

SIGNIFICANCE OF INTEGRATING VOCATIONAL STUDIES IN SECONDARY SCHOOL EDUCATION CURRICULUM IN NIGERIA

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ABSTRACT

This study investigates the role of school leaders in implementing the School Improvement Program (SIP) in selected schools in Jigjiga City, Ethiopia. Recognizing the importance of education as a tool for societal development, the research aims to address the gaps in leadership roles related to SIP execution. Utilizing a mixed-method approach, data were collected through questionnaires, interviews, focus group discussions, document analysis, and observations involving teachers, principals, and educational experts. The findings reveal that the majority of respondents are young and possess first-degree qualifications, with a notable representation of male leaders. The study indicates that while school leaders demonstrate moderate involvement in planning and coordination during the preparation stage of SIP, their effectiveness in assessment procedures and instructional supervision is limited. Consequently, this inadequacy hampers the overall success of SIP implementation. Recommendations include enhancing stakeholder participation, prioritizing critical issues in SIP planning, and providing targeted training for school leaders to foster effective teaching methodologies. The study underscores the necessity for improved leadership practices to elevate educational quality and achieve the objectives of the School Improvement Program.

1. Introduction

Education comprises of teaching and learning of specific skills, imparting of knowledge that usually take within the school environment. It encourages the actualization of self-potential and deposited talents of an individual. Although, education aims to nurture a young person's growth into mature adulthood, allowing them to triumph in their areas of interest. Education started as the natural response of early civilizations and struggle for survival. It usually a process that combine culture and the society. The process tailor towards adults training the younger one of their environments in the knowledge and skills they can perform and eventually pass on to next generation. The practice of imparting information was critical to the evolution of culture and humans as a species. In pre-literate societies, this was done orally and via imitation. The tradition of storytelling was passed down from generation to generation. Furthermore, oral language evolved into written symbols and letters. Many educational theories have been established, all with the purpose of understanding how young people in a society might acquire knowledge and how adults with knowledge and information that is useful to the rest of society can be imparted.

Education can be acquired beyond four walls of classrooms, it maybe through reasoning and experiences, therefore, vocational education is in line with the knowledge beyond the four walls of classrooms. Recently, educational challenges are differing from country to country especially from developed to developing but we are so much concerns about developing countries including Nigeria. Firstly, the challenges are as follows from unaware of the importance of education, parent prioritizing quick money than education, poverty, teachers are often paid less than other similar professions in the country, lack of facilities, inadequate classroom and inadequate staff development.

Vocational education and skills training initiatives are intended to educate students for certain jobs or careers. The importance of vocational studies cannot be discussed without mentioning the contribution of secondary school efforts in making it reality in some part of the world through various education policy reforms. Secondary education policies vary from continent to continent regarding the role of vocational and acquisition of skills acquired. There are so many issues surrounding the decision in placing where to include vocational studies, firstly, some educator believes it should be included in upper class of secondary school, secondly, it should be in post-secondary while others postulate it should be engage by the private sectors. These depends on the individuals perspectives but the primary aim is to contribute to the wellbeing of the participants. Wallenborn and Heyneman (2009) described vocational education and training as a tool to contribute significantly to socioeconomic and physical attributes of a country.

The British system of education has high influence on Nigeria education structure and performance. This type of education neglects our sociocultural background and vocational interest of the nation. The apprenticeship system was the earliest type of vocational education practiced in Nigeria and it engage our youth to participate in various either of interest or as family heritage. The countries that refused dominance of foreign culture to their educational system has higher performance in skill acquisition that helps in economy development.

Various vocational skill practice in schools are under these categories: agricultural, technical, technology, and trade and industrial therefore, any students who prefer to choose according to his or her desire profession definitely will find the choice. The secondary school curriculum includes the following subjects in both junior and senior school: Vocational electives at junior secondary school include agricultural science, business studies, home economics, local crafts, computer education, fine arts, music, and introductory technology. Vocational electives at Senior Secondary School include agricultural science, applied electricity, bookkeeping and accounting, building construction, auto mechanics, commerce, computer education, electronics, clothing and textiles, food and nutrition, home management, metalwork, technical drawing, woodwork, shorthand, typewriting, fine arts, and music. Awolola and Ogunmola (2021)

suggested that vocational education should also be included in private schools' curriculum for better performance.

The subject listed are elective that have different content from vocational skill like fashion Design, tie and dye, Bead making and wire works, welding and fabrication, soap making cosmetology, Bag making, web design, Graphic, Phone repairs etc that involves real practical. It can also be categorised to any profession of study, notwithstanding, ability to perform determines success. The time allocated under general education may be short but if probably includes in secondary school curriculum with full implementation will be appreciated. Secondly, it has effect on jamb combination during Admission process because some courses demand core courses not elective therefore, more efforts and awareness needed in this area.

Educational policy in Nigeria has been of a great contribution to the growth and development of the country. The policy stipulated that 6-year for primary, 3-years for junior secondary, 3-year for senior secondary while 4-year for higher education for the country. It usually called '6-3-3-4'. Therefore, considering this now, it means that secondary school education has major roles, firstly, preparing the students to be useful to the society and also for higher education Ekpenyong, (1988). Secondary education plays a vital role that cannot be rule out in development of the nation. It will very important to inculcate vocational studies into secondary school curriculum for graduates of secondary school to be self-reliance and self-sustainability because there are driving force for acquiring these studies and contribute immensely to industrialization within the country.

Okoye and Udoudo (2015) Identified issues related to vocational development in secondary as curriculum content, teachers' competence (both theory and practical's), linkage to the labour market, facility availability, sufficient exposure of learners to the learning tasks (to enable the student to master it efficiently). Olaniyan and Ojo (2008); Muoghalu (2018); Ojo and Olagoke-Salami (2023), David (2014) and Ojo, (2023). identified insufficient supply of technical teachers, inadequate accessibility to learning resources and workshop facilities, insufficient financing, social appraisal or poor societal perception, excessive emphasis on university education/paper qualification/certification, lack of partnership or collaboration of the private sectors, poor practical/technical skills, terrorism/insecurity, poor monitoring and evaluation, shortage of power supply in the workshop, and insufficient financing for effective and productive practical teaching in Nigerian secondary schools. Ministries of Education have special regard to educational likes schools rather than skill acquisition and training centers, in which the curricula remain stable for a long time where few part were practical oriented. The competencies require by labor markets may not be attained.

Recently, there are different areas to participate but depends on how it was structure within the school. Akombi (2005) pointed out that the secondary school principals and teachers are products of general education, this will always contribute problem to fully implementation of vocational education policies and priority will be given to their own type of education before considering vocational education. It will also affect the quality of Vocational and Technical Education system.

Nigeria, like many nations, faces a crucial need to modernize secondary education. Traditional academic programs, though valuable, might not adequately equip students with the practical skills and job-specific competencies demanded by today's workforce. To bridge this gap, integrating vocational studies into secondary education is gaining traction. This approach aims to investigate the feasibility and effectiveness of integrating vocational studies into the Nigerian secondary education curriculum to provide a well-rounded learning experience, allowing students to develop practical skills, explore career options, and enhance their employability after graduation. This research explores the motivations, challenges, and potential benefits of integrating vocational studies in Nigerian secondary schools. The ultimate goal is to inform policy decisions and educational practices, ultimately preparing students for the workforce and contributing to national development.

2.0 Research Objectives:

- i. Examine students' interests, aspirations, and aptitudes towards vocational education and skill development.
- ii. Assess stakeholders' views on the importance and potential benefits of integrating vocational studies.
- iii. Explore barriers and challenges hindering the integration of vocational studies into the curriculum.

3.0 Methodology

This paper employs quantitative data collection techniques, to provide comprehensive understanding of the integration of vocational studies into secondary school education in Nigeria. The Participants of this study involves secondary school students, teachers, school administrators, policymakers, and representatives from relevant industries within Yewa South local government area of Ogun state. A total of seventy one (71) secondary schools (both public and private) were domiciled in Yewa South local government as at the time of this research (Ogun State Education Statistics, 2020). Out of these schools, fourty three (43) of them were private owned while twenty eight (28) were government owned. These schools were spatially distributed in nine (9) main towns of the local government area viz: Owode, Ilaro, Oke Odan, Idogo, Ajilete, Iwoye, Ilobi-Erinja, Olokuta and Owo. Distribution of the schools per towns can be depicted in table 1.

Table 1: Distribution by Population of Secondary schools in Yewa South Local Government.

s/n	Location	Private	Public	Total	+Sampled Schools
1	Owode	20	6	26	3
2	Ilaro	21	11	32	5
3	Oke Odan	1	3	4	1
4	Idogo/Ipaja	-	1	1	-
5	Ajilete	1	2	3	-
6	Iwoye	-	2	2	-
7	Ilobi-Erinja	-	1	1	1
8	Olokuta	-	1	1	-
9	Owo	-	1	1	-
TOTAL		43	28	71	10

+Sampled schools were chosen using a non-probabilistic (convenience) sampling approach

Source: Ogun State Education Statistics, 2020

Multi-stage sampling techniques was used in the inclusion of samples from the population of study. The first stage was the selection of the secondary schools to be included in the survey which was done using convenience approach, the second stage is the aggregate sample of students to be selected for inclusion while the third stage consists of the selection of students per school. This technique resulted in conveniently selecting 10 schools out of the 71 schools in the study area. The aggregate selected schools, consists of

11,001 population of students. Krejcie and Morgan (1970) Sample size calculator (equation (1)) was used to estimate the sampled number of students included in the survey. The formula is written thus:

$$n = \frac{\chi^2 N p(1-p)}{d^2(N-1) + \chi^2 p(1-p)} \quad (1)$$

Where:

n = sample size required

χ^2 = table value of Chi-square for 1 degree of freedom at the desire confidence level (95%) with a value of (3.841).

N = Population size

p = population proportion (assumed to be 0.5)

d = degree of accuracy/level of precision (0.05).

From equation (1), the sample size is calculated thus:

$$\begin{aligned} n &= \frac{(3.841)(11001)(0.5)(1 - 0.5)}{(0.05)^2(11001 - 1) + 3.841(0.5)(1 - 0.5)} \\ &= \frac{10563.710}{27.500+0.96025} = \frac{10563.710}{28.4603} = 371.174 \sim 371 \end{aligned}$$

Therefore, the aggregate sample size is 371.

Stratified sampling technique via proportional allocation was used in estimating the number of students to be selected per school. This can be evidenced from table 2.

Table 2: Distribution of selected schools per number of students and stakeholders

Selected Schools	Status	Population	Sample $n_i = \frac{nN_i}{N}$	Selected stakeholders
The Best legacy Academy, Owode	Private	$N_1 = 1100$	37	5
Army Day Senior Secondary School, Owode	Public	$N_2 = 1285$	43	5
Area Community (Jnr.) High School, Owode	Public	$N_3 = 2428$	82	5
Auntie Kemi Model College, Ilaro.	Private	$N_4 = 204$	7	5
Ipadeola Bolaji Model College, Ilaro	Private	$N_5 = 650$	22	5
Itolu Community (Jnr.) High School, Ilaro	Public	$N_6 = 1300$	44	5
Oronna High School (Snr.), Ilaro	Public	$N_7 = 724$	24	5

Yewa (Egbado) College, Ilaro	Public	N ₈ = 1600	54	5
Oke-Odan Grammar School, Oke-Odan	Public	N ₉ = 1100	37	5
Ilobi-Erinja High School, Ilobi.	Public	N ₁₀ = 610	21	5
Total		N = 11,001	n = 371	50

Source: Authors' computation

About 5 stakeholders (class teachers, principals and vice principals) per school were randomly selected for inclusion into the survey. In addition, two different closed-ended questionnaires (one for students and other for stakeholders) were drafted on the perceptions, attitudes, barriers and challenges hindering the integration of vocational studies into the curriculum. More so, descriptive statistics (frequencies, percentages and graphs) was used to analyze the data collected through field survey. Inferential statistics such as chi-square test of goodness of fit was employed to examine the equality in response of the normal.

4.0 Results and Discussion

4.1 Analysis of respondent's socio-demographic characteristics

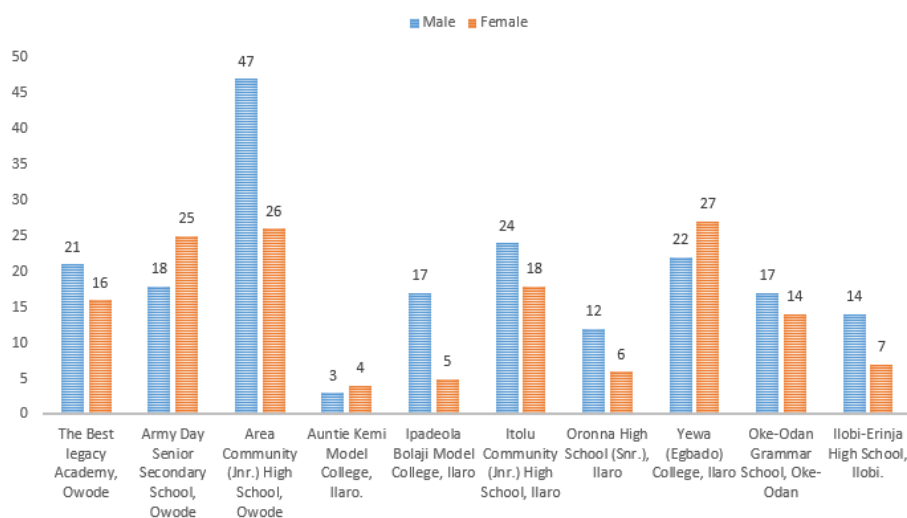


Fig. 1: Distribution of student participants by gender

Result from Fig. 1 indicated the gender distribution of the students by school names. It can be seen that Area community High School, Owode have the highest number of participants, with male participating mostly. This was followed by Egbado/ Yewa College Ilaro, Army Day Senior Secondary School, and Itolu Community (Jnr.) High School, Ilaro to mention a few. This implies no gender disparity in the inclusion of participants for the survey.

Table 3: Frequency and percentage analysis of Students Socio-demographic information

Variables	Frequency	Percentage
<10 years	36	11
10-14 years	73	22.3

Age	15-18 years	91	27.8
	>18 years	127	38.8
	Total	327	100
Class	Junior Secondary	146	44.6
	Senior Secondary	181	55.4
	Total	327	100

Source: Field Survey, February, 2024

Table 3, result of item 1 indicated that about 36(11%) of the student participants were below 10 years old, 73(22.3%) were between 10-14 years of age, 91(27.8%) were between 15-18 years of age while 127(38.8%) of them were found to be more than 18 years of age. This implies that majority of the student participants were found to be of ripe age, making the responses emanating from the research questions valid. More so, item 2 of the table also showed that majority of the student participants were in senior category, representing 181(55.4%) while those in the junior category were 44.6% of the entire respondents.

4.2 Answering Research Questions

RQ1: Are there students' interests, aspirations, and aptitudes towards vocational education and skill development?

Table 4: Perceptions of student participants on interests, aspirations and aptitudes towards vocational education and skill development

Variables		Frequency	Percentage	Chi-square Test
Awareness of vocational studies	Yes	254	77.7	3.746 {1} [0.0000]
	No	73	22.3	
	Total	327	100	
Understanding of vocational studies	Learning practical skills for specific jobs	127	38.8	43.284 {2} [0.0000]
	Studying traditional academic subjects	146	44.6	
	Not sure	54	16.5	
	Total	327	100	
Importance of vocational studies	Yes	272	83.2	114.003 {1} [0.000]
	No	55	16.8	
	Total	327	100	
Interest in learning vocational skills	Yes	237	72.5	66.083 {1} [0.000]
	No	90	27.5	
	Total	327	100	
Interests aligning with vocational studies	Yes	272	83.2	144.003 {1} [0.000]
	No	55	16.8	
	Total	327	100	
Adequate preparation of	Yes	145	44.3	4.187

students for future employment opportunities based on current education	No	182	55.7	{1}
	Total	327	100	[0.041]

Source: Field Survey, February, 2025

Table 4 presents student participants' perceptions regarding interests, aspirations, and aptitudes towards vocational education and skill development. Findings from the first item reveal that 77.7% of participants are aware of vocational studies, while 22.3% are not. This discrepancy is statistically significant ($\chi^2 = 3.746$, $p < 0.05$), suggesting a notable difference in awareness levels among students. Examining the second item, 38.8% of students believe vocational studies focus on practical skills for specific jobs, 44.6% view it as studying traditional academic subjects, and 16.5% are uncertain. This variation is also statistically significant ($\chi^2 = 43.284$, $p < 0.05$), indicating diverse understandings of vocational education among participants. Moreover, a majority of students express the importance of vocational studies (83.2%) and interest in learning vocational skills (72.5%, $\chi^2 = 66.083$, $p < 0.05$). Additionally, responses indicate that students' interests align with vocational studies, with 55.7%, $\chi^2 = 4.187$, $p < 0.05$, stating that current education does not adequately prepare them for future employment opportunities.

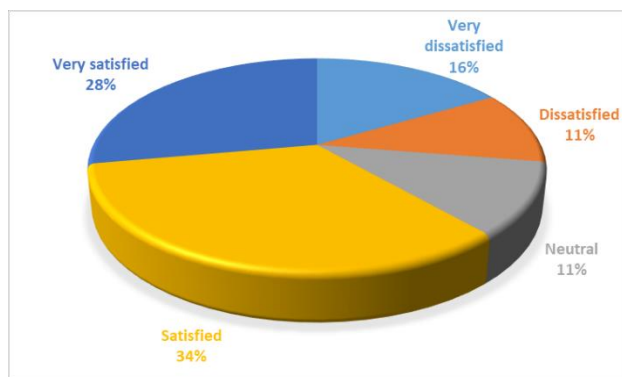


Fig. 2: Students level of satisfaction with their current academic curriculum

However, majority of the students representing 34% were found to be satisfied with their current academic curriculum, 28% of them were very satisfied, 16% were very dissatisfied, and 11% each were dissatisfied and neutral respectively.

RQ2: What are stakeholders' views on the importance and potential benefits of integrating vocational studies?

Table 5: Analyses of stakeholders' perceptions on importance and potential benefits of integrating vocational studies

Statements	Response	Frequency	Percent	Chi-square test
Vocational studies should be integrated into secondary education	Yes	44	100	-
	Very unimportant	3	6.8	24.182

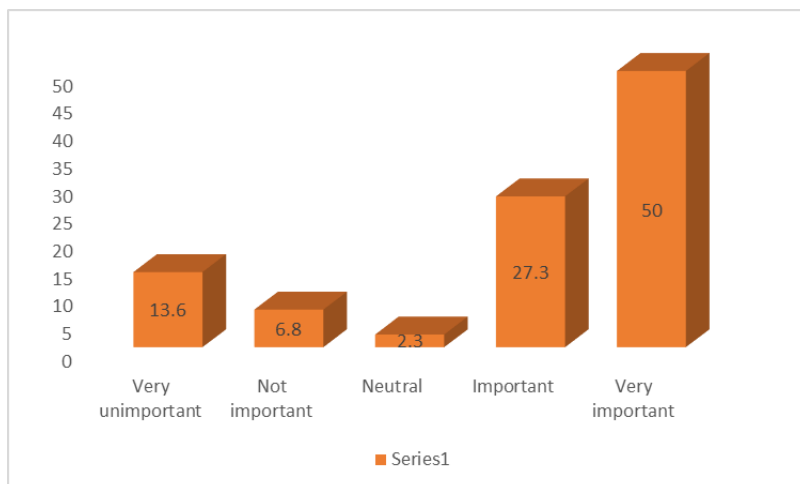
Importance of integrating vocational studies into the secondary education curriculum Ratings	Not important	5	11.4	{df = 4}
	Neutral	3	6.8	[0.000]
	Important	14	31.8	
	Very important	19	43.2	
	Total	44	100	
Potential benefits perceive arising from the integration of vocational studies	Employment opportunities	10	22.7	15.818
	Skill development	19	43.2	{df =3}
	Economic growth	14	31.8	[0.001]
	Others	1	2.3	
	Total	44	100	
Current state of vocational education in Nigeria	Very Poor	4	9.1	
	Poor	18	40.9	22.591
	Fair	14	31.8	{df = 4}
	Good	7	15.9	[0.000]
	Excellent	1	2.3	
Total	44	100		
Vocational studies as a standalone subject or integrated into existing subjects	Standalone	35	79.5	15.364
	Integrated	9	20.5	{df = 1}
	Total	44	100	[0.000]
Attractiveness of vocational studies to students	Hands-on activities	5	11.4	11.227
	Career guidance	23	52.3	{df = 2}
	Industry partnerships	16	36.4	[0.004]
	Total	44	100	

	Highly ineffective	4	9.1	34.636
Effectiveness of vocational education programs on student outcomes if integrated into the curriculum	Ineffective	1	2.3	{ df = 4 }
	Neutral	3	6.8	[0.000]
	Effective	15	34.1	
	Highly effective	21	47.7	
	Total	44	100	

Source: Field Survey, February, 2025

Taking the importance and potential benefits of integrating vocational studies into consideration as evidenced in Table 5, result from the stakeholders indicated from item 1 that vocational studies should be integrated into secondary educational as opined by all the respondents; 43.2% of them were of the opinion that it is “very important” to integrate vocational studies into the secondary curriculum while minority of them said that it is “very unimportant”. This response was found to be statistically significant ($\chi^2 = 24.182$, $p < 0.05$), indicating diverse opinion on the importance of integrating vocational studies. However, majority of the stakeholders (43.2%) viewed that skill development is a potential benefit perceived arising from the integration of vocational studies, followed by economic growth (22.7%) and employment opportunities (31.8%). These responses were found to be statistically significant ($\chi^2 = 15.818$, $p < 0.05$), an indication of notable difference in potential benefits. More so, majority of the stakeholders (40.9%) opined that the current state of vocational education in Nigeria is poor while 31.8% of them rated it as being fair with minority of them rating it as excellent. These responses were as well found to be statistically significant ($\chi^2 = 22.591$, $p < 0.05$), implying a diverse opinion current state of vocational education in Nigeria.

In addition, majority of the respondents also opined that vocational studies should be a standalone subject and should not be integrated into existing subjects while minority of them representing 20.5% opined that it should be integrated. These responses were found to be statistically significant ($\chi^2 = 15.364$, $p < 0.05$), an implication of diverse opinion on how vocational studies should be structured during curriculum implementation. On how vocational studies can be made attractive to students, stakeholders opined that this can be done by hands-on activities (11.4%), career guidance (52.3%) and industry partnerships (36.4%). The statistical significance of this can be evidenced from the $\chi^2 = 11.227$ with $p < 0.05$, implying difference in their responses on how vocational studies can be attractive to the students. In addition to this, teachers and school managements (stakeholders) were of the opinion that the effectiveness of vocational education programs on student outcomes if integrated into the curriculum would be highly effective as opined by 47.7% of the total respondents.



$\chi^2 = 3.636$
d.f = 4
p < 0.05

Fig 3: Stakeholders views on the importance of partnerships between schools and industries for vocational education

Graphical representation of fig. 3 indicated that majority of the stakeholders representing 50% were of the opinion that it is very important for schools and industries to partner for vocational education, 27.3% of them said that is important, 2.3% were neutral, 6.8% said that it is not important while 13.6% of the said that is very unimportant. It cannot be overemphasized that responses emanating from school and industries partnerships for vocational education to stand tall in Nigeria is statistically significant ($\chi^2 = 34.636$, $p < 0.05$), an implication of variation in responses.

Table 6: Stakeholders views on fostering partnerships between schools and industries

How to foster partnerships between schools and industries	SD	D	A	SA	Total	Mean/SD
Government incentives	f 3 % 6.8	6 13.6	18 40.9	17 38.6	44 100.0	3.11 [0.895]
Industry outreach programs	f 7 % 15.9	4 9.1	10 22.7	23 52.3	44 100.0	3.11 [1.125]
School-industry liaison officers	f 3 % 6.8	8 18.2	16 36.4	17 38.6	44 100.0	3.07 [0.925]

Figures in parentheses [] represents standard deviation

Source: Field Survey, February, 2025

Responses emanating from stakeholders’ on fostering partnerships between schools and industries as evidenced from Table 6 showed that majority of them opined to the fact that government incentives (80.5%, mean = 3.11), industry outreach programs (75%, mean = 3.07) and school-industry liaison officers (75%, mean = 3.11) can help in fostering partnerships between schools and industries.

RQ3: What are barriers hindering the integration of vocational studies into the curriculum.

Table 7: Students perceptions on Challenges in integrating vocational studies in secondary school curriculum

Students perceived challenges	SD	D	A	SA	Total	Mean/SD
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Lack of resources	f	37	37	127	126	327	3.05
	%	11.3	11.3	38.8	38.5	100.0	[0.976]
Negative perceptions/stigma	f	18	36	127	146	327	3.32
	%	5.5	11.0	38.8	44.6	100.0	[0.853]
Limited time in the school day	f	38	54	126	109	327	2.94
	%	11.6	16.5	38.5	33.3	100.0	[0.981]

Figures in parentheses [] represents standard deviation

Source: Field Survey, February, 2025

The challenges that may be faced in integrating vocational studies in secondary school curriculum as opined by the student participants, result of Table 7 showed that majority of them representing 77.3% with mean response rate of 3.05 agreed that lack of resources is a challenge; with emphasis on negative perception/stigma (83.4%, mean = 3.32) and limited time in the study day (71.8%, mean = 2.94).

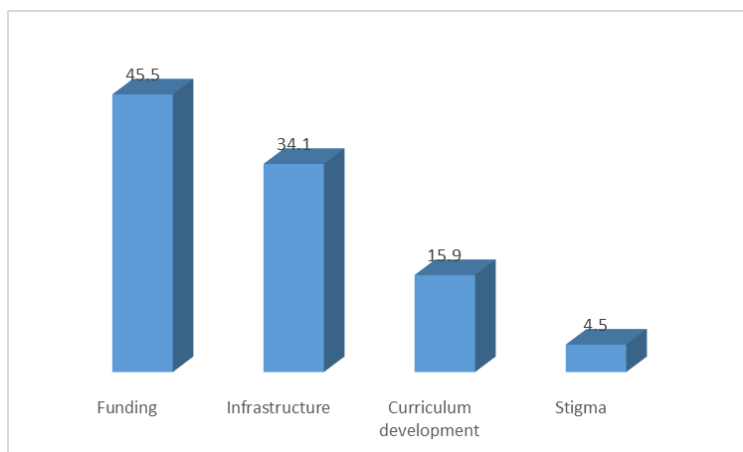


Fig. 4: Stakeholders perceived challenges hindering the integration of vocational education into the school curriculum

It can as well be evidenced from fig. 4 that majority of the stakeholders were of the opinion that funding (45.5%) can be a major challenge hindering the integration of vocational education into the school curriculum, followed infrastructure (34.1%), curriculum development (15.9%) and stigma (4.5) respectively. Hence, it cannot be overemphasized that the integration of vocational education into secondary school curriculum is not without its own challenges in the side of students and stakeholders respectively.

Conclusion

The findings emphasise the significance of overcoming problems and building collaborations in order to effectively include vocational education into secondary school curricula. Addressing resource constraints, eliminating negative perceptions, and strengthening collaboration between schools and industry are all critical steps towards boosting vocational education and skill development projects in Nigeria. These findings have important implications for policymakers, educators, and others involved in educational

reform. Additional research and focused initiatives are required to address the identified issues and encourage the integration of vocational studies for better student outcomes and socioeconomic development. Therefore the following hereby suggested:

- There should be wide range representation of expert in both institution and industries in curriculum preparation of secondary school, this will surely help the country in term of employability and poverty reduction
- The unit for teacher training and development under government should be fully funded to assist the teachers involves in vocational education to attend workshop, seminar, retreat and conferences that will update their daily activities.
- The policy makers should ensure that the youth are equipped with relevant vocational skills and develop relevant curriculum that matches the socio-economic and security issues currently taking place in the nation and survival of global economy.
- The importance of infrastructure like regular power supply, workshops, studios, laboratories, equipment and materials cannot be overlook for successful of vocational education in secondary school in Nigeria.

References

- Akombi, I (2005). Strategies for ensuring quality in the teaching of vocational education in secondary schools." *journal of qualitative education* 1(2). 111-122,
- Awolola, O .I and Ogunmola, D.L (2021). Assessment of curriculum implementation in private secondary schools in Ibadan North Local Government Area of Oyo State: implications and limitations, *African Journal of Educational Management*, 17(2), 161–172,
- David (2014). An overview of vocational and technical education in Nigeria under secondary school education system," *international journal of technology enhancements and emerging engineering research*, (2):6, 119- 122,
- Ekpenyong L. E. (1988). Vocational content in the national curriculum for Nigerian secondary schools: How industry can help, *The Vocational Aspect of Education*, 40:106, 57-62,
- Krejcie, R.V. and Morgan, D.W. (1970). Determining sample size for research activities." *Educational and Psychological Measurement*, **30**, 607-610.
- Muoghalu, J N. C. (2018). Challenges of technical and vocational education in Nigeria." *International Journal of Research*, (05); 01, 3279-3292,
- Ogun State Education Statistics, 2020
- Ojo, O .O (2020). Rethinking access and quality in technical and vocational education and training (TVET) for sustainable development in Nigeria," A Paper presented at 2nd International Conference (virtual) Federal Polytechnic Ilaro, Ogun State. Theme: *Emerging Trends in TVET as a contributor to economic transformation for global competitiveness*. Date: 10th – 11th November,

- Ojo, O. O and Olagoke-Salami, S.O (2023). Housing need and agripreneurship for effective food production in agrarian settlements in Ogun State, Nigeria, A paper presented at Association of Technical Universities and Polytechnics in Africa, **Venue:** Accra International conference centre, Accra, Ghana, **Theme:** *mainstreaming TVET for Skill Development, Mobility and Resilient Economies in Africa*, **Date:** 27th August-2nd September,
- Okoye, K. R. E and Udoudo, E.S (2015). Vocationalisation of secondary education in Nigeria: issues, challenges and prospects,” *journal of education practice*, (6); 30, 71-76,
- Olaniyan D. A. and Ojo L. B. (2008). Challenges against implementation of introductory technology curriculum in Nigerian junior secondary schools.” *European Journal of Scientific Research* 24 (1): 112-118,
- Wallenborn M and S. P, Heyneman (2009). Should vocational education be part of secondary education? *Journal of Educational Change*, 10:405–413,