WORLD ATLAS INTERNATIONAL JOURNAL OF EDUCATION & MANAGEMENT
VOL 9 NO 1, FEBRUARY 2026, NEW YORK CITY. *ISSN: 2667-1069*

DIGITAL LITERACY AND SOCIOECONOMIC DEVELOPMENT IN AKWA IBOM STATE

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ABSTRACT

In today's technology-driven world, digital literacy is as essential as traditional reading and writing skills as it empowers individuals to participate fully in education, employment, social interaction, and civic, but it possibility of this is hindered by inadequate digital infrastructure in many public schools, including insufficient computers, unreliable internet connectivity, irregular power supply, and limited access to modern educational technologies, shortage of trained teachers and instructors with adequate digital competencies, Students and youths from low-income families often lack personal access to digital devices and internet services, which limits their ability to practice and develop digital skills outside school environments. The study examined the impact of digital literacy on educational development in Akwa Ibom State and also find out if digital literacy has contributed to employment generation in Akwa Ibom State. This study was anchored on Modernization Theory. This research work adopted the survey research design with a descriptive method in giving explanations to Digital literacy and socio-economic development in Akwa Ibom State. The population of this study consists of the general population of residents in Akwa Ibom State –five million two hundred and forty thousand five hundred and two hundred and fifty six (5.240, 556) (Source: 2006 population census). the findings of the study reveals among others that there is a positive and statistically significant relationship between Digital Literacy and educational development in Akwa Ibom State, due to the fact that Students are expose to online resources, online learning, and there is accessible to education Base on the findings, the study recommends among others that the Nigeria's Government- federal, state, local Government and ministry of education should formulate, budget and implements policies on digitalization incorporating students in the primary, secondary schools and university to boast the educational sector in the state.

KEYWORDS: Digital Literacy Socioeconomic Development Educational Development Employment Generation

INTRODUCTION

Globally, different nations of the world have put up more advanced learning and developed strategies, and one of such is the application and adoption of information and communication technology if for the purpose of manpower development of which many organizations today place major paramount attention to it (Eyo, 2024). To this, digital literacy is being considered as to the ability to effectively and responsibly use digital technologies to find, evaluate, create, and communicate information. In today's technology-driven world, digital literacy is as essential as traditional reading and writing

skills. It empowers individuals to participate fully in education, employment, social interaction, and civic life (Dobson & Willinsky, 2009).

Again, digital literacy goes beyond knowing how to operate devices such as computers, smartphones, or tablets. It includes understanding how to search for reliable information online, evaluate the credibility of digital sources, protect personal data, communicate appropriately on digital platforms, and create digital content. For example, using search engines like Google effectively requires critical thinking skills to distinguish accurate information from misinformation (Lee, 2014). In the contemporary workplace, digital literacy is decisive for productivity and innovation. Many organizations rely on digital tools and platforms such as Microsoft applications or collaboration software to manage tasks and communicate. Employees who are digitally literate can adapt more easily to technological changes and contribute more effectively to their organizations. Lee, S. H. (2014).

Again, digital literacy plays a key role in promoting online safety and ethical behavior. Understanding issues such as cybersecurity, digital footprints, and responsible social media use helps individuals navigate the digital environment safely and respectfully.

In conclusion, digital literacy is a vital skill in the 21st century. It enables individuals to access opportunities, make informed decisions, and actively engage in a connected world. As technology continues to evolve, developing strong digital literacy skills will remain essential for personal growth and societal progress.

The place of digital literacy is considered paramount in promoting socioeconomic development by enabling individuals, communities, and nations to participate effectively in the digital economy. It equips people with the skills needed to access information, communicate, solve problems, and create digital content, thereby improving their educational, employment, and entrepreneurial opportunities. In the modern knowledge-based economy, digital competence is no longer optional but essential for productivity, innovation, and competitiveness (Martin, & Grudziecki 2006).

According to the United Nations Educational, Scientific and Cultural Organization, digital literacy is a key component of quality education and lifelong learning, both of which are central to sustainable development. When individuals possess digital skills, they are better able to access online learning platforms, professional training, financial services, and government resources. This enhances human capital development, which directly contributes to economic growth.

The World Bank also recognizes digital skills as critical for economic transformation, particularly in developing countries. Digital literacy enables workers to adapt to technological advancements, participate in remote work, engage in digital entrepreneurship, and access global markets. Small and medium-sized enterprises

(SMEs), for example, can use digital platforms to expand their customer base, reduce operational costs, and increase efficiency.

Reddy, et al., (2020), further observed that digital literacy supports social inclusion and reduces inequality. It helps bridge the digital divide by empowering marginalized groups such as rural populations, women, and low-income communities to access information, education, and employment opportunities. By enhancing access to e-government services, digital literacy also promotes transparency, civic participation, and improved public service delivery.

In addition, digitally literate citizens are better prepared to engage in innovation and knowledge creation, which are drivers of national competitiveness. As economies increasingly rely on data, artificial intelligence, and digital platforms, countries that invest in digital literacy education are more likely to experience sustainable economic development and social progress.

In conclusion, digital literacy is a powerful catalyst for socioeconomic development. It strengthens human capital, fosters inclusive growth, enhances productivity, and promotes social equity. Therefore, investing in digital literacy programmes is not only an educational priority but also a strategic development imperative for nations seeking long-term prosperity.

Digital literacy has become a pivotal driver of educational development in Akwa Ibom State because it equips students and learners with the skills needed to effectively use digital tools such as computers, the internet, and software applications, thereby enhancing the quality of teaching and learning in schools and communities. For example, the Nigerian Content Development & Monitoring Board commissioned state-of-the-art Information and Communication Technology (ICT) centres in secondary schools across the state, providing students with access to computers, broadband internet, and modern learning tools that broaden their educational resources and support preparation for external examinations (Tinmaz, Het al., 2022).

In addition to formal education settings, community and nonprofit initiatives in Akwa Ibom have focused on closing the digital divide and strengthening digital competence. The Iban Ifiok Foundation, for instance, successfully trained young women in basic digital skills such as computer use, internet navigation, and online safety, empowering participants to pursue further learning and expand their educational horizons. Programs targeting inclusive digital skills training have also been implemented for people with disabilities, helping to ensure that learners with diverse needs can participate in the digital economy.

Ibok & Williams, (2025), noted that the State Government's broader development agenda includes plans to establish youth-friendly innovation hubs across all 31 local government areas, which are intended to function as continuous learning and mentorship

centres where young people can access digital skills training, collaboration spaces, and entrepreneurial support. This initiative is expected to deepen digital literacy among youths and foster innovation, critical thinking, and problem-solving capabilities that are essential for success in a technology-driven world.

As digital literacy improves, it directly supports employment generation by making youths more competitive and adaptable in the labour market. For example, training programmes in digital marketing, data analytics, cybersecurity, and other tech-oriented skills have been launched in partnership with federal and international partners, helping participants acquire job-relevant competencies and linking some of them to internship and job placement opportunities. Local government initiatives have also reported that hundreds of youths have been empowered through digital skills development programs, where participants learn practical ICT skills that enhance their employability and readiness for both formal employment and self-employment in the digital economy (Joel et al, 2025).

Moreover, NGOs such as RHAB-YESS Foundation have organized digital skills training focused on entrepreneurship and business development, teaching youths how to build online brands, use digital platforms for sales, and implement digital business strategies all of which contribute to job creation and economic self-sufficiency.

Digital literacy in Akwa Ibom State is improving educational outcomes by integrating technology into learning environments, expanding access to modern tools and resources, and preparing learners for the demands of the 21st-century economy. At the same time, it is fostering employment generation by equipping youths with marketable digital skills, promoting entrepreneurship, and linking trained individuals to emerging job opportunities in the digital and innovation sectors (Esu, & Uyouko, 2023).

Statement of the problem

Despite growing recognition of the importance of digital literacy for educational advancement and employment generation, Akwa Ibom State continues to face significant challenges that limit the full realization of its digital potential. While efforts have been made by the Akwa Ibom State Government and federal agencies to promote ICT integration in schools and youth development programmes, digital literacy levels remain uneven across urban and rural communities.

One major problem is inadequate digital infrastructure in many public schools, including insufficient computers, unreliable internet connectivity, irregular power supply, and limited access to modern educational technologies. These infrastructural gaps hinder effective integration of digital tools into teaching and learning processes, thereby affecting the quality of educational development.

Another critical issue is the shortage of trained teachers and instructors with adequate digital competencies. Even where ICT facilities are available, many educators lack the necessary training to effectively incorporate digital technologies into classroom instruction. This reduces the impact of investments made in digital equipment and learning platforms.

There is a persistent digital divide between urban and rural areas, as well as among socio-economic groups. Students and youths from low-income families often lack personal access to digital devices and internet services, which limits their ability to practice and develop digital skills outside school environments. This inequality widens educational gaps and restricts opportunities for skill acquisition.

In terms of employment generation, although digital literacy has the potential to create new job opportunities in areas such as digital marketing, software development, online entrepreneurship, and remote work, many youths in Akwa Ibom State remain unemployed or underemployed due to insufficient practical digital skills that align with current labour market demands. There is also limited linkage between digital training programs and actual job placement or startup support systems.

Again, limited awareness about digital safety, cybersecurity, and responsible online behavior exposes youths to risks such as cyber fraud, misinformation, and online exploitation, which can negatively affect both educational and economic outcomes.

Therefore, the central problem is that while digital literacy is recognized as a catalyst for educational development and employment generation, structural, infrastructural, capacity-building, and policy implementation gaps continue to hinder its effective development and utilization in Akwa Ibom State. Addressing these challenges is essential to fully harness digital literacy as a tool for sustainable socioeconomic growth in the state.

Objective of the study

The main objective of the study is digital literacy and socioeconomic development in Akwa Ibom state while the specific objectives of the study are:

1. To examine the impact of digital literacy on educational development in Akwa Ibom State
2. To find out if digital literacy has contributed to employment generation in Akwa Ibom State.

Research Questions

1. what is the impact of digital literacy on educational development in Akwa Ibom State

2. Does digital literacy contributed to employment generation in Akwa Ibom State

Research hypotheses

Ho $_1$: Digital literacy has no impact on educational development in Akwa Ibom State
Ho $_2$: Digital literacy has not contributed to employment generation in Akwa Ibom State.

Conceptual explorations

Digital literacy refers to the comprehensive set of skills required to access, interpret, evaluate, produce, and share information through digital technologies. This concept goes beyond basic technical competence, including elements of critical thinking, ethical conduct, and responsible digital behavior. It involves the ability to operate digital devices like computers, smartphones, and tablets, and to use various software tools, cloud-based platforms, and online services effectively. Again, digital literacy incorporates information literacy, which entails the capability to search for, assess, and analyze digital content, distinguish between trustworthy sources and misinformation, and apply that information in decision-making or problem-solving contexts (Helsper, & Eynon, 2010).

Digital literacy includes the skills necessary for effective communication and collaboration in online spaces, such as social media, messaging apps, and collaborative platforms, while adhering to social norms and respecting cultural differences. It also involves an understanding of digital rights, privacy, cyber security, and intellectual property laws to ensure ethical use of online resources. Critical thinking plays a central role, helping individuals analyze complex digital materials, identify patterns, and detect deceptive or false content. Additionally, digital literacy requires creative problem-solving and the ability to adapt to new technologies, fostering lifelong learning in an ever-evolving digital environment. Ultimately, digital literacy enables individuals to thrive in educational, professional, civic, and everyday contexts, expanding their opportunities in a technology-driven world (Eshet-Alkalai, 2004).

Digital literacy and educational development

In Akwa Ibom State, Nigeria, *digital literacy* is increasingly recognized as one of the major element of *educational development* because it equips learners with the knowledge and skills needed to thrive in an information-rich, technology-driven world. Digital literacy in this context means students and educators can use computers, the internet, and other digital tools to learn, communicate, access information, and solve problems in meaningful ways that support academic achievement and future employment (Archibong, 2025).

The state has seen several notable developments linking digital literacy to education as Government and agencies have established Information and

Communication Technology (ICT) centres in schools, such as those commissioned by the Nigerian Content Development and Monitoring Board (NCDMB) in rural secondary schools, which provide computers, internet access, smart screens, and related infrastructure to support digital learning and exposure to global knowledge resources. These centres aim to help students become *ICT-savvy* and competitive academically and professionally (Esu & Uyouko, 2023).

Again, the Akwa Ibom State Government has also been actively promoting digital skills among youths through initiatives like free ICT training programmes at the ARISE ICT Hub, where participants gain practical technology skills that enhance both employability and innovation capacity.

Educational research in the state shows that *online learning platforms* and access to digital resources are increasingly used by postgraduate and tertiary students, indicating an expanding role for digital literacy in higher education and lifelong learning. Historically, digital education infrastructure such as the Ibom E-Library has provided one of West Africa's earliest large-scale digital learning environments, offering access to electronic books, journals, databases, and other digital learning materials that support students and educators alike AS the integration of digital literacy into educational development in Akwa Ibom State is aimed at closing the digital divide, improving teaching and learning quality, preparing students for the digital economy, and fostering a culture of innovation across all levels of education.

Digital literacy and employment generation

In Akwa Ibom State, digital literacy has played a growing role in *employment generation* by equipping residents especially youths with skills that make them more employable, enable entrepreneurship, and link them to job opportunities in the digital economy (Okoli et al.,. (2025).

Programmes that focus on digital skills training**,** such as ICT and technology courses offered through government hubs and nonprofit initiatives, have helped young people develop competencies in areas like digital marketing, data analytics, cyber security, and online business tools, which increase their chances of finding work or starting their own ventures. For example, the state government's recent ICT training at the ARISE ICT Hub empowered 135 youths with practical tech skills tied to employment prospects, mentorship, internships, and startup support (Eyo, et al., 2025).

Beyond skills training, digital platforms and employment portals launched by the state government have modernized how job opportunities are accessed and matched, making it easier for digitally literate job seekers to find work, apply online, and track applications without traditional barriers.

As nothed by Archibong, (2025). Non-governmental and international partnerships have also contributed: initiatives training people with disabilities in data analytics and linking them to employers, and programs by organizations like RHAB-YESS to train hundreds of youths in digital tools for business and online entrepreneurship, both create broader pathways to income and jobs in the digital space. To this, local tech ecosystems in Akwa Ibom are leveraging digital literacy to expand job creation: communities of tech professionals are actively working to generate thousands of employment opportunities for skilled tech-job applicants and innovators within and beyond the state, through developing digital competencies, improving access to digital job markets, and fostering digital entrepreneurship, digital literacy has contributed to reducing unemployment and enhancing economic opportunities in Akwa Ibom State (Ibok, et al., 2025).

Theoretical framework

This study is anchored on Modernization Theory, a development theory that explains how societies progress from traditional systems to more advanced, industrialized, and technologically driven societies. Modernization Theory emerged in the mid-20th century through the works of scholars such as Walt Whitman Rostow, Talcott Parsons, and Daniel Lerner. The theory argues that development occurs when societies adopt modern values, institutions, education systems, and technologies similar to those of industrialized nations.

According to Modernization Theory, economic growth and social transformation are driven by technological advancement, industrialization, urbanization, and expansion of education. In his influential work *The Stages of Economic Growth,* Rostow proposed that societies pass through five stages of development from traditional society to the "age of high mass consumption." A key factor in this transition is the adoption of modern technology and knowledge systems, which enhance productivity and innovation.

In the perspective of digital literacy, Modernization Theory suggests that the integration of digital technologies into education and the workforce represents a critical step in societal transformation. Digital literacy equips individuals with modern skills required for participation in a knowledge-based and technology-driven economy. Therefore, improving digital literacy in Akwa Ibom State can be seen as part of the modernization process that enhances educational quality, promotes technological adoption, and stimulates economic growth.

The theory further assumes that increased access to education and information leads to attitudinal change, rational decision-making, and higher productivity. By integrating digital tools into schools, training youths in ICT skills, and promoting innovation hubs, the Akwa Ibom State Government can accelerate modernization by building human capital and fostering entrepreneurship. As citizens acquire digital

competencies, they become better positioned to engage in emerging sectors such as digital marketing, e-commerce, remote work, and software development, thereby contributing to employment generation and economic diversification.

Again, Modernization Theory emphasizes the importance of institutional reforms and infrastructure development. Reliable electricity, broadband connectivity, and supportive education policies are necessary structural components for digital transformation. Without these foundations, the process of modernization remains incomplete, while Modernization Theory highlights the positive relationship between technology, education, and development, it has been criticized for assuming that all societies must follow the same developmental path as Western nations. Despite these criticisms, the theory remains useful for explaining how investment in digital literacy can serve as a catalyst for educational development and employment generation in Akwa Ibom State.

It is worthy of note that while using Modernization Theory as a framework it helps to explain that strengthening digital literacy is not merely an educational reform but a broader developmental strategy aimed at transforming society from traditional economic structures to a modern, technology-driven economy.

METHODOLOGY

This research work adopted the survey research design with a descriptive method in giving explanations to Digital literacy and socio-economic development in Akwa Ibom State. The population of this study consists of the general population of residents in Akwa Ibom State –five million two hundred and forty thousand five hundred and two hundred and fifty six (5.240, 556) (Source: 2006 population census). The research work adopted the purposive sampling procedure in the distribution of questionnaire. Simple percentage was one of the statistical procedures used in the analysis of the data. The hypotheses formulated for this study used to guide the process of data analysis. Thus, the Pearson Product Moment Correlation Analysis was used to analyze the data.

The sample size for this study was 400, determined with the use of Cochran's formula propounded in 1977

$$n = \frac{X2NP(1-P)}{e2(N-1) + X2P(1-P)}$$

N=sample size or total population

e=Margin of Error (0.05)

$$N = \frac{5.240, 556\ (1 - 5.240, 556)}{1 + (0.05)^2\ (5.240, 56\ -1) + 2(5.240, 56)\ (1 - 5.240, 565)}$$

$$N = \frac{5.240, 556\ (5.240, 555)}{1 + (0.00025)\ (5.240.556) + 2274\ (-5305)}$$

N = 27463421.94858
1+1.310139+ 1.6
N = 400.35211
N= 400. Approximately

Data Presentation and Analysis

BIO-DATA OF RESPONDENTS

Table 1: Distribution of questionnaire

Questionnaire	**Frequency**	**Percentage**
Returned	310	75%
Not returned	90	25%
Total	**400**	**100%**

Source: Field survey (2026)

Having collected the questionnaire from the respondents, the researcher observed that from the information gathered, that out of (400) four hundred copies of questionnaire distributed, and three hundred (310) were completed and returned to the researcher.

Research hypothesis 1: There is no significant relationship between Digital Literacy and educational development in Akwa Ibom State

Tables 2: Responses on Digital Literacy and educational development in Akwa Ibom State

S/N	Digital Literacy and educational development in Akwa Ibom State	S/A	A	D	U	S/D	TOTAL (%)
1.	Students are expose to online resources	**250 (75%)**	**50 (25%)**	**5**	**6**	**-**	**310 (100%)**
2	Students are expose to online learning	**290 (95%)**	**10 (5%)**	**3**	**7**	**-**	**310 (100%)**
3	Digital Literacy make education system more accessible	**220 (60%)**	**80 (40%)**	**4**	**4**	**2**	**310 (100%)**
4	Students are expose and engage into interactive tools and multimedia content	**280 (90%)**	**20 (10%)**	**6**	**4**	**-**	**310 (100%)**
5	Students are expose and engage into educational platforms	**180 (40%)**	**120 (60%)**	**8**		**2**	**310 (100%)**

From the questionnaire retrieved, it was observed that there is a higher percentage of respondents on Digital Literacy and educational development in Akwa Ibom State

Testing of Hypothesis

The Null hypothesis indicates that there is no significant relationship between Digital Literacy and educational development in Akwa Ibom State. Pearson Product Moment Correlation (PPMC) and regression analysis was used in analysis of the above hypothesis with the examination of the responses to the questions on the relationship

between Digital Literacy and educational development in Akwa Ibom State. The PPMC obtained for each of the responses to the questions in Table .2, is presented in Table 3

Table 3: Pearson Product Moment Correlation Coefficients

		Educational development (ED)	Educational development (ED)	Educational development (ED)	Educational development (ED)
Digital Literacy (DL) 1	Pearson Correlation	1	.593**	.414**	.426**
	Sig. (2-tailed)		.000	.000	.000
	N	300	300	300	300
Digital Literacy (DL) 2	Pearson Correlation	.593**	1	.659**	.599**
	Sig. (2-tailed)	.000		.000	.000
	N	300	250	300	300
Digital Literacy (DL) 3	Pearson Correlation	.414**	.659**	1	.932**
	Sig. (2-tailed)	.000	.000		.000
	N	300	300	300	300
Digital Literacy (DL) 4	Pearson Correlation	.426**	.599**	.932**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	300	300	300	300

Source: Researcher's Computation (2026)

Table 4.3 indicates that on the statements that there is no significant relationship between Digital Literacy (DL) and educational development (ED). Pearson Moment Correlation (PPMC) coefficients generated include 0.893, 0.414, 0.426, 0.659, 0.599, and 0.932 were found to be statistically significant at 5% level of significance. This is an indication of the significant relationship between Digital Literacy and educational development in Akwa Ibom State. However, on the nature and degree of relationship between Digital Literacy (independent variable) and educational development (Dependent Variable), the regression and correlation results are presented in Table 4.4.

Table. 4: Analysis Results for Hypothesis One

DL= 4.446 + 0.091	ED
T-stat= (51.795)	(5.244)
Prob. = (0.000)	(0.026)

R= 0.141; R^2 = 0.720; F-stat= 5.035; Prob. (F-stat) = 0.776

Source: Researcher's Computation (2026)

Table 4 shows that educational development in Akwa Ibom State will remain positive at an average of 4.446 units, if there are no changes in Digital Literacy. This implies that educational development in Akwa Ibom State remain constant, indicating the more the unit of Digital Literacy, the more the level of educational development in Akwa Ibom State which will lead to an increase of 0.091 units change. This positive relationship is statistically significant with a computed t-statistic value of 5.244 and a probability value of 0.776 (Sig = 0.076), since the probability value obtained is less than 0.05 at 5% level of significance.

The correlation (PPMC) coefficient R-value of 0.541 indicates the existence of a positive correlation between Digital Literacy and educational development. However, this can be said to be a high positive correlation. Also, the predictive power of Digital Literacy (DL) to explain the changes in educational development (ED) is high given the obtained coefficient of determination (R^2) value of 0.770 obtained.

Finally, given that the computed F-statistic value obtained is 5.035 and the probability (sig) value is 0.726, the relationship between Digital Literacy (DL) and educational development (ED) can be said to have goodness-of-fit. This implies that the relationship is statistically significant. This is an indication that the null hypothesis earlier stated will fail to hold, and is hereby rejected. This implies that a positive and significant relationship exists between Digital Literacy and educational development in Akwa Ibom State.

Research hypothesis 2: There is no significant relationship between Digital Literacy and employment generation in Akwa Ibom State

Tables 5: Responses on Digital Literacy and employment generation in Akwa Ibom State

S/N	Digital Literacy and employment generation in Akwa Ibom State	S/A	A	D	U	S/D	TOTAL (%)
1.	As a result of digital literacy individuals and organization have produced digital technologies for profit motive	**280 (90%)**	**20 (10%)**	**6**	**4**	**-**	**310 (100%)**
2	As a result of digital literacy individuals and organization have data analyst embarking on data analysis for profit motive	**180 (40%)**	**120 (60%)**	**8**		**2**	**310 (100%)**
3	individuals and organization have embark on digital marketing to earn a living	**220 (60%)**	**80 (40%)**	**4**	**4**	**2**	**310 (100%)**
4	As a result of digital literacy individuals and organization have venture into software development to make profit which serve as an employment generation avenue	**250 (75%)**	**50 (25%)**	**5**	**6**	**-**	**310 (100%)**

From the questionnaire retrieved, it was observed that there is a higher percentage of respondents on Digital Literacy and employment generation in Akwa Ibom State

Testing of Hypothesis

The Null hypothesis indicates that there is no significant relationship between Digital Literacy and employment generation in Akwa Ibom State. Pearson Product Moment Correlation (PPMC) and regression analysis was used in analysis of the above

hypothesis with the examination of the responses to the questions on the relationship between Digital Literacy and employment generation in Akwa Ibom State. The PPMC obtained for each of the responses to the questions in Table 4.5, is presented in Table 4.6

Table 4.6: Pearson Product Moment Correlation Coefficients

		Employment Generation (EG)	Employment Generation (EG)	Employment Generation (EG)	Employment Generation (EG))
Digital Literacy (DL) 1	Pearson Correlation	1	.593**	.414**	.426**
	Sig. (2-tailed)		.000	.000	.000
	N	300	300	300	300
Digital Literacy (DL) 2	Pearson Correlation	.593**	1	.659**	.599**
	Sig. (2-tailed)	.000		.000	.000
	N	300	250	300	300
Digital Literacy (DL) 3	Pearson Correlation	.414**	.659**	1	.932**
	Sig. (2-tailed)	.000	.000		.000
	N	300	300	300	300
Digital Literacy (DL) 4	Pearson Correlation	.426**	.599**	.932**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	300	300	300	300

Source: Researcher's Computation (2026)

Table 4.6 indicates that on the statements that there is no significant relationship between Digital Literacy (DL) and Employment Generation (EG). Pearson Moment Correlation (PPMC) coefficients generated include 0.893, 0.414, 0.426, 0.659, 0.599, and 0.932 were found to be statistically significant at 5% level of significance. This is an indication of the significant relationship between Digital Literacy and educational

development in Akwa Ibom State. However, on the nature and degree of relationship between Digital Literacy (independent variable) and Employment Generation (EG) (Dependent Variable), the regression and correlation results are presented in Table 4.7.

Table 4.7: Analysis Results for Hypothesis Two

DL= 4.446 + 0.091	EG
T-stat= (51.795)	(5.244)
Prob. = (0.000)	(0.026)
R= 0.141; R^2 = 0.720; F-stat= 5.035; Prob. (F-stat) = 0.776	

Source: Researcher's Computation (2026)

Table 4.4 shows that Employment Generation (EG) in Akwa Ibom State will remain positive at an average of 4.446 units, if there are no changes in Digital Literacy. This implies that Employment Generation in Akwa Ibom State remain constant, indicating the more the unit of Digital Literacy, the more the level of Employment Generation in Akwa Ibom State which will lead to an increase of 0.091 units change. This positive relationship is statistically significant with a computed t-statistic value of 5.244 and a probability value of 0.776 (Sig = 0.076), since the probability value obtained is less than 0.05 at 5% level of significance.

The correlation (PPMC) coefficient R-value of 0.541 indicates the existence of a positive correlation between Digital Literacy and Employment Generation. However, this can be said to be a high positive correlation. Also, the predictive power of Digital Literacy (DL) to explain the changes in Employment Generation (EG) is high given the obtained coefficient of determination (R^2) value of 0.770 obtained.

Finally, given that the computed F-statistic value obtained is 5.035 and the probability (sig) value is 0.726, the relationship between Digital Literacy (DL) and Employment Generation (EG) can be said to have goodness-of-fit. This implies that the relationship is statistically significant. This is an indication that the null hypothesis earlier stated will fail to hold, and is hereby rejected. This implies that a positive and significant relationship exists between Digital Literacy and Employment Generation in Akwa Ibom State.

Table 4.8: Descriptive analysis and representation of digital literacy and educational development in Akwa Ibom State

S/N	Initiative/Programmes	Description	Impact on Educational Development
1	ICT Centers in Schools	ICT centers installed in rural schools (e.g., Ikot Ibiok, Utu-Etim-Ekpo, Ikot Uko-Ika) to provide digital tools like computers, smart screens, and Internet access.	Increases access to technology, improving digital skills and global learning opportunities for students.
2	Community Digital Literacy Trainings	"Digital Literacy for All" initiative in Essien Udim LGA, teaching digital skills, online safety, and content creation.	Empowers local communities by enhancing digital literacy and confidence in using technology.
3	Youth Digital Skills Programs	ARISE ICT hubs and training programs in Uyo for youth, focusing on ICT and business skills.	Prepares youth for the digital workforce, improving employability and entrepreneurial skills.
4	Inclusion and Accessibility Initiatives	Digital literacy workshops for underrepresented groups, such as persons with disabilities and women, run by NGOs in Uyo.	Promotes educational equity by providing digital literacy opportunities to marginalized groups.

5	Proposed Innovation Hubs Across the State	Establishment of innovation hubs in all 31 LGAs under the ARISE Agenda, to train youth in digital skills.	Encourages youth innovation and prepares them for future jobs in the digital economy.

Table 4.9: Descriptive analysis and representation of digital literacy and employment generation in Akwa Ibom State

S/N	Area	Description	Impact on Employment Generation
1	Youth Digital Skills Training	Programmes like the ARISE ICT hubs and youth empowerment initiatives focus on providing training in digital skills like coding, graphic design, digital marketing, and website development.	Enhances employability by equipping youth with skills needed in the growing digital economy, increasing chances of securing local and remote employment.
2	Entrepreneurship Development	Digital skills training programmes, including digital marketing, e-commerce, and business automation tools, foster self-employment and innovation.	Promotes entrepreneurship, allowing young people to start online businesses or digital-based services, reducing dependency on formal employment.
3	Remote Work Opportunities	Digital literacy opens doors for remote work, especially with global companies that hire online. Programs train people in remote working tools (e.g., Zoom, Trello, and Slack).	Creates access to global job markets, giving local talent the ability to work remotely for

			companies' worldwide, thereby diversifying income streams and reducing unemployment.
4	Agricultural Tech (AgriTech) Integration	The introduction of digital tools in agriculture, such as farm management apps, e-marketplaces, and drone technology, is training farmers and agribusinesses in tech applications.	Boosts agribusiness employment by modernizing agricultural practices, improving productivity, and creating new jobs in tech-driven agriculture.
5	Government-Backed Employment Programs	The Akwa Ibom government has partnered with international organizations to implement skills development programs, such as the Digital Skills for Youth Empowerment Program, which trains youth in both digital literacy and entrepreneurship.	Increases job opportunities in both public and private sectors, and helps alleviate unemployment by providing support to small businesses and startups.
6	Digital Literacy for Persons with Disabilities	Programs for training people with disabilities in digital tools (e.g., screen readers, e-learning platforms) and online job opportunities.	Inclusive employment: Empowering persons with disabilities to access work-from-home jobs, digital marketing roles, or freelance services, increasing their participation in the economy.

7	Innovation Hubs & Co-working Spaces	Innovation hubs across Akwa Ibom provide access to technology, mentorship, and funding for startups and entrepreneurs, focusing on tech-driven businesses.	Fosters job creation by supporting startups, encouraging new businesses in sectors like software development, digital marketing, and other tech-based industries.

Discussion of Findings

Digital Literacy and educational development

The Null hypothesis indicates that there is no significant relationship between Digital Literacy and educational development in Akwa Ibom State. Pearson Product Moment Correlation (PPMC) and regression analysis was used in analysis of the above hypothesis with the examination of the responses to the questions on the relationship between Digital Literacy and educational development in Akwa Ibom State. Pearson Moment Correlation (PPMC) coefficients generated include 0.893, 0.414, 0.426, 0.659, 0.599, and 0.932 were found to be statistically significant at 5% level of significance. This is an indication of the significant relationship between Digital Literacy and educational development in Akwa Ibom State. This implies that educational development in Akwa Ibom State remain constant, indicating the more the unit of Digital Literacy, the more the level of educational development in Akwa Ibom State which will lead to an increase of 0.091 units change. This positive relationship is statistically significant with a computed t-statistic value of 5.244 and a probability value of 0.776 (Sig = 0.076), since the probability value obtained is less than 0.05 at 5% level of significance.

The correlation (PPMC) coefficient R-value of 0.541 indicates the existence of a positive correlation between Digital Literacy and educational development. However, this can be said to be a high positive correlation. Also, the predictive power of Digital Literacy (DL) to explain the changes in educational development (ED) is high given the obtained coefficient of determination (R^2) value of 0.770 obtained.

Finally, given that the computed F-statistic value obtained is 5.035 and the probability (sig) value is 0.726, the relationship between Digital Literacy (DL) and educational development (ED) can be said to have goodness-of-fit. This implies that the relationship is statistically significant. This is an indication that the null hypothesis earlier stated will fail to hold, and is hereby rejected. This implies that a positive and significant relationship exists between Digital Literacy and educational development in Akwa Ibom State.

Digital Literacy and employment generation

The Null hypothesis indicates that there is no significant relationship between Digital Literacy and employment generation in Akwa Ibom State. Pearson Product Moment Correlation (PPMC) and regression analysis was used in analysis of the above hypothesis with the examination of the responses to the questions on the relationship between Digital Literacy and employment generation in Akwa Ibom State. Pearson Moment Correlation (PPMC) coefficients generated include 0.893, 0.414, 0.426, 0.659, 0.599, and 0.932 were found to be statistically significant at 5% level of significance. This is an indication of the significant relationship between Digital Literacy and educational development in Akwa Ibom State. This implies that Employment Generation in Akwa Ibom State remain constant, indicating the more the unit of Digital Literacy, the more the level of Employment Generation in Akwa Ibom State which will lead to an increase of 0.091 units change. This positive relationship is statistically significant with a computed t-statistic value of 5.244 and a probability value of 0.776 (Sig = 0.076), since the probability value obtained is less than 0.05 at 5% level of significance.

The correlation (PPMC) coefficient R-value of 0.541 indicates the existence of a positive correlation between Digital Literacy and Employment Generation. However, this can be said to be a high positive correlation. Also, the predictive power of Digital Literacy (DL) to explain the changes in Employment Generation (EG) is high given the obtained coefficient of determination (R^2) value of 0.770 obtained.

Finally, given that the computed F-statistic value obtained is 5.035 and the probability (sig) value is 0.726, the relationship between Digital Literacy (DL) and Employment Generation (EG) can be said to have goodness-of-fit. This implies that the relationship is statistically significant. This is an indication that the null hypothesis earlier stated will fail to hold, and is hereby rejected. This implies that a positive and significant relationship exists between Digital Literacy and Employment Generation in Akwa Ibom State.

SUMMARY

This study was an examination on Digital Literacy and socio-economic development in Akwa Ibom State. The objectives developed in the study were to examine relationship between Digital Literacy and educational development in Akwa Ibom State, to assess the relationship between Digital Literacy and employment generation in Akwa Ibom State. Survey method and descriptive research design was adopted in the study. Data was collected using research questionnaire which was administered to a sample of 400 respondents in Akwa Ibom State. The collected data was analyzed using descriptive and inferential statistics analysis. The analysis revealed that:

i. There is a positive and statistically significant relationship between Digital Literacy and educational development in Akwa Ibom State, due to the fact that

Students are expose to online resources, online learning, and there is accessible to education

ii. There is a positive and statistically significant relationship between Digital Literacy and employment generation in Akwa Ibom State.

CONCLUSION

It could be concluded from the findings that Digital Literacy has contributed to the socio-economic development in Akwa Ibom State as it has enhanced educational development and employment generation.

RECOMMENDATIONS

Based on the findings, the study recommends that the Nigeria's Government- federal, state, local Government and ministry of education should formulate, budget and implements policies on digitalization incorporating students in the primary, secondary schools and university to boast the educational sector in the state, and secondly that the Nigeria's Government- federal, state, local Government should empower individuals and organization on digital/technological categories, as it will generate more employment for individuals who would have remained unemployed and an avenue for profit maximization to organizations.

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