



21st century Literacy Skills Need of English Language Teachers in Jega, Kebbi State, Nigeria

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Abstract

The study investigated the 21st-century literacy skills need of English language teachers in secondary schools in Jega Education Zone, Kebbi State, Nigeria. The main objective of the study is to assess the 21st-century literacy skills need of English language teachers in secondary schools in Jega Education Zone, Kebbi State, Nigeria. A descriptive survey research design was employed in the study. The target population was 349 respondents comprising of 152 schools' administrators and 197 English language teachers from 38 secondary schools of Jega Education Zone. A sample of 182 respondents was purposively drawn and used for data collection. The instrument for data collection was a researcher-developed structured questionnaire, titled, '21st Century Literacy Skills Questionnaire (21st CLSQ).' The instrument was validated by four experts, and its reliability was established using test-retest, with a Cronbach alpha value of $r = 0.82$. The data were collected with the help of four trained research assistants and analysed using weighted mean and the Skills Need Index (SNI). The study found that there were significant gaps between the 21st century information literacy, media literacy, and ICT literacy skills required by English language teachers and those they currently possessed. These gaps indicated the need for capacity-building initiatives to these teachers. The study concluded that addressing these gaps is crucial for enhancing English language teaching effectiveness and student achievement in 21st-century education. It recommended that the government should provide accessible resources and training programs to improve teachers' practical skills and integration of modern tools into English language teaching practices in secondary schools of Jega education zone.

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Introduction

Literacy is simply conceived as ability of an individual to read and write. In the 21st century, this concept extends beyond simple conception as it involves the ability of an individual to access, manage, integrate, evaluate, and create information to function in a knowledge society (Chu, Reynolds, Tavares, Notari & Lee, 2021) ^[3]. United Nations Educational, Scientific, and Cultural Organization (UNESCO, 2020) conceived literacy as the ability to identify, understand, interpret, create, communicate, and compute printed or written information in variety of contexts. This conception shows that literacy is a lifelong learning process that that enables individuals to achieve their goals, develop their knowledge and potential, and to participate fully in their community and wider society (Khlaisang & Koraneekij, 2019) ^[6]. From these conceptions, three important components were identified. These are information literacy, media literacy, and information and communication technology (ICT) literacy. Information literacy denotes skills that deal with the ability to access information (traditional or digital), media and technology,

to understand and critically evaluate different aspects of content and information, as well as create and communicate effectively (Khlaissang & Koraneekij, 2019)^[6]. Possession of these skills is believed to enable students to critically access and evaluate information, use the information accurately for resolving issues or problems, manage the flow of the information from a wide variety of sources, and apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information. Lin and Lian (2018)^[7] stated that this is significance in recognizing intellectual property rights, employing proper citation methods, and adhering to ethical guidelines in the digital landscape. Information literacy empowers individuals to identify biases, assess different perspectives, and engage in responsible information sharing with available media.

Media literacy in the 21st century involves creation and analysis of media products. P21st Century Skills (2015) conceptualized that media literacy is the creation of media product. This is the understanding and utilization of the most appropriate media creation tools, characteristics, and conventions. Media literacy skills deal with understanding, examining, and applying media products considering how and why media messages are constructed and for what purposes (P21st Century Skills, 2015). The examination skills are the skills of critical examination of messages, how valuable the message is what points of view are included or excluded, and how media can influence individual beliefs and behaviours. Application, as a media literacy skill, is devising a fundamental understanding of the ethical/legal issues surrounding access and use of media in information sharing (P21st Century Skills, 2015). Robinson *et al.*, (2021)^[12] emphasizes that individual with strong media literacy skills can navigate various forms of media to distinguish between credible sources from misinformation and propaganda as portrayed in different ICT tools.

Information and Communication Technology (ICT) literacy in the 21st century deals with the application of technological tools to organize, evaluate, store, and communicate. It involves the use of digital technologies, communication networks, and tools to access, manage, integrate, evaluate, and create information (Khlaissang & Koraneekij, 2019)^[6]. These are the essential technical skills needed to develop students' ICT knowledge beyond purely academic applications. Matli and Ngoepe (2020)^[10] stated that ICT literacy skills include application of ICT tools in learning, sourcing, and evaluating of information for media presentation and production, as well as in life and career skills.

This study was informed by the Technological Pedagogical Content Knowledge (TPACK) framework. TPACK was introduced by Punya Mishra and Matthew J. Koehler in 2006 to show complex interplay between technology, pedagogy, and content knowledge for effective teaching practices (Scott, 2021)^[13]. Mishra and Koehler (2006) proposed that effective teaching requires the intersection of three components- content knowledge (CK), which is the teacher's understanding of the subject matter; pedagogical knowledge (PK), which is the understanding of teaching methods; and technological knowledge (TK), which is the ability to use technology effectively. Scott (2021)^[13] stated that these components intersect to form Technological Pedagogical Content Knowledge, where teachers can design and implement strategies that leverage technology to enhance learning. This proposition informed the importance of

equipping English language teachers with the skills to authenticate information, use diverse digital media, and integrate ICT tools into their instruction. Aligning this study with the TPACK framework will identify the specific gaps in teachers' literacy skills and provide insights into the professional development needed to improve these skills for effective English language instruction in the 21st century.

There are several empirical studies that assessed the capacity building need of English language teachers on 21st century literacy skills (Bravo *et al.* 2024; Lin & Yang, 2020; Liza & Andriyanti, 2020)^[2, 8, 9]. For instance, Lin and Yang (2020)^[8] used a quantitative survey research method and studied 200 college English teachers from 10 universities in China. The study utilized a questionnaire to assess technical skills, pedagogical integration, and the use of innovative technologies. Results showed that teachers had basic technical abilities but struggled with advanced tasks like video editing and designing online platforms for teaching. The study emphasized the need for targeted professional development to bridge these gaps. Similarly, Bravo *et al.* (2024)^[2] conducted a systematic literature review of 56 studies globally, analyzing the digital literacy levels of educators. The study found that theoretical awareness was growing, yet, teachers lacked practical applications of digital skills in real-world contexts. The researchers recommended continuous, long-term training programs to enhance practical skills.

In a related development, Liza and Andriyanti (2020)^[9] explored the media literacy skills of 54 pre-service English teachers in Indonesia through a mixed-methods approach. Using the Digital Literacy Scale and semi-structured interviews, the study found high levels of theoretical understanding but insufficient skills in practical applications like content creation. However, Anggeraini *et al.* (2019)^[11] assessed media literacy among 60 practicing teachers in Indonesia. The study found that there was limited familiarity of teachers with media platforms for instructional purposes. The study recommended organizing workshops and practical sessions to enable teachers to use media platforms effectively in classrooms, improving student engagement and learning outcomes.

Furthermore, Eryansyah *et al.* (2020)^[5] surveyed 186 pre-service English teachers across three universities in Indonesia using the Digital Literacy Scale and a demographic questionnaire. The study found that there was a strong basic ICT literacy skill among the teachers but weak proficiency in advanced collaborative tools and interactive teaching technologies. Similarly, Dashtestani (2014)^[4] examined the ICT proficiency of 100 English language teachers globally through an online survey and self-assessment tool. The study found disparities in ICT skills influenced by resource availability and teaching experience. The study recommended designing ICT training programs that cater to individual teacher needs and promote equitable access to technological resources. These studies concentrated on the high schools compared secondary schools where English language teaching and learning is most effective when media is applied.

21st century witnessed rapid advancement of technology. This has presented significant challenge for English language teachers in secondary schools, particularly in the areas of information, media, and ICT literacy. The researcher observed that many English language teachers in secondary schools of Jega Education Zone find it difficult to access,

adopt, adapt or authenticate online information, which are essential in ensuring students engagement with intelligible, native-like, accurate, and credible English language lesson content. The integration of diverse digital media, such as videos, podcasts, and interactive platforms, into English language classrooms remains a big challenge thereby limiting the ability of the teachers to foster active students' engagement and enhance effective instruction. Similarly, the effective use of ICT tools in teaching and learning is hindered by insufficient training and limited access to resources. These gaps restrict teachers' capacity to deliver innovative and effective instruction. This has great impacts on students' development of critical thinking and digital literacy skills. Therefore, this study intends to assess the 21st-century information, media, and ICT literacy skills need of English language teachers in secondary schools for effective English language instruction.

Objectives of the Study

The aim of this study is to identify the 21st century literacy skills need of Secondary Schools English Language Teachers in Jega Education Zone, Kebbi State, Nigeria. Specifically, the study intended to achieve the following objectives:

1. To determine the 21st century information literacy skills need of Secondary Schools English Language Teachers in Jega Education Zone, Kebbi State, Nigeria.
2. To identify the 21st century media literacy skills need of Secondary Schools English Language Teachers in Jega Education Zone, Kebbi State, Nigeria.
3. To identify the 21st century ICT literacy skills need of Secondary Schools English Language Teachers in Jega Education Zone, Kebbi State, Nigeria.

Research Questions

The following research questions were formed to guide the study:

1. What are the 21st century information literacy skills need of Secondary Schools English Language Teachers in Jega Education Zone, Kebbi State, Nigeria?
2. What are the 21st century media literacy skills need of Secondary Schools English Language Teachers in Jega Education Zone, Kebbi State, Nigeria?
3. What are the 21st century ICT literacy skills need of Secondary Schools English Language Teachers in Jega Education Zone, Kebbi State, Nigeria?

Methodology

The study employed a descriptive survey research design. The targeted population is 349 respondents comprising of 152 School Administrators (Principals; Vice Principals Administration and Academic; and Heads of Departments, English Studies) and 197 English Language teachers. A sample 169 respondents as determined by Research Advisor (2006), was purposively selected and used for the study. The instrument used for data collection was a structured questionnaire titled, '21st Century Literacy Skills Questionnaire (21st CLSQ)' It consisted of 20 items generated from review of literature. 21st CLSQ was divided into two categories of skills required and the skills possessed.

Both of the categories had a 4-point likert scales of Highly Required (4), Required (3), Moderately required (2) and Not Required (1) as well as the scale of Highly Possessed (HP), Possessed (P), Moderately Possessed (MP) and Not Possessed (NP), with a corresponding value of 4, 3, 2 and 1 respectively. Four experts validated the instrument, one from the Department of Curriculum, Sokoto State University, Two from Secondary School and one from Department of Science Education, Kebbi State University of Science and Technology, Aliero. Their corrections and suggestions were used to produce the final copy of the questionnaire. The reliability was established using test-retest, with a Cronbach alpha value of $r = 0.82$. Four research assistants who were familiar with the area of the study were employed and briefed on how to administer the questionnaire to the respondents. A total of One Hundred and Sixty-Nine copies of the questionnaire were administered and a total of One Hundred and Fifty-Seven copies were retrieved and analyzed using weighted means and Skills Needed Index (SNI) to answer the research questions. To determine the SNI the following steps were taken:

1. The mean of each item under the skills required category was calculated ($\bar{x}_a$).
2. The mean of each item under the skills possessed category was calculated ($\bar{x}_b$).
3. The difference between the mean of skills required and the mean of skills possessed were calculated ($\bar{x}_a - \bar{x}_b$) and this gives the SNI which indicated whether skills improvement is required or not.
4. Where the mean was found to be equal to zero ($\bar{x}_a - \bar{x}_b = 0$), it indicates that English language teachers do not need skills improvement on the item because the level at which the skills required is equal to skills possessed.

However, any of these conditions must occur for SNI to be equal to zero.

- a) Highly required = Highly Possessed
- b) Required = Possessed
- c) Moderately required = Moderately Possessed
- d) Not required = Not possessed

1. Where the difference is found to be less than zero ($\bar{x}_a - \bar{x}_b < 0$), it is an indication that English language teachers do not need or require skills improvement on the items because the level at which the skills is required is less than the level of the skills possessed.
2. Where the difference is found to be greater than zero ($\bar{x}_a - \bar{x}_b > 0$), it is an indication that English language teachers need or require skills improvement on the items because the level at which the skills is required is greater than the level of the skills possessed. This is what is referred to as the skills improvement.

Results

Research Question 1: What are the 21st century information literacy skills need of Secondary Schools English Language Teachers in Jega Education Zone, Kebbi State, Nigeria?

Table 1: 21st century information literacy skills gap analysis of mean ratings of the responses (N=157)

S. N	Information Literacy Skill	X_R	SD_R	X_p	SD_p	$X_R - X_p$	REMARKS
1.	Possess knowledge and understanding in using existing information accurately for my instruction.	3.32	0.92	3.15	0.61	0.17	Needed
2.	Knowledge of the information that matches the needs of my students	3.43	0.84	3.27	0.71	0.16	Needed
3.	Ability to evaluate information before using it in my lessons.	3.08	0.77	3.16	0.63	-0.08	Not Needed
4.	Ability to access authentic information	3.23	0.81	3.09	0.79	0.14	Needed
5.	Ability to manage information to the need of every student	3.19	0.79	3.48	0.64	-0.29	Not Needed
6.	Ability to apply information to the need of my students	3.29	0.90	3.05	0.67	0.24	Needed
7.	Ability to respect ethics in using information in my lessons	3.48	0.74	3.25	0.76	0.23	Needed

Key: X_R = Mean of Skills Required, SD_R = Standard Deviation of Skills Required, X_p = Mean of Skills Possessed, SD_p = Standard Deviation of Skills Possessed, $X_R - X_p$ = Standard Deviation of Skills Required minus Standard Deviation of Skills Possessed (Gap Index)

Table 1 indicates the overview of the responses of the respondents on the items posed to determine the 21st century information literacy skills need of English Language teachers in secondary schools in item 1, 2, 4, 6, and 7. This shows that these teachers need professional building in most of the 21st century information literacy skills for effective English

language instruction.

Research Question 2: What are the 21st century media literacy skills need of Secondary Schools English Language Teachers in Jega Education Zone, Kebbi State, Nigeria?

Table 2: 21st century media literacy skills gap analysis of mean ratings of the responses (N=157)

S. N.	Media Literacy Skills	X_R	SD_R	X_p	SD_p	$X_R - X_p$	REMARKS
1.	Ability to identify and access relevant media for English language lessons	3.31	0.80	3.17	0.75	0.14	Needed
2.	Ability to assess the media contents before application in the lesson	3.23	0.87	3.02	0.60	0.21	Needed
3.	Ability to analyse the media tools before its application in the lesson	2.96	1.07	2.98	0.79	-0.02	Not Needed
4.	Ability to evaluate the media contents to avoid unwanted contents	3.44	0.90	2.95	0.79	0.49	Needed
5.	Creating the media using available resources	3.07	1.01	3.04	0.76	0.03	Needed
6.	Accessing the media from various sources	3.32	0.78	2.93	0.69	0.39	Needed
7.	Using the media creatively	3.29	0.77	3.02	0.71	0.27	Needed

Key: X_R = Mean of Skills Required, SD_R = Standard Deviation of Skills Required, X_p = Mean of Skills Possessed, SD_p = Standard Deviation of Skills Possessed, $X_R - X_p$ = Standard Deviation of Skills Required minus Standard Deviation of Skills Possessed (Gap Index)

Table 2 indicates an overview of the responses of the English language teachers on the items posed to determine the 21st century information literacy skills need. The data shows that the respondents they need skills on all the media literacy skills items. This indicates that these teachers require capacity building in all the media literacy skills for effective

English language instruction.

Research Question 3: What are the 21st century ICT literacy skills need of Secondary Schools English Language Teachers in Jega Education Zone, Kebbi State, Nigeria?

Table 3: 21st century ICT literacy skills gap analysis of mean ratings of the responses (N=157)

S.N.	ICT Literacy Skills	X_R	SD_R	X_p	SD_p	$X_R - X_p$	REMARKS
1.	Ability to access ICT	3.40	0.74	3.34	0.76	0.06	Needed
2.	Ability to communicate using ICT	3.40	0.64	2.98	0.75	0.42	Needed
3.	Management of ICT gadgets in the institution	3.10	0.83	3.15	0.76	-0.05	Not Needed
4.	Integrate ICT in the instructional practice	3.30	0.78	3.07	0.63	0.23	Needed
5.	Evaluate ICT resources for teaching and learning	3.04	0.94	3.05	0.83	-0.01	Not Needed
6.	Create media using ICT resources in the institution	3.22	0.99	3.07	0.76	0.15	Needed

Key: X_R = Mean of Skills Required, SD_R = Standard Deviation of Skills Required, X_p = Mean of Skills Possessed, SD_p = Standard Deviation of Skills Possessed, $X_R - X_p$ = Standard Deviation of Skills Required minus Standard Deviation of Skills Possessed (Gap Index)

Table 3 indicates the overview of the responses of the respondents on the items posed to determine the 21st century information literacy skills need of English Language teachers in secondary schools in 1, 3, 5, 6, 7, 8, 10, 12, 13, 14, 15, 17 and 19. This indicates that these teachers need capacity building in most of the information literacy skills for effective English language instruction.

Summary of Findings

The following is the summary of findings of the study:

1. There is a wide gap between the information literacy skills required by English language teachers and the skills they possess.
2. There is a wide gap between the media literacy skills required by English language teachers and the skills they

possess.

3. There is a wide gap between the ICT literacy skills required by English language teachers and the skills they possess.

Discussion of Findings

Research question one found that there is a wide gap between the information literacy skills required by English language teachers and the skills they possess. This supported the finding of Lin and Yang (2020)^[8] who found that teachers have only basic technical skills and lack proficiency in advanced competencies, such as using online teaching platforms and multimedia editing tools. It also supported the finding of Bravo *et al.* (2024)^[12] who noted that while teachers demonstrated awareness of digital tools, they fail to apply

these skills effectively in teaching contexts. These findings confirm the need for targeted skills-building programs to close the gap.

Research question two found that there is a wide gap between the media literacy skills required by English language teachers and the skills they possess. This finding corroborated the findings of Liza and Andriyanti (2020)^[9] who showed that pre-service teachers reported possession of theoretical knowledge of media literacy but were unable to create, evaluate, or analyze media content in practical lesson delivery. In addition, Anggeraini *et al.* (2019)^[1] found that practicing teachers rarely integrate media tools into classroom teaching, they also disconnect between required and existing skills.

Research question three found that there is a wide gap between the ICT literacy skills required by English language teachers and the skills they possess. This finding confirms the finding of Eryansyah *et al.* (2020)^[5] and Dashtestani (2014)^[4]. The researchers found that pre-service teachers excel in basic ICT tasks but struggle with advanced skills, such as using collaborative digital tools and interactive teaching resources. Dashtestani (2014)^[4] further found that these disparities in ICT proficiency were influenced by several factors such as resource availability and teaching experience. The studies recommended for equitable training opportunities in well-structured ICT training programs to bridge these gaps.

Conclusion

In conclusion, this research underscores substantial disparities between the information literacy, media literacy, and ICT literacy competencies necessitated by English language educators and those they presently possess. Although foundational skills are manifest, advanced proficiencies essential for the effective incorporation of technology, critical media engagement, and digital collaboration within pedagogical practices are deficient. These inadequacies impede educators' capacity to enhance student involvement and facilitate 21st-century learning outcomes. Addressing these deficiencies requires meticulously designed capacity-building initiatives that emphasize practical training and contextually relevant applications. Such programs should prioritize ongoing professional development to furnish educators with the requisite skills to adapt to the evolving educational milieu. Ultimately, bridging these competency gaps is imperative for empowering educators to cultivate critical thinking, creativity, and digital literacy in their students, thereby ensuring they are adequately prepared to navigate and thrive in a technology-driven environment.

Recommendations

The study recommended the following:

1. The government should design and fund professional development programs to address gaps in information literacy, media literacy, and ICT literacy skills for English language teachers, ensuring these programs are accessible to all educators.
2. The government should provide adequate resources, including digital infrastructure, training facilities, and technology tools, to support the integration of 21st-century skills in teaching practices.
3. The government should establish monitoring and evaluation frameworks to assess teachers' progress in

acquiring and applying these skills, using the findings to refine and improve training initiatives.

4. School administrators should promote and support the integration of digital tools into lesson planning and delivery through regular in-house training and mentorship programmes.
5. School administrators should develop assessment frameworks to evaluate the progression of English language teachers' digital competencies and identify areas needing improvement.
6. Teacher training institutions should revise English language teacher education curricula to embed practical components of digital literacy, ensuring that pre-service teachers acquire not just theoretical knowledge but also hands-on experience with digital tools relevant to English language teaching.

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