

ADOPTION OF DIGITAL TOOLS AND TEACHERS' MANAGEMENT OF ENTREPRENEURIAL RESPONSIBILITY IN PUBLIC SECONDARY SCHOOLS IN RIVERS STATE.

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ABSTRACT

The study examined the extent to which teachers' adoption of digital tools (TADTs) predicts their effective management of entrepreneurial responsibilities (EMER) in public secondary schools in Rivers State. The study adopted correlational research design approach. The population of the study consisted of 267 Entrepreneurial Studies Teachers in the 245 public secondary schools in Rivers State from which sample of 106 Entrepreneurial Studies Teachers were derived using multistage random sampling technique consisting of clustering, proportionate and simple random sampling technique. Data were collected with structured questionnaire entitled: "Adoption of Digital Tools for Effective Entrepreneurial Management Questionnaire (AD-TEEMQ). Data collected were analysed using mean score for question 1), R^2 for questions 2, 3 and 4 while the hypotheses were tested using linear regression probability value. The results indicate that the extent of TADTs in the EMER in public secondary schools in Rivers State was low (1.88). The result also show that the extent of prediction of EMER by TAMR and TAIW was very low ($R^2=11.3$ & $R^2=10$ for TAMR and TAIW respectively) while that of TAI was high ($R^2=51.2$). However, though with very low extent, it was revealed that TAMR, TAIW & TAI significant predict the EMER in public secondary schools in Rivers State. It is concluded that the potentials of digital tools have shown to be ineffective in enhancing sustainably, the teachers' effective management of entrepreneurial responsibilities due to low extent adoption of the tools among the teachers. It is recommended that government should as a matter of priority mandate the entrepreneurial studies teachers to subject themselves to individual digital training for quality job delivery. This will spur the consciousness of the teachers to the importance of having a clear-cut knowledge of the importance of these tools and as well, encourage them to adopt same in transferring curriculum instructions to students for quality entrepreneurial skill acquisition.

Keywords: Teachers, Adoption, Digital Tool, Effective Management, Entrepreneurial Responsibility.

INTRODUCTION

The rising level of school leavers and graduates of higher institutions of learning alongside the geometric increase in Nigerian population contribute critical concern for employment status quo of Nigeria. Originally, Nigeria been among a lower middle income earning nations of the world has recorded an umpteen time high level of unemployment due to the rising level of population with very few organized job opportunities. Statistics revealed that more than 50 percent of Nigerians are unemployed (Obiekezie, 2022). This is in spite of the abundant opportunities and viable market that exist in situations of highly populated market like Nigeria. The unfortunate situation may culminate to rising level of poverty, crimes and insecurity (Afegbua, 2015, Stewart, 2021). However, many studies and scholars suggested the incorporation of entrepreneurial studies into the syllabus of basic education as a measure for creating a skill base for school leavers' self-reliance as well as job creation.

Twenty first century society could also be referred to an era of special skill where services are rendered in more unique, practical and specialized manner according to expertise of the professional. In other words, it is an era of entrepreneurial optimization. Many studies maintained that entrepreneurial studies play significant roles in changing young people' attitude and giving them

skills to create jobs for themselves, start and manage small business, reduce unemployment and poverty to its minimum, contribute to economic growth and development, as well as build people to survive volatile business environment. (Jibrin, et. al., 2024, Wrahatnolo, 2018). Other potentials of entrepreneurial studies include but not limited to creating and implementing new ideas and creative solutions to emerging societal challenges, assists in developing entrepreneurial skills of students, and as well, serve as crucial driver of social and economic growth and encouraging self-reliance (Jibrin, et al., 2024, Odutola, 2020, Oboh, et al., 2021). These underscore the essentialities of entrepreneurial studies in building bridges with potencies to liberate the unemployment status of Nigerians.

Nevertheless, the actualization and derivation of benefits that comes with entrepreneurial studies introduction in secondary school curriculum cannot be possible without practical presentation of fact using instructional facilities that suit every concept discussed. When these facilities are either unavailable or inadequate, it becomes unrealistic to expect quality education outcome (Abubakar, et al., 2019, Birabil & Ogeh, 2020). Many studies maintained that issues relating to lack of instructional facilities or their inadequacy is the prominent challenge of entrepreneurial studies in the development in Nigeria (Abubakar, et al., 2019, Ogwu, 2021, Mujahidin, et al., 2023). A situation that retard the derivations of the potentials of entrepreneurial academic performance (Anaedobe & Ezugoh, 2024, Ibronke, et al., 2022), and job creation (Ogbu, 2015, Madukwe, et al., 2024). Meanwhile, one may argue that the expectations of attaining a level of sufficiency in instructional facilities availability in schools is unattainable due to the rising cases of students' enrolment in schools, and other society sectorial development that cry for funding. Therefore, securing a better future for entrepreneurial development is more of a teacher in the utilization of available instructional resources or improvisation of facilities than facilities adequacy.

Teachers build the equilibrium of quality education by serving both as fulcrum and effort that shoulders the loads (class management, workload, role models, social support and lack of or inadequacy of instructional facilities, and improvisation of tools) associating with quality curriculum instructions transfer. This implies that delivering effective management of entrepreneurial responsibility by the teachers is essential for quality education outcome. Whether this has been achieved in Rivers State is a contemplation for assessment.

Rivers State becomes a focal point for assessment because of humongous budgetary allocation appropriated for education in the past decades as well as the demands for entrepreneurial skills sets by the companies in the State. Records revealed that over time, the State government and corporate organizations have contributed in diverse ways (such as donations of entrepreneurial tools, training and retraining of teachers, and funding of entrepreneurial development of schools) to emphasize on the importance of entrepreneurial studies in building formidable self-reliant society. These efforts in some quarters have yielded in promoting students interest in the study (Amaewule & Okagbare, 2021, Nwile, et al., 2023, Imoh, 2023), while some argued that it contributes insignificantly to the expectations as established (Eze & Eziolisa, 2022, Okoli & Osi, 2018). The insignificant contribution of entrepreneurship education or studies is evident in the students' disinterest in the subject, rising case of poor students' academic performance, and the low skill quality of school leavers turnout from secondary schools (Opara & Ukaigwe, 2024, Amadi & Amakodi, 2019). Many studies attributed the unfortunate status quo in the performance of students in entrepreneurial studies to factors such as shortage of qualified lecturers or teachers, inadequate facilities, inadequate teaching techniques, poor funding and lack of government support hinders the effective implementation of entrepreneurship education in tertiary institutions in Rivers State (Amadi & Amakodi, 2019, Jacob, et al., 2024). Among these factors, teachers' management of entrepreneurial responsibility is considered as paramount.

Teachers management of entrepreneurial responsibility requires effectiveness in coordinating the entrepreneurial studies teaching in a way that promote interest, students' concentration and realistic assimilation of values and skills transferred. Olowe, and Enijuni (2024), Huang, et al., (2020), Wei and Guo, (2010) inferred that effective entrepreneurial studies teachers'

must possess professional competency (effective teaching and curriculum management), administrative competency (departmental management and organizational skills), human skill competency (interpersonal and teamwork skills), as well as knowledgeability in adopting new models of teaching, improvising instructional resources and exhibiting quality practical skills. Among these qualities expected of entrepreneurial studies teachers in the twenty first century schools, adoption of digital tools resumed prominence.

Digitalization of schools is an emerging innovation that promote effectiveness in the management of entrepreneurial studies curriculum instructional transfer for quality education outcome. Parviainen, et al. (2017) refers to the concept of digitization as "the action or process of digitizing; the conversion of analogue data (especially in later use images, video, and text) into digital form." This entails the integration of digital technologies for easy and reasonable understanding and accessibility of vital information. The digital tools over the years are utilized for easy interpretation of curriculum instructions as well as inculcation of valuable skills on the students. Different studies highlighted the importance of digital tools to include provision of exciting learning environment to the learner, makes the teacher to have creative ways of making his work easier, give students opportunities to collaborate with their peers resulting in learning from each other, and as well, provides students with a wide range of knowledge and skills for employment after graduation (Seymoureducate, 2016, Costley, 2019, Otum, 2018, Kurt, 2017, Igwe & Chima-Uduma 2021). Yadav (2024) maintains that digital tools offer accessibility and equity to information, makes learning highly flexible and personalized, enhances interactiveness and accessibility to learning resources and expertise, and as well, remain cost effective and scalable. This implies that without tangible availability or adequacy of quality entrepreneurial instructional facilities, utilization of digital tools, the foregoing by scholars and researchers will definitely be unachievable. However, no matter the importance attributed to the digital tools in the quality education service delivery, when the digitalized facilities are not adopted and utilized by the teachers, the values cannot be translated to quality education outcome.

The concept of adoption could be explained as applicability of valuable knowledge for the improvement of engagement. In the case of educational service delivery, adoption of digital tool refers to as the acceptance of digital tools usefulness and application in the management of responsibilities (Chinenye et al, 2022). It is the utilization of the platforms in the organisation of teaching and other statutory responsibilities attached to classroom management. The adoption of digital tools in teaching and learning according to Chinenye, et al. (2022), Obaydullah and Rahim (2019), assists in strengthening the classroom environment, promoting collective work, while learners know clearly what they are learned, fosters live contact between the teachers and the students, and as well, promote independence learning among students. Studies revealed that teacher's level of digital tools adoption of teaching is low (Igwe & Chima- Uduma, 2021, Igboechesi et al, 2023, De & Kaugi, 2023, Nwafor et al, 2023). Igwe and Chuma-Uduma (2021) in an empirical assessment on the extent of teachers' adoption of digital tools in teaching business studies in Ebonyi State reported a low extent of teachers' adoption of digital tools in teaching. The result supported the studies done by Igboechesi, et al. (2023), De and Kaugi (2023), Nwafor, et al. (2023), Al-Zaidiyeen, et al. (2012), Habibu, et al. (2012), Onasanya, et al., (2011), Ameen, et al. (2019). On a contrary, Dash in India and Cherry (2014) in Minnesota reported a high extent of teachers' adoption digital tools in teaching entrepreneurial studies.

Diverse digital tools exist that have valuable importance in enhancing teachers' effective management. Some of these digital tools are multimedia projectors, interactive whiteboard (IWB), web based digital versatile disc rewritable disc (DVD-RW), computers, various software applications, digital camera, scanners, photocopying machines, printers, the internet, audio/video conferencing and artificial intelligence.

Multimedia projector considered as a vital digital tool is an output ICT device that projects an image onto a large surface such as white screen or wall. National Centre for Technology in Education (2010) maintained that multimedia digital projector is extremely useful and effective as

teaching tool that facilitates a range of learning opportunities when connected to a desktop computer in a whole class teaching scenarios. It is considered as being highly effective as a means of instruction or demonstration in classrooms, or computer rooms. Many studies highlighted the benefits of multimedia projector to include promoting students' learning of real world skills related to technology, help to improve office skills acquisition as compared to the traditional method of teaching, enhancing the value of teamwork, encourage effective collaboration (Shah & Khan, 2015, Igwe & Chima-Uduma, 2021, Okedeyi et al., 2015), analyse information in compelling ways, reduces the complexity of synthesizing and analyzing complex content, as well as improving research, planning and organization skills of the students. Ajayi and Bichi (2018) found out that the use of slide projectors in teaching and learning increases students' skills acquisition. In spite the importance of this digital tool, teachers' adoption and utilization in teaching is still very low (Ajayi & Bichi, 2018).

Another aspect of digital tool that is essential in teaching is the interactive whiteboard. This is a technology that transmits computer screen to the whiteboard by means of a projector and that enables controlling the computer by only touching the whiteboard with a special pen (Nnajofofor & Ejikeme, 2020). Trust et al. (2017) considered it as a large touch-sensitive display unit, connected to digital projector and computer. Studies point to fore the effectiveness of interactive whiteboard to manipulate data, project images and videos, including sound as well as allowing storage and retrieval of data, which in turn, attract the students' attention and increase students understanding during instructional delivery (Nnajofofor et al. 2020, Trust, et al., 2017). Despite the enormous advantages of interactive white board in teaching, studies indicated a low utilization of the tool in teaching business education in tertiary institutions (Agbagbue, 2018, Nwafor, et al., 2023, Al-Zaidiyeen, et al., 2012).

Internet is equally a digital tool essential for the effective management of entrepreneurial responsibility. Internet is a technological measure of interconnectivity that has the potency in enhancing interpersonal interaction and communication. It could be considered as a global system of interconnected computer networks that utilize wireless and optical technologies to link and serve billions of users worldwide. Internet comprises of a variety of hardware and software such as digital subscriber loop (DSL) modem, DSL broadband filter and firewall with the most dominant enabler toward better, faster and cheaper approach in operating administration and management of daily tasks such as information processing, information transferring, information storing and information retrieving (Susmita, 2017). In the words of Ward (2019), web based instruction implies teaching with electric means and through electronic device– whether wholly or in part, for course delivery, interaction and/or facilitation. The non-usage of internet in schools could cause retardation in knowledge and idea generation because of the rapid shift from paper to online experience. However, studies reported that there is gross underutilization of web based technology in Nigerian tertiary institutions (Abiye, et al., 2018, Habibu, et al., 2012, Onasanya, et al., 2011, Ameen, et al., 2019). Adducing from the studies reviewed, no study was found that distinctively highlighted the extent of teachers' adoption of digital tools in their effective management of entrepreneurial responsibilities in public secondary schools in Rivers State.

Statement of Problem

The rapid advancement of digital technologies has transformed various sectors, including education, necessitating a re-evaluation of teaching methodologies and management practices within public secondary schools. In Rivers State, Nigeria, the adoption of digital tools in educational settings is increasingly recognized as a critical component for enhancing teaching effectiveness and fostering entrepreneurial skills among students. However, despite the potential benefits, there exists a significant gap in the effective integration of these digital tools into the management of teachers' entrepreneurial responsibilities.

Entrepreneurial education is pivotal in equipping students with essential skills for future employment and self-sufficiency. Teachers play a vital role in this process, as they are responsible for not only

delivering curriculum content but also for instilling entrepreneurial mindsets and skills in their students. Nonetheless, many educators in Rivers State face challenges in adopting digital tools that could facilitate innovative teaching and effective management of entrepreneurial responsibilities. Factors such as Inadequate training, limited access to technological resources, and insufficient institutional support may hinder teachers' ability to leverage digital tools effectively. This study aims to investigate the extent to which public secondary school teachers in Rivers State adopt digital tools and how this adoption influences their management of entrepreneurial responsibilities.

Research Questions

- i. What is the extent of teachers' adoption of digital tools in the management of entrepreneurial responsibility in public secondary schools?
- ii. What is the extent to which teachers' adoption of multimedia projector predict effective management of entrepreneurial responsibility in public secondary schools in Rivers State?
- iii. What is the extent to which teachers' adoption of interactive whiteboard predict effective management of entrepreneurial responsibility in public secondary schools in Rivers State?
- iv. What is the extent to which teachers' adoption of internet predict effective management of entrepreneurial responsibility in public secondary schools in Rivers State?

Research Hypotheses

The following research hypotheses were tested:

- i. There is no significant relationship between the extent to which teachers' adoption of multimedia projector predict effective management of entrepreneurial responsibility in public secondary schools in Rivers State.
- ii. There is no significant relationship between the extent to which teachers' adoption of interactive whiteboard predict effective management of entrepreneurial responsibility in public secondary schools in Rivers State.
- iii. There is no significant relationship between the extent to which teachers' adoption of internet predict effective management of entrepreneurial responsibility in public secondary schools in Rivers State.

Research Methods

The study was carried out in Rivers State. The study area is one of the six States in the South-South geopolitical zone of Nigeria. The State is bounded on the South by the Atlantic Ocean and to the North by Anambra, Imo and Abia States, to the East by Akwa-Ibom State and to the West by Bayelsa and Delta State respectively. It has an estimated 5,185,400 people over a total area of 11,077km. sq (40 451N, 60 501 E and Latitude of 4.150N and Longitude of 6.8830 E). Politically, Rivers State has total of 23 local government areas grouped into five federal constituencies in the three senatorial districts. As a baselined State that housed diverse companies requiring skilled manpower specialized in different entrepreneurial skills, Rivers State has sunk in humongous amount of funds for the development of entrepreneurial studies in secondary schools as well as training of teachers in this perspective. Whether this effort has translated to teachers' adoption of digital tools in the management of entrepreneurial responsibility becomes critical for assessment. This informed the choice of Rivers State for the study.

The study adopted correlational research design approach. According to Uyanga and Etudor (2015), correlational design emphasizes the nature of relationship existing between variables that are not manipulated but assist in assessing and predicting the trends of variability. The population of the study consisted all the 267 Entrepreneurial Studies Teachers in the 245 public secondary schools in Rivers State (Source: Planning, Research and Statistics Department, Rivers State Schools Board, Port Harcourt, January, 2024)). Sample of 106 Entrepreneurial Studies Teachers were utilised and derived from the multistage random sampling technique consisting of clustering, proportionate and simple random sampling technique. At the first stage, Rivers State was clustered into three based on senatorial districts using clustering sampling technique. This resulted to Rivers East, Rivers

South, and Rivers West senatorial districts 104, 69 and 72 public secondary schools respectively. The second stage involved sampling of 60 percent of schools in each of these senatorial districts using proportionate random sampling technique. Thus resulting to 62, 41 and 43 schools from Rivers East, Rivers South and Rivers West senatorial districts respectively. From the schools sampled, a total of 106 entrepreneurial studies teachers were found and utilized for the study.

Data were quantitatively sourced using structured questionnaire designed in line with statements of research questions raised. The research instrument entitled: "Adoption of Digital Tools for Effective Entrepreneurial Management Questionnaire (AD-TEEMQ) had two sections: A and B. the section A elicited information on the knowledgeability of teachers in the manipulation of digital tools, availability of the tools, and the digital tools the teachers adopted in the course of delivering entrepreneurial studies curriculum instructions to the students. The section had seven items structured on four options of very high extent (VHE), high extent (HE), low extent (LE), and very low extent (VLE). Section B elicited details of selected digital tools teachers adopted and the extent of their effectiveness in the management of entrepreneurial studies responsibilities. This section was clustered into three clusters each with five items structured on four options of very high extent (VHE), high extent (HE), low extent (LE), and very low extent (VLE). The items were designed on a positive perspective and coded thus: 4, 3, 2, and 1 for VEH, HE, LE, and VLE respectively.

Data administration was done with the assistance of research adhocs using instant retrieval approach. The respondents were met during the just concluded verification exercise of government. Data collected were analysed based on the research questions raised (using mean score for question 1), R^2 for questions 2, 3 and 4 while the hypotheses were tested using linear regression probability value.

Results

Question 1: What is the extent of teachers' adoption of digital tools in the management of entrepreneurial responsibility in public secondary schools in Rivers State?

Table I: Extent of teachers' adoption of digital tools in the management of entrepreneurial responsibility in public secondary schools in Rivers State (N= 106)

SN	Items description <i>In your school, the extent you...</i>	Mean scores	Remarks
1	Utilized digital tool in presenting practicals.	1.26	VLE
2	Utilize digital tools for presenting tutorial plans	2.12	LE
3	Utilise digital tools for timely analysis of entrepreneurial concepts	2.67	HE
4	Utilize digital tools in surfing for entrepreneurial information	1.62	LE
5	Utilise digital tools in assembling fact	1.21	LE
6	Utilize digital tools in recording class programmes	1.17	VLE
7	Utilize digital tools in transferring instruction to students	3.17	HE
	Average	1.88	LE

Source | Field Survey, 2024

Table 1 indicates that the mean score on the extent of teachers' adoption of digital tools in the management of entrepreneurial responsibility in public secondary schools in Rivers State was low (1.88), implying that most of the teachers did not adopt digital tools un the management of entrepreneurial responsibility. This low extent may be attributed to the inadequacy of the facility in schools as well as the teachers' low quality competencies in the manipulation of these tools as indicated from the survey assessment. This finding seems to be lower than that of Igwe and Chima-Uduna (2021) in an empirical assessment on the extent of teachers' adoption of digital tools in

teaching business studies in Ebonyi State which revealed a low extent of teachers' adoption of digital tools in teaching. This implies that adoption of digital tools by the teachers in Ebonyi State was better than that of Rivers State. The implication may be related to the inadequacy of the effort of government in ensuring training and retraining of teachers in the utilization of digital tools for effective transfer of curriculum instructions as related to entrepreneurial studies.

Question Two: What is the extent to which teachers' adoption of multimedia projector predict effective management of entrepreneurial responsibility in public secondary schools in Rivers State?

Table 2: Result of Simple linear regression of the prediction of effective management of entrepreneurial responsibility (EMER) by teachers adoption of multimedia projector (TAMP)(N =106).

Variable	R	R ²	Adjusted R ²	Remark
EMER	0.3891	0.9243	0.2782	
TAMP	0.150	0.113	0.152	VL. Extent

Source | Field Survey, 2024

Testing the Hypothesis: There is no significant relationship between the extent to which teachers' adoption of multimedia projector predict effective management of entrepreneurial responsibility in public secondary schools in Rivers State.

Table 3: Simple linear regression of the prediction of effective management of entrepreneurial responsibility (EMER) by teachers adoption of multimedia projector (TAMP)(N =106).

Model	Sum of square	Df	Mean square	F-	Sig.	Decision @ P<.05
Regression	328.37	1	285.37	11.02	0.00 ^b	Significant
Residual	1370.92	105	40.90	0.00	---	---
Total	1699.29	106	326.27	11.02	0.00 ^b	

Source | Field Survey, 2024
 Note | b probability value

The result presented in Table 2 revealed that the R-value of .150 as the strength of the relationship between teachers' adoption of digital multimedia projector and effective management of entrepreneurial responsibility. The R² value of .113 also shown indicates that only 11.3 percent variation in effective management of entrepreneurial responsibility is explained or predicted by the teachers' adoption of multimedia projector. This result implies that teachers' adoption of multimedia projector predicts effective management of entrepreneurial responsibility in Rivers State to a very low extent.

The result in Table 3 showed that the calculated F-value of the prediction of effective management of entrepreneurial responsibility by teachers' adoption of multimedia projector at 1 and 105 degree of freedom is 11.02, while its corresponding calculated level of significance is 0.00 alpha. This level of significance is less than .05 in which the decision is based. With this result, the null hypothesis was rejected. This result implies that teachers' adoption of multimedia projector does significantly predicts effective management of entrepreneurial responsibility in public secondary schools in Rivers State. The finding aligned with the position of Ajayi, et al. (2018) which revealed the use of slide projectors in teaching to be very low.

The significance of very low extent contribution of teachers' adoption of multimedia projector in enhancing their effectiveness in entrepreneurial responsibility is unfortunately the

precursor/indicator of the low quality of school leavers that cannot withstand the stress and the competitiveness of business inefficiency and inconsistency in the administration of schools by the principals. It is noteworthy to states that without encouraging the teachers to adopt multimedia projector in the management of entrepreneurial responsibility, it almost likely that the status of poor quality of school leavers will be sustained. The implication is that low level of teachers' adoption of multimedia projector deprive students' the real time experience of what they are taught, and in turn undermines their academic achievement in entrepreneurial studies. The finding corroborated the positions of several studies that revealed that utilization promotes students' learning of real world skills related to technology, help to improved office skills acquisition as compared to the traditional method of teaching, as well as enhancing the value of teamwork, encourage effective collaboration (Shah & Khan, 2015, Igwe & Chima-Uduma, 2021, Okedeyi et al., 2015)

Question Three: What is the Extent to which teachers' adoption of interactive whiteboard predict effective management of entrepreneurial responsibility in public secondary schools in Rivers State.

Table 4: Result of Simple linear regression of the prediction of effective management of entrepreneurial responsibility (EMER) by teachers' adoption of interactive whiteboard (TAIW) (N =106).

Variable	R	R ²	Adjusted R ²	Remark
EMER	0.2732	0.7430	0.2101	
TAIW	0.342	0.101	0.110	VL. Extent

Source | Field Survey, 2024

Testing the Hypothesis: There is no significant relationship between the extent to which teachers' adoption of interactive whiteboard predict effective management of entrepreneurial responsibility in public secondary schools in Rivers State.

Table 5: Simple linear regression of the prediction of effective management of entrepreneurial responsibility (EMER) by teachers' adoption of interactive whiteboard (TAIW) (N =106).

Model	Sum of square	Df	Mean square	F-	Sig.	Decision @ P<.05
Regression	621.01	1	151.21	10.11	0.00 b	Significant
Residual	1028.72	105	39.11	0.00	---	---
Total	1649.73	106	326.27	10.11	0.00 b	

Source | Field Survey, 2024

Note | b probability value

The result presented in Table 4 revealed that the R-value of .150 as the strength of the relationship between teachers' adoption of interactive whiteboard and effective management of entrepreneurial responsibility. The R² value of .10 also shown indicates that only 10 percent variation in effective management of entrepreneurial responsibility is explained or predicted by the teachers' adoption of interactive whiteboard. This result implies that teachers' adoption of interactive whiteboard predicts effective management of entrepreneurial responsibility in Rivers State to a very low extent.

The result in Table 5 showed that the calculated F-value of the prediction of effective management of entrepreneurial responsibility by teachers' adoption of interactive whiteboard at 1 and 105 degree of freedom is 10.11, while its corresponding calculated level of significance is 0.00 alpha. This level of significance is less than .05 in which the decision is based. With this result, the null hypothesis was rejected. This result implies that teachers' adoption of interactive whiteboard

does significantly predict effective management of entrepreneurial responsibility in public secondary schools in Rivers State. The finding could result from inability of the teachers to have access to the tool as well as knowledge of the workability of it. It is a common knowledge that availability enhances chances of acceptability which in turn promotes adoptability and utilization. The finding aligned with the position of Agbagbue, (2018), Nwafor, et.al., (2023), and Al-Zaidiyeen, et.al. (2012), which revealed that despite the enormous advantages of interactive white board in teaching, indications abound of low utilization of the tool in teaching business education in tertiary institutions in Nigeria. However, the hypothesis indicates that significance of the interactive white board in the enhancement of effectiveness in management of entrepreneurial responsibility.

Question Four: What is the extent to which teachers' adoption of internet predict effective management of entrepreneurial responsibility in public secondary schools in Rivers State.

Table 6: Result of Simple linear regression of the prediction of effective management of entrepreneurial responsibility (EMER) by teachers adoption of internet (TAI)(N =106).

Variable	R	R ²	Adjusted R ²	Remark
EMER	0.5261	1.7391	1.7911	
TAI	0.537	0.512	0.518	H. Extent

Source	Field Survey, 2024
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Testing the Hypothesis: There is no significant relationship between the extent to which teachers' adoption of internet predict effective management of entrepreneurial responsibility in public secondary schools in Rivers State.

Table 7: Simple linear regression of the prediction of effective management of entrepreneurial responsibility (EMER) by teachers adoption of internet (TAI)(N =106).

Model	Sum of square	Df	Mean square	F-	Sig.	Decision @ P<.05
Regression	971.31	1	239.12	15.22	0.00 _b	Significant
Residual	1381.27	105	56.22	0.00	---	---
Total	2352.58	106	295.34	13.22	0.00 _b	

Source	Field Survey, 2024
Note	b probability value

The result presented in Table 6 revealed that the R-value of .51 as the strength of the relationship between teachers' adoption of internet and effective management of entrepreneurial responsibility. The R² value of .10 also shown indicates that only 51 percent variation in effective management of entrepreneurial responsibility is explained or predicted by the teachers' adoption of internet. This result implies that teachers' adoption of internet predicts effective management of entrepreneurial responsibility in Rivers State to a high extent.

The result in Table 7 showed that the calculated F-value of the prediction of effective management of entrepreneurial responsibility by teachers' adoption of internet at 1 and 105 degree of freedom is 13.22, while its corresponding calculated level of significance is 0.00 alpha. This level of significance is less than .05 in which the decision is based. With this result, the null hypothesis was rejected. This result implies that teachers' adoption of internet does significantly predicts effective management of entrepreneurial responsibility in public secondary schools in Rivers State. The finding is contrary to the positions of many studies that revealed that there is gross underutilization of web based technology in Nigerian educational institutions (Abiye, et al., 2018, Habibu, et al., 2012, Onasanya, et al., 2011, Ameen, et al., 2019). This perhaps may be related to

the teachers' accessibility, understanding and availability of internet facilities. Nevertheless, this majorly promote teachers' classroom lessons preparation, and illustrative examples in the class without real-time experience as many of these schools sampled lack projector.

CONCLUSION AND RECOMMENDATIONS

The potentials of digital tools in the management of entrepreneurial responsibility among the teachers in public secondary schools in Rivers State has shown to be ineffective in enhancing sustainable skill acquisition among the students. It is majorly a pointer that teachers in public secondary schools in Rivers State do not rely on digital tools in the management of their entrepreneurial responsibilities. This could be responsible for the poor implementation of entrepreneurial curriculum instructions as enshrined for the development of students' technological capacity. The low extent of teachers' adoption of digital tools undermine their effectiveness in the teaching of entrepreneurial studies as they lack any other tangible tool that can effectively assist in transferring practical experience on students. This in turn has corresponding effect on students' level of apathy to the subject vis-à-vis undermining learners' concentration, and assimilation of the concepts as embedded in the curriculum. The low extent adoption of the digital tools tend to promote teachers' inconsistency, misrepresentation and ideal ineffectiveness in delivering quality education outcome in accordance with what is embedded in the curriculum.

However, reversing this unfortunate trend of poor school teachers' adoption of digital tools as well as ineffective management of entrepreneurial responsibilities and re-instating quality entrepreneurial studies that guarantees quality knowledge generation and skill acquisition among the students, it is recommended that:

- i. The government should as a matter of priority mandate the entrepreneurial studies teachers to subject themselves to individual digital training for quality job delivery. This will spur the consciousness of the teachers to the importance of having a clear-cut knowledge of the importance of these tools and as well, encourage them to adopt same in transferring curriculum instructions to students for quality entrepreneurial skill acquisition.
- ii. Government should make it compulsory for entrepreneurial studies teachers to acquire competence in digital tools manipulations and utilization. This serving as prerequisite for appointment into the position of entrepreneurial studies teacher will encourage the teachers to be proactive, effective and efficient in the utilization of the tools in the management of entrepreneurial responsibilities in schools. The condition will equally eliminate the resistance to change among the teachers and over-dependency on government for provision of ICT facilities and career development.

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