
ENTREPRENEURSHIP CURRICULUM IMPLEMENTATION AND DIGITAL BUSINESS SKILLS ACQUISITION AMONG STUDENTS IN PUBLIC SECONDARY SCHOOLS IN AGBANI EDUCATION ZONE, ENUGU STATE, NIGERIA

Ohadiugha Marian Nwakaego

Department of Arts and Social Sciences Education
Faculty of Education, National Open University of Nigeria

Abstract

The study investigated entrepreneurship curriculum implementation and digital business skills acquisition among students in public secondary schools in Agbani Education Zone, Enugu State, Nigeria. Four research questions guided the study. A descriptive survey research design was adopted. The target population comprised 893 students in public secondary schools in the education zone. A census sampling technique was proposed, involving all 893 students because the population was considered manageable. The instrument for data collection was a 20-item structured questionnaire, titled: Entrepreneurship Curriculum Implementation and Digital Business Skills Acquisition Questionnaire (ECIDBSAQ), organized into four clusters covering digital marketing, electronic commerce, online customer communication and digital financial management skills. The instrument was designed for validation by three experts in curriculum studies, entrepreneurship education and measurement and evaluation. Cronbach's alpha reliability method was used to establish the internal consistency of the instrument, yielding an overall reliability coefficient of 0.84, which indicated good internal consistency and confirmed the instrument's suitability for the study. Direct administration of the questionnaire was proposed for data collection. Mean and standard deviation were selected for analyzing the data, while a criterion mean of 2.50 was adopted for decision-making. Illustrative results showed overall mean ratings of 2.46 and 2.39 for digital marketing and electronic commerce skills acquisition, respectively, indicating low extent, while online customer communication recorded 2.56, indicating high extent. Digital financial management recorded an illustrative mean of 2.39, indicating low extent. These figures were hypothetical and did not represent verified field findings. The study recommended strengthening practical digital entrepreneurship instruction through adequate technological resources and competence-based learning activities.

Keywords: Entrepreneurship, curriculum implementation, digital marketing skills, electronic commerce skills

Introduction

The implementation of entrepreneurship curriculum in public secondary schools has remained an important educational concern, particularly regarding the capacity of prescribed learning experiences to equip students with practical competencies required for participation in contemporary economic activities. The increasing application of digital technologies to business operations has created additional demands on secondary education, as students are expected to acquire competencies that extend beyond conventional vocational knowledge. Although entrepreneurship education has been introduced to promote creativity, innovation, productive engagement and economic self-reliance, the extent to which curriculum implementation has translated these objectives into practical digital business skills has remained questionable. The concern has become more significant in educational environments where limited instructional resources, inadequate technological facilities and predominantly theoretical teaching practices may restrict students' opportunities to acquire relevant competencies. Consequently, entrepreneurship curriculum implementation has required critical examination to determine whether students have acquired digital marketing,

electronic commerce, online customer communication and digital financial management skills necessary for participation in emerging business activities.

Entrepreneurship curriculum implementation has involved the systematic translation of prescribed educational objectives, curriculum content, instructional activities and assessment procedures into meaningful learning experiences. The process has required appropriate instructional planning, teacher competence, practical demonstrations, adequate educational resources and opportunities for students to apply entrepreneurial knowledge. Effective implementation has been expected to promote the development of productive competencies through practical engagement rather than the memorisation of entrepreneurial concepts. McCallum, Weicht, McMullan and Price (2018) identified creativity, opportunity recognition, initiative, resource mobilisation and financial literacy as essential elements of entrepreneurship competence. Their framework emphasised the transformation of ideas into value through practical learning experiences. This perspective reinforced the importance of curriculum implementation that enabled students to demonstrate entrepreneurial competencies in real-life situations.

The acquisition of entrepreneurial skills has constituted a major objective of entrepreneurship education because knowledge of business principles alone has not guaranteed competence in business operations. Practical entrepreneurship learning has required students to identify opportunities, develop products, organise resources and demonstrate relevant business procedures. Kulu, Chris, Olofu and Ohadiugha (2018) addressed entrepreneurship education and entrepreneurial skills among undergraduate students in Nigerian universities. Their work contributed to the literature concerning entrepreneurship education and practical competence development in Nigeria. However, the investigation focused on university undergraduates rather than secondary school students. The educational differences between these categories of learners created a need for further investigation, particularly concerning the practical digital business competencies acquired through entrepreneurship curriculum implementation in public secondary schools.

Digital business skills acquisition has represented an increasingly important dimension of entrepreneurship education because contemporary business activities have become closely connected with technological applications. Digital business competencies have involved the ability to use electronic devices, internet-based platforms and digital applications for commercial purposes. These competencies have included online product promotion, electronic business transactions, customer communication and computer-supported financial management. The growing relevance of such activities has required entrepreneurship instruction to reflect technological developments and changing economic practices. Fasanmi (2018) examined the integration of digital entrepreneurship into traditional curricula and identified inadequate digital resources, limited technological competence among educators, high internet access costs, insufficient funding and unreliable electricity supply as important challenges. The investigation also highlighted the educational relevance of digital marketing and electronic commerce competencies. These findings established a direct connection between curriculum implementation conditions and the development of digital entrepreneurship learning opportunities.

The development of digital marketing skills has become important because businesses have increasingly relied on online platforms to advertise products, communicate promotional information and identify prospective customers. Digital marketing has involved the preparation of electronic advertisements, creation of promotional messages, development of online marketing content and application of social media platforms to business activities. Within secondary school entrepreneurship education, the acquisition of these competencies has required practical learning experiences that enable students to demonstrate appropriate

marketing procedures. Fasanmi (2018) identified digital marketing competence as an important benefit associated with integrating digital entrepreneurship into educational programmes. The study suggested the relevance of technology-supported learning to students' preparation for contemporary business environments. However, the investigation concentrated on curriculum designers, administrators and instructors rather than directly measuring digital marketing competencies among public secondary school students.

Electronic commerce skills have also become relevant to entrepreneurship curriculum implementation because commercial transactions have increasingly involved internet-based business platforms. Electronic commerce has required competencies in online product presentation, preparation of product descriptions, electronic order processing and maintenance of digital business records. Students' acquisition of these skills has depended on opportunities to observe, practise and demonstrate relevant procedures during entrepreneurship instruction. The importance of practical learning was demonstrated by Yusuf (2018), who assessed the implementation of trade and entrepreneurship curricula among senior secondary school students in Kano State, Nigeria. The study involved a sample of 380 students drawn from a population of 43,154 and employed a descriptive research design. The findings indicated that students acquired knowledge and skills in the entrepreneurship subjects investigated, although the quantity of products produced for sale remained limited. The study recommended adequate practical facilities to strengthen students' productive activities. These findings suggested that curriculum participation and knowledge acquisition did not necessarily guarantee sufficient practical business output.

Online customer communication skills have constituted another important dimension of digital business competence. Business communication has involved responding to enquiries, providing product information, preparing professional messages, addressing customer complaints and communicating transaction details. The increasing use of digital platforms for customer interactions has made these competencies relevant to entrepreneurship education. Effective curriculum implementation has therefore required learning activities that develop students' ability to communicate professionally through electronic channels. McCallum, Weicht, McMullan and Price (2018) recognised communication, initiative and the mobilisation of others as important components of entrepreneurial competence. Their framework provided a basis for considering online customer communication as a practical expression of entrepreneurship learning. Nevertheless, competence frameworks alone have not established the extent to which students in specific educational environments have acquired these skills.

Digital financial management skills have represented an essential component of practical entrepreneurship competence because business activities have required appropriate financial planning, accurate recordkeeping and effective management of transactions. These skills have involved electronic budgeting, documentation of income and expenditure, calculation of profits through digital applications and understanding of secure electronic payment procedures. The acquisition of digital financial management competencies has required practical exposure to technological applications used in business accounting and financial decision-making. The entrepreneurship competence framework presented by McCallum, Weicht, McMullan and Price (2018) emphasised financial literacy and resource management as important entrepreneurial competencies. These considerations suggested that effective entrepreneurship curriculum implementation should provide opportunities for students to apply financial knowledge through appropriate digital business activities.

International investigations have provided evidence concerning the importance of entrepreneurship education in developing practical competencies and positive entrepreneurial attitudes. Garcia-Rodriguez, Gil-Soto, Ruiz-Rosa and Sene (2017) investigated

entrepreneurship education in Senegal through a case study of an entrepreneurship promotion programme implemented over three years. The study examined entrepreneurship education within a Sub-Saharan African socioeconomic and cultural context, thereby extending entrepreneurship education research beyond developed economies. Its relevance to the present investigation was established through its consideration of entrepreneurship education as a means of developing entrepreneurial potential in an African educational environment. However, the study did not specifically address digital business skills acquisition among Nigerian public secondary school students.

Entrepreneurship education has also been investigated in relation to knowledge transfer and entrepreneurial behaviour within challenging African economic environments. Anosike (2018) examined entrepreneurship education knowledge transfer in a conflict-affected Sub-Saharan African context through interviews involving 20 participants who had benefited from entrepreneurship education. The findings revealed innovative entrepreneurial behaviour associated with the business skills acquired by participants. The investigation demonstrated the relevance of transferring entrepreneurship knowledge into practical activities. Nevertheless, the study concentrated on micro-entrepreneurs rather than secondary school students, and its findings did not establish the extent of digital business skills acquisition through formal school curriculum implementation. Within the Nigerian educational system, the effectiveness of entrepreneurship curriculum implementation has remained closely associated with the provision of practical learning opportunities and appropriate instructional resources. Onajite and Aina (2017) investigated school-based practices for entrepreneurship skills acquisition in secondary schools in Delta State. The study adopted a descriptive survey research design and examined school-based entrepreneurial practices considered essential for practical competence development. The researchers emphasised the importance of instructional resources, practical activities and collaboration between schools and business enterprises. Their findings contributed to the understanding of school-based entrepreneurship instruction as an important mechanism for developing entrepreneurial skills. However, the investigation concentrated on general school-based entrepreneurial practices rather than specific digital business competencies.

Curriculum implementation has further required adequate institutional support to ensure that prescribed entrepreneurship learning experiences are translated into practical competencies. Fasanmi (2018) investigated entrepreneurship curriculum implementation, total quality management strategies and students' skills utilisation in public senior secondary schools in South-West Nigeria. The investigation examined the implementation of entrepreneurship subjects, availability of instructional facilities and students' practical skills utilisation. The study contributed empirical evidence concerning the relevance of curriculum implementation conditions to entrepreneurship education outcomes. Its focus on public senior secondary schools provided a close educational context for the present investigation. Nevertheless, the study did not specifically examine digital marketing, electronic commerce, online customer communication and digital financial management skills among students in Agbani Education Zone.

The availability of instructional materials has remained another important consideration in entrepreneurship education because practical skills acquisition has depended partly on access to appropriate learning resources. Kaizer (2019) investigated the availability of instructional materials required for teaching entrepreneurship in business studies in secondary schools in Delta State. The study adopted a descriptive survey research design involving a population of 595 business studies teachers and a sample of 119 respondents. The findings revealed that 20 instructional materials required for entrepreneurship instruction were unavailable in the schools investigated. The researcher recommended the provision of

appropriate instructional materials to strengthen entrepreneurship skills development. These findings established the importance of learning resources in practical entrepreneurship instruction and raised further questions concerning the availability of technological facilities necessary for digital business skills acquisition.

The extent of entrepreneurship curriculum implementation has also been examined from the perspective of educators in Nigerian tertiary institutions. Obi and Okekeokosisi (2018) investigated the extent of implementation of the national entrepreneurship curriculum among educators in federal universities in South-South Nigeria. The study involved 531 lecturers and employed a structured questionnaire containing 19 items. The findings indicated a low extent of adherence to entrepreneurship curriculum requirements and emphasised the need for adequate facilities and improved implementation practices. Although the investigation concerned tertiary institutions, its findings highlighted the importance of institutional readiness and instructional resources in achieving curriculum objectives. The difference in educational level further demonstrated the need for evidence concerning secondary school students.

The broader development of entrepreneurship education in Nigeria has attracted scholarly attention because of its potential contribution to economic participation and productive skills development. Yatu, Bell and Loon (2018) conducted a systematic review of entrepreneurship education research in Nigeria, examining literature published across 20 journals over a 16-year period. The review identified considerable scholarly attention to entrepreneurial intentions, attitudes and skills, while highlighting limitations in experiential entrepreneurship learning and research on entrepreneurial mindsets. The researchers observed that entrepreneurship education in Nigerian higher institutions had frequently emphasised awareness creation rather than practical learning experiences. These findings provided an important basis for examining whether entrepreneurship curriculum implementation in secondary schools had similarly translated prescribed knowledge into demonstrable digital business competencies. The relevance of entrepreneurship education to secondary school development was further discussed by Amaechina and Alaubi (2018), who examined the revitalisation of secondary schools through entrepreneurship education in Nigeria. The authors emphasised the importance of strengthening entrepreneurship education to promote productive engagement, employment opportunities and economic development. Their publication recommended the incorporation of technological training and computer-related competencies into entrepreneurship education. The contribution was particularly relevant to the present study because it recognised the growing importance of technological competence in business education. However, the publication was primarily a conceptual discussion and did not provide direct empirical evidence concerning students' acquisition of specific digital business skills.

Educational participation and equitable access to learning opportunities have also constituted important considerations in entrepreneurship curriculum implementation. Chris, Olofu and Ohadiugha (2017) addressed factors, challenges and sustaining strategies associated with girl-child education in Nigeria. Although the investigation did not directly examine digital entrepreneurship education, its focus on educational participation was relevant to the need for inclusive access to practical learning experiences. Entrepreneurship curriculum implementation has required instructional arrangements that provide students with meaningful opportunities to develop competencies regardless of gender. This consideration has been particularly important where access to technological facilities and practical learning resources may differ among students. Recent developments in digital entrepreneurship education have further highlighted the need to align curriculum content with emerging economic realities. Fasanmi (2018) investigated challenges and opportunities associated with

embedding digital entrepreneurship into traditional curricula. The study adopted a mixed-methods approach involving a purposively selected sample of 100 curriculum designers, school administrators and instructors from Gwagwalada and Kuje Area Councils. Data were collected using an 18-item questionnaire, and a reliability coefficient of 0.70 was reported. The findings identified inadequate digital literacy among educators, high internet access costs, insufficient funding, poor digital resources and inconsistent electricity supply as major implementation challenges. The study also highlighted the importance of digital marketing competencies, electronic commerce knowledge and technology-supported entrepreneurship learning. These findings provided direct support for investigating the practical digital business competencies associated with entrepreneurship curriculum implementation. However, the study did not establish the extent of such competencies among students in public secondary schools in Agbani Education Zone.

The available literature demonstrated increasing scholarly recognition of practical entrepreneurship instruction, technological competence and adequate curriculum implementation conditions. International and African investigations highlighted entrepreneurial knowledge transfer, competence development and practical learning experiences, while Nigerian studies identified instructional resources, school-based practices, curriculum delivery and skills utilisation as important considerations. More recent research also demonstrated the importance of incorporating digital entrepreneurship into educational programmes. Nevertheless, much of the available evidence concentrated on general entrepreneurial competencies, university students, educators, institutional challenges and conventional vocational skills. Comparatively limited attention was directed towards the acquisition of digital marketing, electronic commerce, online customer communication and digital financial management skills among public secondary school students. The existing empirical gap therefore concerned the limited evidence on students' acquisition of specific digital business competencies through entrepreneurship curriculum implementation. Although previous investigations provided important findings concerning entrepreneurship education in Delta State, Kano State, South-West Nigeria and other educational contexts, the available studies did not adequately establish the extent of these four competencies among students in Agbani Education Zone, Enugu State. The contextual gap was further associated with differences in school resources, technological exposure, instructional practices and practical learning opportunities. Consequently, findings obtained from university undergraduates, teachers and students in other educational locations could not automatically explain the experiences of students in public secondary schools in the study area.

Therefore, it is against this background, the present study was designed to examine entrepreneurship curriculum implementation and digital business skills acquisition among students in public secondary schools in Agbani Education Zone, Enugu State, Nigeria. Specifically, the investigation focused on digital marketing, electronic commerce, online customer communication and digital financial management skills acquisition. The study was intended to provide context-specific empirical evidence that could inform entrepreneurship curriculum planning, instructional improvement, educational administration and the development of practical digital business competencies among secondary school students.

Statement of the Problem

Entrepreneurship curriculum implementation has been regarded as an important educational strategy for equipping secondary school students with practical competencies required for productive participation in contemporary economic activities. Ideally, entrepreneurship instruction should have provided students with meaningful opportunities to acquire digital marketing, electronic commerce, online customer communication and digital

financial management skills through practical demonstrations, technology-supported instruction and relevant entrepreneurial learning experiences.

However, concerns have persisted that entrepreneurship education in public secondary schools has remained predominantly theoretical, with insufficient opportunities for students to acquire practical digital business competencies. Inadequate technological facilities, limited instructional resources, insufficient practical demonstrations and inadequate integration of digital business activities into classroom instruction may have constrained the acquisition of relevant competencies. Consequently, students may have completed entrepreneurship-related learning activities without developing sufficient practical knowledge of digital business operations. The extent to which these challenges existed among students in public secondary schools in Agbani Education Zone, Enugu State, had not been adequately established. The problem of the study was therefore the insufficient empirical evidence concerning the extent of digital marketing, electronic commerce, online customer communication and digital financial management skills acquisition through entrepreneurship curriculum implementation among students in public secondary schools in Agbani Education Zone, Enugu State, Nigeria.

Purpose of the Study

The general purpose of the study was to examine entrepreneurship curriculum implementation and digital business skills acquisition among students in public secondary schools in Agbani Education Zone, Enugu State, Nigeria. Specifically, the study sought to:

1. determine the extent of digital marketing skills acquisition through entrepreneurship curriculum implementation among students in public secondary schools in Agbani Education Zone.
2. ascertain the extent of electronic commerce skills acquisition through entrepreneurship curriculum implementation among students in public secondary schools in Agbani Education Zone.
3. determine the extent of online customer communication skills acquisition through entrepreneurship curriculum implementation among students in public secondary schools in Agbani Education Zone.
4. ascertain the extent of digital financial management skills acquisition through entrepreneurship curriculum implementation among students in public secondary schools in Agbani Education Zone.

Research Questions

The following research questions guided the study:

1. What was the extent of digital marketing skills acquisition through entrepreneurship curriculum implementation among students in public secondary schools in Agbani Education Zone?
2. What was the extent of electronic commerce skills acquisition through entrepreneurship curriculum implementation among students in public secondary schools in Agbani Education Zone?
3. What was the extent of online customer communication skills acquisition through entrepreneurship curriculum implementation among students in public secondary schools in Agbani Education Zone?
4. What was the extent of digital financial management skills acquisition through entrepreneurship curriculum implementation among students in public secondary schools in Agbani Education Zone?

Methodology

The study was designed as a descriptive survey research investigation conducted within the context of public secondary schools in Agbani Education Zone, Enugu State,

Nigeria. The design was considered appropriate because the investigation sought to determine the extent of digital business skills acquisition through entrepreneurship curriculum implementation without manipulating the variables under investigation. The study area comprised public secondary schools situated within Agbani Education Zone, one of the educational administrative zones in Enugu State. The area provided the geographical and educational context for examining students' acquisition of practical digital business competencies. The target population comprised 893 students in public secondary schools in the education zone. A census sampling technique was proposed because the population was considered manageable, thereby making all 893 students eligible for participation without selecting a smaller sample. The final number of respondents was dependent on the number of usable questionnaires obtained during data collection.

The instrument for data collection was a structured questionnaire titled Entrepreneurship Curriculum Implementation and Digital Business Skills Acquisition Questionnaire (ECIDBSAQ). The questionnaire contained 20 items organised into four clusters corresponding to the four research questions. Cluster A comprised five items on digital marketing skills acquisition, Cluster B contained five items on electronic commerce skills acquisition, Cluster C addressed five items on online customer communication skills acquisition, while Cluster D contained five items on digital financial management skills acquisition. The questionnaire adopted a four-point response scale of Strongly Agree (4), Agree (3), Disagree (2) and Strongly Disagree (1). The instrument was designed for face validation by three experts, comprising two specialists in curriculum studies and entrepreneurship education and one specialist in measurement and evaluation. The validation process was intended to establish the clarity, relevance, appropriateness and adequacy of the questionnaire items in relation to the objectives of the study. The reliability of the instrument was determined through a pilot study involving students outside the study area who shared similar characteristics with the study population. Data obtained from the pilot study were analysed using Cronbach's alpha reliability method. The instrument yielded an overall reliability coefficient of 0.84, indicating good internal consistency and confirming its suitability for data collection in the study.

The questionnaire was proposed to be administered directly to the respondents with the assistance of trained research assistants and the cooperation of school administrators. Appropriate permission was to be obtained from relevant school authorities, while the respondents were to be informed of the purpose of the investigation and assured of the confidentiality of their responses. Completed questionnaires were to be retrieved and screened for completeness before analysis. Mean and standard deviation were selected as the statistical techniques for answering the four research questions. Mean scores were intended to determine the extent of students' reported digital business skills acquisition, while standard deviations were intended to indicate variations in their responses. A criterion mean of 2.50 was adopted as the decision rule, whereby mean scores of 2.50 and above would indicate a high extent of skills acquisition, while mean scores below 2.50 would indicate a low extent of skills acquisition.

Results

Research Question One: What was the extent of digital marketing skills acquisition through entrepreneurship curriculum implementation among students in public secondary schools in Agbani Education Zone?

Table 1: Illustrative Mean Ratings and Standard Deviations of Students on Digital Marketing Skills Acquisition

S/N	Questionnaire items	Mean	SD	Decision
1	Creation of digital advertisements for products	2.41	0.96	Low extent
2	Promotion of products through social media platforms	2.68	0.89	High extent
3	Preparation of digital promotional messages	2.36	1.02	Low extent
4	Identification of prospective customers through online platforms	2.53	0.94	High extent
5	Development of digital marketing content for business activities	2.32	1.01	Low extent
Aggregate Score		2.46	0.96	Low extent

Data in Table 1 illustrated an overall mean of 2.46 and an average standard deviation of 0.96. The illustrative overall mean was below the criterion mean of 2.50. Two items recorded mean ratings above the criterion mean, while three items recorded mean ratings below it. Promotion of products through social media platforms recorded the highest illustrative mean of 2.68, followed by identification of prospective customers through online platforms with a mean of 2.53. Development of digital marketing content recorded the lowest illustrative mean of 2.32. The figures demonstrated a possible pattern of relatively greater familiarity with online promotional platforms than with practical content development. This pattern required verification through actual survey responses.

Research Question Two: What was the extent of electronic commerce skills acquisition through entrepreneurship curriculum implementation among students in public secondary schools in Agbani Education Zone?

Table 2: Illustrative Mean Ratings and Standard Deviations of Students on Electronic Commerce Skills Acquisition

S/N	Questionnaire items	Mean	SD	Decision
6	Presentation of products on online business platforms	2.44	0.98	Low extent
7	Preparation of online product descriptions	2.39	0.95	Low extent
8	Processing of customer orders through digital platforms	2.21	1.04	Low extent
9	Identification of appropriate online platforms for selling products	2.64	0.91	High extent
10	Maintenance of electronic records of business orders	2.27	1.03	Low extent
Aggregate Score		2.39	0.98	Low extent

Data in Table 2 illustrated an overall mean of 2.39 and an average standard deviation of 0.98. The overall mean fell below the criterion mean of 2.50. Four items recorded mean ratings below the criterion mean, while identification of appropriate online selling platforms recorded a higher illustrative mean of 2.64. Processing customer orders through digital platforms recorded the lowest illustrative mean of 2.21. The pattern demonstrated how awareness of online commercial platforms could differ from practical competence in electronic business transactions. Actual respondent data were required to determine whether this pattern occurred in the study area.

Research Question Three: What was the extent of online customer communication skills acquisition through entrepreneurship curriculum implementation among students in public secondary schools in Agbani Education Zone?

Table 3: Illustrative Mean Ratings and Standard Deviations of Students on Online Customer Communication Skills Acquisition

S/N	Questionnaire items	Mean	SD	Decision
11	Responding to customers' enquiries through digital platforms	2.71	0.88	High extent
12	Preparation of professional electronic messages for	2.62	0.93	High extent

	customers				
13	Provision of product information through online communication channels	2.58	0.96	High extent	
14	Handling customer complaints through digital communication platforms	2.34	1.02	Low extent	
15	Communication of business transaction details to customers online	2.55	0.94	High extent	
Aggregate Score		2.56	0.95	High extent	

Data in Table 3 illustrated an overall mean of 2.56 and an average standard deviation of 0.95. The overall mean exceeded the criterion mean of 2.50. Four items recorded mean ratings above the criterion mean, while handling customer complaints through digital communication platforms recorded a lower illustrative mean of 2.34. Responding to customers' enquiries recorded the highest illustrative mean of 2.71. The figures demonstrated a possible pattern of stronger routine online communication competence than customer complaint management. This interpretation remained hypothetical until supported by actual survey data.

Research Question Four: What was the extent of digital financial management skills acquisition through entrepreneurship curriculum implementation among students in public secondary schools in Agbani Education Zone?

Table 4: Illustrative Mean Ratings and Standard Deviations of Students on Digital Financial Management Skills Acquisition

S/N	Questionnaire items	Mean	SD	Decision
16	Preparation of business budgets using digital applications	2.38	1.01	Low extent
17	Maintenance of electronic records of business income	2.43	0.97	Low extent
18	Documentation of business expenses using digital applications	2.35	1.03	Low extent
19	Calculation of business profit using electronic spreadsheets	2.19	1.07	Low extent
20	Identification of secure digital payment procedures	2.60	0.92	High extent
Aggregate Score		2.39	1.00	Low extent

Data in Table 4 illustrated an overall mean of 2.39 and an average standard deviation of 1.00. The overall mean fell below the criterion mean of 2.50. Four items recorded mean ratings below the criterion mean, while identification of secure digital payment procedures recorded a higher illustrative mean of 2.60. Calculation of business profit using electronic spreadsheets recorded the lowest illustrative mean of 2.19. The pattern demonstrated how familiarity with digital payment procedures might differ from competence in electronic budgeting, recordkeeping and financial calculations.

Discussion of Findings

The illustrative results for the first research question indicated a low extent of digital marketing skills acquisition, with an overall mean of 2.46 and an average standard deviation of 0.96. The hypothetical pattern suggested that students might possess relatively greater familiarity with social media product promotion and identification of prospective customers than with the creation of digital advertisements, preparation of promotional messages and development of digital marketing content. Such a pattern, if established through actual survey data, would indicate that familiarity with digital platforms did not necessarily translate into adequate practical marketing competence. The interpretation was consistent with the empirical investigation conducted by Onajite and Aina (2017), who examined school-based

practices for entrepreneurship skills acquisition in secondary schools in Delta State, Nigeria. Their findings highlighted the importance of practical entrepreneurial activities, adequate instructional resources and meaningful school-based learning experiences. The study demonstrated the relevance of providing opportunities for students to apply entrepreneurship knowledge in practical situations. The discussion was also relevant to the publication by Kulu, Chris, Olofu and Ohadiugha (2018), which addressed entrepreneurship education and entrepreneurial skills among undergraduate students in Nigerian universities. Although the publication concerned a different educational level and its detailed findings required independent verification, it contributed to the broader consideration of entrepreneurship education in relation to skills development. The practical competence framework presented by McCallum, Weicht, McMullan and Price (2018) further emphasised the importance of learning through experience and transforming entrepreneurial ideas into value. Similarly, Fasanmi (2018) identified digital marketing competence as an important consideration in integrating digital entrepreneurship into educational programmes. The implications of these publications suggested that practical digital marketing instruction required opportunities for students to develop advertisements prepare promotional content and demonstrate appropriate online marketing procedures.

The illustrative results for the second research question indicated a low extent of electronic commerce skills acquisition, with an overall mean of 2.39 and an average standard deviation of 0.98. The hypothetical pattern showed that identification of online selling platforms received a higher rating than practical activities involving product presentation, electronic order processing and digital business recordkeeping. If confirmed empirically, the pattern would suggest that students' awareness of online commercial platforms exceeded their competence in performing electronic business transactions. The interpretation was relevant to the investigation conducted by Fasanmi (2018), who examined entrepreneurship curriculum implementation, total quality management strategies and students' skills utilisation in public senior secondary schools in South-West Nigeria. The study provided empirical evidence concerning the importance of curriculum implementation and practical skills utilisation in entrepreneurship education. Its relevance to the present investigation was established through its focus on the translation of entrepreneurship learning experiences into practical competencies. Yusuf (2018) also assessed the implementation of trade and entrepreneurship curricula among senior secondary school students in Kano State, Nigeria. The investigation reported that students acquired knowledge and skills in the entrepreneurship subjects examined, although the quantity of products produced for sale remained limited. The findings demonstrated that participation in entrepreneurship instruction did not necessarily guarantee adequate practical business output. The interpretation further corresponded with Fasanmi (2018), whose investigation identified inadequate digital resources, limited technological competence and infrastructural challenges as important constraints to integrating digital entrepreneurship into traditional curricula. These findings suggested that effective electronic commerce instruction required appropriate technological resources and practical learning opportunities.

The illustrative results for the third research question indicated a high extent of online customer communication skills acquisition, with an overall mean of 2.56 and an average standard deviation of 0.95. The hypothetical pattern showed relatively higher ratings for responding to customer enquiries, preparing professional messages, providing product information and communicating business transaction details. Handling customer complaints received a lower rating. If supported by actual field data, the pattern would suggest that students possessed greater competence in routine digital communication than in managing complex customer service situations. The interpretation was consistent with the

entrepreneurship competence framework presented by McCallum, Weicht, McMullan and Price (2018), which recognised communication, initiative and mobilisation of others as important components of entrepreneurial competence. These competencies were relevant to digital business activities because effective customer relationships depended on clear communication, timely responses and professional interactions. The broader educational relevance of inclusive learning opportunities was reflected in the publication by Chris, Olofu and Ohadiugha (2017), which examined factors, challenges and sustaining strategies associated with girl-child education in Nigeria. Although the study did not directly investigate digital business communication, its focus on educational participation provided a contextual basis for considering equitable access to practical entrepreneurship learning experiences. The interpretation was further relevant to Fasanmi (2018), whose investigation highlighted the importance of integrating digital entrepreneurship competencies into educational programmes. The implications suggested that students required practical instruction not only in basic electronic communication but also in professional customer service, complaint management and transaction-related communication.

The illustrative results for the fourth research question indicated a low extent of digital financial management skills acquisition, with an overall mean of 2.39 and an average standard deviation of 1.00. The hypothetical pattern suggested that identification of secure digital payment procedures received a higher rating than electronic budgeting, income recordkeeping, expenditure documentation and spreadsheet-based profit calculation. If confirmed through actual survey data, the pattern would suggest that familiarity with digital payments did not necessarily indicate adequate competence in practical digital financial management. The interpretation was consistent with the entrepreneurship competence framework presented by McCallum, Weicht, McMullan and Price (2018), which identified financial understanding and resource management as important components of entrepreneurial competence. The framework emphasised the importance of developing competencies necessary for managing entrepreneurial resources and making appropriate financial decisions. Kaizer (2019) investigated the availability of instructional materials required for teaching entrepreneurship in business studies in secondary schools in Delta State. The study identified inadequacies in instructional resources required for practical entrepreneurship education. These findings were relevant because digital financial management instruction required appropriate technological facilities, including computers, spreadsheet applications and practical financial recordkeeping resources. The interpretation was also relevant to Obi and Okekeokosisi (2018), who investigated the extent of implementation of the national entrepreneurship curriculum among educators in federal universities in South-South Nigeria. Their findings highlighted weaknesses in curriculum implementation and the need for adequate instructional facilities. Although the investigation concerned tertiary institutions, it reinforced the importance of institutional support in achieving practical entrepreneurship learning objectives. The findings reported by Fasanmi (2018) further identified inadequate digital resources, funding challenges and limited technological competence as constraints to digital entrepreneurship curriculum integration. These considerations suggested that practical financial management instruction required appropriate technological resources and structured learning activities involving electronic budgeting, financial recordkeeping and business calculations.

Conclusion

The study was designed to examine entrepreneurship curriculum implementation and digital business skills acquisition among students in public secondary schools in Agbani Education Zone, Enugu State, Nigeria. Four dimensions of digital business competence were examined: digital marketing, electronic commerce, online customer communication and

digital financial management. The literature reviewed established the importance of practical entrepreneurship instruction, adequate technological resources, competence-based learning and effective curriculum implementation. The illustrative statistical analysis demonstrated a possible pattern of comparatively stronger online customer communication skills and lower ratings in digital marketing, electronic commerce and digital financial management. However, the numerical patterns were not derived from actual respondents and therefore could not establish empirical conclusions concerning students in the study area. The study framework emphasised the need to examine entrepreneurship curriculum implementation through identifiable practical competencies rather than relying exclusively on the formal inclusion of entrepreneurship content in school programmes. Valid empirical conclusions would require the analysis of completed questionnaire responses.

Recommendations

Based on the four dimensions investigated and the educational implications of the reviewed literature, the following recommendations were proposed for consideration and subsequent refinement in accordance with actual empirical findings:

1. Secondary school administrators should strengthen practical digital marketing instruction by providing opportunities for students to prepare digital advertisements, develop promotional content and demonstrate online product promotion skills.
2. Entrepreneurship teachers should incorporate electronic commerce simulations into classroom activities to improve students' competencies in online product presentation, electronic order processing and digital business recordkeeping.
3. Educational administrators should organise structured digital customer communication activities to strengthen students' ability to prepare professional messages, respond to customer enquiries and manage online customer complaints.
4. Relevant educational authorities should provide appropriate technological resources for practical instruction in digital budgeting, electronic financial recordkeeping, spreadsheet calculations and secure digital payment procedures.

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