean of 3.50 indicates a high level of technology integration competence among Art and Social Sciences teachers in the selected secondary schools in Kebbi State. Nevertheless, improvements in institutional support, ICT facilities, internet access, and related infrastructure are needed to enhance the practical integration of technology into teaching and learning.

6. KEY FINDINGS

1. The study revealed that majority of the respondents (67.0%) were male. This finding that the majority of social sciences teachers were male suggests that, the teaching workforce in the study area is predominantly male. As a result, the overall findings on technology integration are likely to reflect the experiences and practices of male teachers more than those of their female counterparts. Additionally, it indicates professional development gender imbalance among the teachers.

2. Regarding age distribution, the study revealed that largest proportion of respondents (36.5%) were within the age bracket of 30–39 year. This highest proportion of age bracket (30–39 years), indicates that social sciences teachers in the study area are predominantly in their mid-career stage. This age group is generally considered to be professionally active, adaptable, more likely to embrace technological innovations in teaching and may be better positioned to adopt and integrate digital technologies into classroom instruction.

3. With respect to the level of qualifications, the study revealed that majority of the respondents 49.2% possessed Bachelor's degrees. This indicates that most social sciences teachers in the study area have attained the minimum academic qualification required for

professional teaching. However, the overall findings on technology integration competence are likely to reflect the experiences and capabilities of this group. Additionally, the study area is likely to have workable workforce with regard to technology integration in teaching and learning process.

4. The study revealed that majority of the respondents (Art and Social Sciences teachers) in the study area (27.9%), had between 5 and 10 years of teaching experience. This have positive implications for technology integration competence, as relatively early-career teachers are often more familiar with contemporary digital technologies and may have been exposed to ICT-related training during their pre-service education. However, they can demonstrate greater willingness and confidence in adopting technology-enhanced instructional practices.

5. The analysis revealed that majority of the respondents 115 (58.4%) had not received any formal ICT training. This finding that 58.4% of the respondents had not received any formal ICT training suggests that the majority of Art and Social Sciences teachers may lack the structured preparation required for effective technology integration in teaching and learning. However, it further underscores the importance of continuous professional development and institutional support in equipping teachers with the competencies required for technology-enhanced instruction.

6. The study discovered that teachers possess the necessary technological knowledge and skills, the actual use of technology in classroom teaching while, student engagement is not yet at an optimal level. However, the findings further indicate that inadequate institutional support and infrastructural facilities may be limiting effective technology integration.

7. The overall grand mean of 3.50 discovered, indicates a high level of technology integration competence among Art and Social Sciences teachers in the selected secondary schools in Kebbi State. Nevertheless, improvements in institutional support, ICT facilities, internet access, and related infrastructure are needed to enhance the practical integration of technology into teaching and learning.

7. CONCLUSION

The study assessed the technology integration competence of Art and Social Sciences teachers in selected secondary schools in Kebbi State. The findings revealed that teachers possessed a high level of technological competence, particularly in basic technological skills, productivity applications, internet resources, and communication technologies. The study also showed that teachers frequently used technology for lesson planning and preparation.

However, the use of technology during classroom instruction and for student engagement was only moderate. Furthermore, inadequate institutional support, insufficient ICT facilities, poor internet connectivity, and limited formal ICT training were identified as major challenges affecting effective technology integration. The study therefore concludes that while teachers have the necessary technological knowledge and skills, improved infrastructural facilities, institutional support, and professional development opportunities are required to enhance the practical application of technology in teaching and learning.

8. RECOMMENDATIONS

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

1. **Provide Adequate ICT Infrastructure:** Government and school authorities should equip schools with functional computers, projectors, reliable internet access, and other ICT facilities to support effective technology integration.
2. **Strengthen Teacher Training Programmes:** Regular workshops, seminars, and in-service training should be organized to improve teachers' practical skills in using technology for classroom instruction and student engagement.
3. **Improve Technology Integration:** There should be more efforts to improve technology integration with specific focus on strengthening teachers' technological and pedagogical competencies regardless of their years of experience.
4. **Enhance Institutional Support:** Government/Educational Stakeholders should establish supportive ICT policies, provide technical assistance, and encourage teachers to integrate technology into their teaching practices.
5. **Increase Funding for Educational Technology:** Relevant stakeholders should allocate sufficient resources for the acquisition, maintenance, and upgrading of ICT facilities to ensure sustainable technology integration in secondary schools.

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