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PARENTAL CHARACTERISTICS AND THE ACQUISITION OF DIGITAL SKILLS AMONG SECONDARY SCHOOL STUDENTS IN ETINAN LOCAL GOVERNMENT AREA OF AKWA IBOM STATE

By

Emak Mfoniso Ntiedo
Curriculum Studies, Educational Management and Planning

ABSTRACT

This study examined the influence of parental characteristics on the acquisition of digital skills among secondary school students in Etinan Local Government Area of Akwa Ibom State. Specifically, the study investigated the influence of parental support and parental education on students' acquisition of digital skills. Two research questions and two null hypotheses guided the study. A descriptive survey research design was adopted. The population of the study comprised 3,314 SSIII students in 11 public secondary schools, while a sample size of 200 students was selected using random sampling technique. The instrument for data collection was a structured questionnaire titled Parental Characteristics and Acquisition of Digital Skills Questionnaire (PCADSQ), which was validated and yielded a reliability coefficient of 0.84 using Cronbach Alpha. Data were analysed using mean and standard deviation to answer the research questions, while t-test and Analysis of Variance (ANOVA) were used to test the hypotheses at 0.05 level of significance. The findings revealed that parental support had a significant influence on the acquisition of digital skills among secondary school students, as students with high parental support demonstrated higher levels of digital competence than those with low support. The study also found that parental education significantly influenced students' acquisition of digital skills, with students whose parents had higher educational qualifications exhibiting better digital competencies. Based on these findings, it was concluded that parental characteristics are critical determinants of students' digital skill acquisition. It was therefore recommended that parents should actively support their children's digital learning, while government and educational stakeholders should implement programmes aimed at enhancing parental involvement and bridging the digital divide.

KEYWORDS: Parental Characteristics, Parental Support, Parental Education, Digital Skills, Secondary School Students

INTRODUCTION

The acquisition of digital skills among secondary school students has become increasingly problematic despite the rapid expansion of digital technologies in education. The persistent digital divide has reflected inequalities in access to digital devices, internet connectivity and supportive learning environments. Many students, particularly in rural areas lack access to functional computers, reliable electricity and affordable internet services. This situation has limited their opportunities to develop essential digital competencies. Observations have shown that even in areas where digital tools are available, disparities in usage exist, as some students primarily use these technologies for entertainment rather than educational purposes. This unequal access and utilization hinder the development of critical digital skills such as information literacy, online communication and content creation which could ultimately affect students' academic performance and future employability (Alharbi et al., 2023).

Digital skills refer to a set of competencies that enable students to effectively and responsibly use digital technologies for learning, work and everyday life. According to van Laar et al. (2020), digital skills encompass technical, cognitive and socio-emotional abilities required to operate digital devices, evaluate information, communicate, and create content in digital environments. Similarly, the European Commission (2021) defines digital skills as the confident and critical use of information and communication technologies (ICT) for information retrieval, communication and problem solving. In secondary school, digital skills involve students' ability to search for relevant academic information, assess the credibility of digital sources, use educational software and engage in safe and ethical online behaviour. These skills are not limited to basic computer operations but extend to higher-order thinking abilities such as critical analysis, collaboration, and digital creativity (Odigwe and Owunari, 2022). The integration of digital platforms such as virtual classrooms, online libraries and educational applications requires learners to possess competencies that go beyond basic computer operation. Digital skills enable students to locate, evaluate and synthesize information from diverse online sources and promote independent inquiry-based learning among students. These competencies also facilitate effective communication through emails, discussion forums and collaborative platforms, enabling them to interact with peers and teachers. It also fosters global awareness as students gain exposure to global knowledge and perspectives. However, digital proficiency is not merely an academic requirement but a fundamental necessity for personal, educational and professional development in the 21st century.

The lack of digital skills among secondary school students presents far-reaching consequences. Students who lack digital competence often have trouble in accessing online learning materials, completing computer-based assignments and participating in digital classroom activities. This limitation can result in poor academic achievement, reduced engagement and a lack of confidence in their learning abilities. Moreover, digital illiteracy restricts students' capacity to critically evaluate online information, making them more susceptible to misinformation and unreliable sources (van Deursen and van Dijk, 2021). In an era where information is abundant and easily accessible, the inability to discern credible content poses significant risks to students' intellectual development. Additionally, students without adequate digital skills are more vulnerable to online threats such as cyberbullying, identity theft, and exposure to harmful content, as they may lack the knowledge required to navigate digital spaces safely and responsibly (Livingstone et al., 2021). Beyond the classroom, the absence of digital competence contributes to social and economic exclusion, as individuals may be unable to participate fully in digital communication, e-governance, and online economic activities (Ogbuene, 2025).

The acquisition of digital skills among students can be attributed to several interrelated factors, broadly categorized into personal, institutional, parental characteristics, and socio-cultural influences. According to Oladipo and Akinola (2021), personal factors such as motivation, self-regulation, and emotional control play a crucial role in shaping students' willingness and capacity to engage with digital technologies and persist in learning new digital competencies. Students who demonstrate higher levels of intrinsic motivation and self-discipline are more likely to explore digital tools, practice consistently, and adapt to evolving technological demands. Institutional factors, including the availability of functional ICT infrastructure, access to digital learning resources, presence of structured digital literacy programs, supportive school policies, and effective instructional leadership, also significantly influence students' acquisition of digital skills (Oladipo and Akinola, 2021). Furthermore, parental characteristics such as family background, level of parental education, access to digital

devices at home, parental support, and monitoring of technology use contribute meaningfully to students' exposure to and engagement with digital technologies (Eze and Chukwuemeka, 2022).

Literature highlights the critical influence of parental education and parental support on students' acquisition of digital skills, particularly at the secondary school level. Parental education functions as an important socio-cultural resource that shapes students' cognitive development, learning orientation, and access to digital opportunities. Parents with higher educational attainment are more likely to possess digital literacy and demonstrate positive attitudes toward technology integration in learning, which significantly enhances their children's engagement with digital tools and platforms (Dong, Cao, and Li, 2020; Wang et al., 2021). Such parents are also better positioned to provide enabling learning environments through access to digital devices, internet connectivity, and academic guidance that supports the development of relevant digital competencies. Parental support further reinforces students' acquisition of digital skills by promoting consistent engagement and effective utilization of technology for academic purposes. This support includes supervision of learning activities, encouragement, and active participation in students' academic experiences. Evidence indicates that students who receive adequate parental support tend to exhibit higher levels of motivation, self-regulation, and confidence in the use of digital technologies (González DeHass, Willems, and Holbein, 2020; Garbe et al., 2020). These factors contribute to more disciplined and purposeful use of digital resources, thereby enhancing learning outcomes. Limited parental education and inadequate support may restrict students' exposure to digital tools and reduce opportunities for skill development. Students from such backgrounds often encounter challenges such as lack of access to devices, minimal guidance, and low academic stimulation, which can hinder the acquisition of essential digital competencies (Andrew et al., 2020).

STATEMENT OF THE PROBLEM

Parental characteristics is expected to shape students' learning experiences and outcomes especially in the acquisition of digital skills. However, in secondary schools within Etinan Local Government Area, concerns have been raised about students' low level of digital competence which seem to have been caused by limited proficiency in the use of computers, internet applications, and other digital learning tools. This situation poses a challenge to effective teaching and learning, especially in an era where digital literacy is a core educational requirement. Observation revealed that most students seem to experience lack access to digital tools, inadequate support at home, and low awareness of the importance of digital literacy. Furthermore, the variations in parental involvement and supervision seem to affect how students utilize available digital resources for productive academic purposes. Despite the recognized importance of parental influence, there is limited empirical evidence on how parental characteristics such as parental support and education affect the acquisition of digital skills among secondary school students in Etinan Local Government Area. This gap in knowledge makes it difficult for educators, school administrators, and policymakers to develop targeted interventions that address disparities in digital competence among students. Therefore, this study seeks to investigate the influence of parental characteristics on the acquisition of digital skills among secondary school students in Etinan Local Government Area, with the aim of providing evidence-based insights that will inform strategies for improving digital literacy and enhancing students' academic and technological development.

PURPOSE OF THE STUDY

The aim of the study was to investigate the influence of parental characteristics on the acquisition of digital skills among secondary school students in Etinan Local Government Area. Specifically, the study examined:

i) The influence of parental support on the acquisition of digital skills among secondary school students in Etinan Local Government Area
ii) The influence of parental education on the acquisition of digital skills among secondary school students in Etinan Local Government Area

DESIGN OF THE STUDY

A descriptive survey research design will be adopted for the study. A survey research design employs questionnaire in order to determine the opinions, attitude and perception of persons in line with the objectives of the study. It is one in which the entire population or representative sample is studied by collecting and analyzing data from or the use of questionnaire (Amujaoyi and Joseph, 2016).

POPULATION

The population of the study comprised of all 3,314 SSIII students in 11 Public Secondary Schools in Etinan Local Government Area during the 2025/2026 academic session. Therefore, 3,614 SSIII students constituted the population of the study (State Secondary Education Board, Uyo, 2023).

SAMPLE AND SAMPLING TECHNIQUE

A sample size of 200 SSIII students was selected using a random sampling technique. 8 schools were randomly selected from the 11 schools in the area. In each school, 25 students were selected. Balloting without replacement method was used. This process involves folding pieces of paper with "YES" and "NO" options and mixing them up in a basket before drawing. Students who picked paper with Yes options were used for the study.

INSTRUMENTATION

A structured questionnaire titled: Parental Characteristics and Acquisition of Digital Skills Questionnaire (PCADSQ) was used as instrument for data collection. The instrument was subjected to a face validation and reliability test. The reliability coefficient index for the instrument of .84 was obtained using Cronbach Alpha Statistics.

METHOD OF DATA ANALYSIS

Mean, standard deviation was used to answer the research questions while t-test was used to test the null hypotheses at .05 level of significance in answering the research questions. Criterion mean score of 2.5 was used to compare with achieved mean score of respondents on the questionnaire.

RESULTS

Research Question One: What is the influence of parental support on the acquisition of digital skills among secondary school students in Etinan Local Government Area?

Research Hypothesis One: There is no significant influence of parental support on the acquisition of digital skills among secondary school students in Etinan Local Government Area

Table 1 Mean and standard deviation and t-test analysis of influence of parental support on the acquisition of digital skills among secondary school students in Etinan Local Government Area

Parental support	N	Mean	St. d	p-value	Decision at .05
High parental support	92	3.13	1.10	0.001	Sig.
High parental support	108	3.41	.97		

Source: Field Survey, 2026 (df=199, significant at .05 alpha level)

The result in Table 1 reveals the mean and standard deviation for parental support and acquisition of digital skills. The result reveals that students that receive high parental support recorded digital skills mean score of 39.13 and a standard deviation of 1.10 while students with low parental support recorded digital skills mean score of 22.56 and standard deviation of .95. This implies that students with high parental support have better opportunity to acquire highly value digital skills than their counterparts with low parental support in secondary schools in Etinan Local Government Area. Furthermore, the corresponding test of hypothesis reveals that the p-value of .004 at 199 degree of freedom is less than 0.05 level of significance. With this result, the null hypothesis which stated that there is no significant influence of parental support on the acquisition of digital skills among secondary school students was rejected. This implies that there is no significant influence of parental support on the acquisition of digital skills among secondary school students in Etinan Local Government Area.

Research Question Two: What is the influence of parental education on the acquisition of digital skills among secondary school students in Etinan Local Government Area?

Research Hypothesis Two: There is no significant influence of parental education on the acquisition of digital skills among secondary school students in Etinan Local Government Area

Table 2: Mean and Standard Deviation of influence of parental education on the acquisition of digital skills among secondary school students in Etinan Local Government Area

Variables	N	$\bar{X}$	SD	Remarks
Non-formal Education	17	22.18	2.91	
Primary Education	19	27.46	3.84	
Secondary Education	53	31.72	4.25	
Tertiary Education	111	36.94	5.12	

Source: Field Survey, 2026

The analysis in Table 2 produces the mean score and standard deviation of influence of parents' educational level on the acquisition of digital skills among secondary school students in Etinan Local Government Area. The result reveals that students whose parents had non-formal education recorded a mean score of 22.18 and a standard deviation of 2.91 in their acquisition of digital skills. Students whose parents had primary education recorded a mean score of 27.46 and a standard deviation of 3.84 in their acquisition of digital skills. Students whose parents had secondary education recorded a mean score of 31.72 and a standard deviation of 4.25, while students whose parents had tertiary education recorded a mean score of 36.94 and a standard deviation of 5.12 in their acquisition of digital skills. The analysis also showed that mean scores for students in all the educational categories were above the 2.50 criterion score. This implies that parents' educational level has a positive influence on the acquisition of digital skills among secondary school students in Etinan Local Government Area. However, students whose parents have tertiary education demonstrated relatively higher degree of acquisition of digital skills compared to other categories.

Table 3: Summary of ANOVA Analysis of influence of parental education on the acquisition of digital skills among secondary school students in Etinan Local Government Area

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	5305.515	2	2652.758	135.215*	.000
Within Groups	2530.818	197	19.619		
Total	7836.333	199			

Significant at .05 level

The analysis in Table 3 reveals the F-value (2, 197) of 135.215 and the corresponding p-value of .000 which is significant at 0.5 level of significance. With this result, the null hypothesis which stated that there is no significant influence of parental education on the acquisition of digital skills among secondary school students was rejected. This implies that there is a significant influence of parental education on the acquisition of digital skills among secondary school students in Etinan Local Government Area.

DISCUSSION

The findings of the study revealed that students who received high parental support had a significantly higher mean score (39.13) in digital skills acquisition compared to those with low parental support (22.56). This substantial difference indicates that parental support plays a critical role in enhancing students' digital competencies. The test of hypothesis further showed that there is a significant influence of parental support on the acquisition of digital skills. This finding is in strong agreement with the study by Eze and Chukwuemeka (2022), who emphasized that parental support significantly contributes to students' exposure to and

engagement with digital technologies. Similarly, González DeHass, Willems, and Holbein (2020) and Garbe et al. (2020) found that parental involvement enhances students' motivation, self-regulation and confidence in using digital tools. This result may be attributed to consistent supervision, encouragement, and provision of necessary digital resources at home. These forms of support create a conducive learning environment that fosters active engagement with technology, thereby improving digital skill acquisition.

The findings from Table 2 indicated that parents' educational level has a progressive influence on students' digital skills acquisition. Students whose parents had tertiary education recorded the highest mean score (36.94), followed by those with secondary (31.72), primary (27.46), and non-formal education (22.18). This trend demonstrates a clear positive relationship between parental educational attainment and students' digital competencies. The implication is that higher parental education equips parents with better knowledge, attitudes, and resources to support their children's digital learning. This result corroborates the findings of Dong, Cao and Li (2020); Wang et al. (2021), who noted that parents with higher educational qualifications are more likely to possess digital literacy skills and positive dispositions toward technology use in education. Such parents are also more capable of providing digital devices, internet access, and academic guidance, which significantly enhance students' opportunities to develop relevant digital skills. In addition, Andrew et al. (2020) highlighted that students from less educated family backgrounds often face limitations such as lack of access to digital tools and minimal academic support, which negatively affect their skill acquisition.

CONCLUSION

Based on the findings of this study, it is evident that parental characteristics play a significant role in the acquisition of digital skills among secondary school students in Etinan Local Government Area. Specifically, parental support and parents' level of education were found to have a significant influence on students' digital competencies.

RECOMMENDATIONS

It is therefore recommended that:

- Parents should be encouraged to take a more active role in supporting their children's use of digital technologies for learning purposes.
- Government should implement intervention programs aimed at assisting parents with lower educational backgrounds in order to bridge the digital divide and ensure that

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