

Strategies for Improving Students Acquisition of Practical Skills in Construction Trades Works in Government Technical Colleges for Employability in South West, Nigeria

B. T. Lasisi*, R. S. Busari*, A. A. Ayoola*, I. O. Mustapha*, & S. O. Amuda*

Abstract

The study identified strategies for improving student's acquisition of practical skills in construction trade works in south-west, Nigeria with a view to finding out ways of optimizing practical skills acquisition among students for employability and self-reliance. It was guided by three research questions and three null hypotheses. The descriptive survey design was employed. The population of the study comprised 104 school administrators 82 traders and 1208 final year students making a total of 1394. The entire population of 1394 was used as the sample for the study. A structured questionnaire named "Strategies for Improving Students Acquisition of Practical Skills in Construction Trade Works in South-West, Nigeria GTC" (SISAPSCTW) was used for data collections. The reliability coefficient of entire instruments was 0.82. The data for the study were analyzed using Mean, Grand Mean, Standard Deviation and t-test statistical methods. The findings of the study include among others, Demonstration, assignment, drill and practice, Technology integration, real-world connections, and apprenticeship strategies as much appropriate technology for enhancing practical skills acquisition by the students. It was found out in the study that there were no significant differences between the mean respondents of trade teachers and students on supervisory strategies for student's practical skills acquisition in construction trade works in GTC of south-west, Nigeria. It was concluded among others that teachers in construction works such as Electrical/Electronics trade, woodwork, building construction, metal construction, automobile, food and Home management apply the appropriate strategies

* Faculty of Vocational, Innovation and Engineering Education
Emmanuel Alayande University of Education, Oyo
Correspondence: lasisibt@eauedoyo.edu.ng

among the listed or combinations of strategies to actualize the impart of skills on the students in GTC. Based on the findings the study recommended that teachers of specific construction works should continue to adopt appropriate teaching strategies identified in the study for improving acquisition of practical skills by the students in GTC and identified strategies for assessing practical skills of students in construction trade works, the finished product work by the students in the GTC should be vested on exhibition, sales and sharing of proceeds with the participatory students as these strategies will motivate GTC students to focus on their study and ready to accomplish and exhibit the skills learnt on their trade and established as self-employer.

Keywords: Strategies, Government Technical Colleges, Practical Skills, Construction Trade and Employability.

Introduction

Employability skills is referred to as the skill required to secure and retrain a job, and recent usage of the term is often used to describe the training or foundation skills upon which a person must develop job-specific skills. Employability skills are the essential skills necessary for acquiring, keeping and performing well on a job (Hassan and Mohammed, 2020) such skills as pronounced in the program of Vocational and Technical Education are engineering, Agriculture, communication and interpersonal skills, managing resources, problem- solving acquiring and job maintaining (Adu, Yusri & Muhammed 2013). Generally employability skills are required by students to prepare themselves to meet the needs of various occupations after graduation.

Employers today are worried about getting good workers, who not only have basic academic skills like reading, writing, science, mathematics, oral, communication and listening, but also higher reasoning, thinking creativity, decision making and problem solving (Murtala, Yahaya, Haibu. Sani and Sale, 2024).

Technical College is a post primary school institution with the following objectives;

1. Providing students with practical skills and training in a specific trade or technical field
2. Preparing students for entry-level positions in the workforce

3. Offering specialized training and certification programs
4. Fostering entrepreneurship and innovation
5. Developing critical thinking, problem-solving and communication skills
6. Providing opportunities for continuing education and professional development
7. Building partnerships with industry and the community
8. Offering flexible and accessible programs to meet the needs of diverse learners
9. Ensuring students are work-ready and adaptable to changing technologies
10. Contributing to economic, development of the region. (NECER 2024, NABTEB 2022).

Technical Vocational Education (TVE) is defined as a planned program of courses and learning experiences that begins with exploration of career options, supports-basic academic and life skills and enable achievement of high academic standards, leadership, preparation for industry-defined work and advanced and continuing education (Mahamid, 2020). One of the most significant aspects of TVE is its inclination towards the world of work and the emphasis of the curriculum or the acquisition of employability skills. (Audu, Yusri & Kamin & Saud 2013). TVE delivery systems are therefore, well placed to train the skilled workforces that the nation needs to create employment for the youth in order for them to become productive and contribute to the development of their society and the nation at large.

Humanitarian Needs Overview (HNO 2024), the policy states thus; Review technical and vocational education curriculum to increase the relevance of programmes to the needs of industry ensure that practical skills are assessed as part of all science and technical education examinations, initiated and articulate appropriate technology programmes that will enhance the capacity of vocational centres to support and services cottage industries, broaden and localize the vocational colleges to develop products and provide services to their immediate communities on a commercial basis, established small scale enterprises managed by staff and students in

technical colleges, solicit private sector sponsorship to supplement government subventions to technical colleges encourage government patronage of goods and services offered by technical colleges.

The education system must prepare young people to face complex challenges and current future uncertainty due to society's increasing complexity and the changing nature of work (OECD, 2023). Nevertheless students acquisition of new practical skills is necessary for the attainment and purpose of solving immediate societal problem which cannot be realized in a non-supportive school environment, Udafia, Ekpo, Nsal & Akpan (2024) asserted that practical teaching materials available in most Technical Colleges in Southwest Nigeria are obsolete and not functional and consumable materials do not commensurate with students population as a result of this inadequacies technical graduate product that are deficient in practical skill were produced over the year. In a similar perspective, Lasisi (2022) reported wrong approach to teaching and evaluation of practical subjects in technical colleges rather than impart skills to students, poor funding of technical colleges among other myriads challenges leads to production of graduates who are ill-equipped with practical skills, and were unable to establish on their own and still fail to secure employment.

A teacher of vocational and technical subject or trade must not only teach but must use activity-based strategies that will enhanced students' acquisition and sustenance of knowledge skills and self concept formation as well as interest (Chinonso, 2017). Construction trades refers to skilled occupation and crafts involved in the construction industry some of examples of construction traded include carpentry (woodworking, cabinetry, furniture making) electrical (Electrical installation, maintenance, wiring circuits, plumbing (piping, water supply drainage) Masonry (bricklaying, stonework, concrete).

Heating, ventilation Air conditioning, Roofing (roofing installation, repair, waterproofing. Painting and Decorating (Painting, wallpapering, funshing). Glazing (glass installation, window fitting) Flooring, welding, lock smoothing and telecommunication among others.

These trades require specialized training skills and often certification or licensure. Teachers of construction trades give instruction and communicate knowledge, skills and attitudes to students. Teachers and instructors are the conduit through which knowledge and practical skills of construction trades could be transmitted, as such they should use appropriate teaching and supervisory strategies together with learning resources and must use relevant pedagogy that will enhance students' acquisition of practical skills through activity-based instruction where students are given opportunities to be more active in the class. (Chinonso, 2017). The teacher inspires, motivates and empowers students to discover their full potentials, create a safe, inclusive and engaging learning environment, prepare their lesson properly by carefully selecting their instructional objectives and discharge accordingly. The teacher guides and instructs students in academic subject skills or values, facilitates learning, understanding and application of knowledge, evaluates students' progress, provides feedback and adjusts instruction.

In the working environment, practical skill or technical skills are referred to as the procedure, technique or methods of carrying out specialized or special tasks that can be easily measured. The training of such skills in technical colleges is easier in contrast to employability skills, which are normally referred to as core-skill, generic skills or non-technical skill. These skills are not easily taught in schools although they are highly important for the 21st century workforce (Lasisi, 2022).

These skills can be grouped and referred to as key skills, core-skills, essential skills, key competence skills, necessary skills and transferable skills. Workers in the 21st century need group skills to be employable in the workforce. Hence, strategies for improving students' acquisition of practical skills in construction trade works in Government Technical Colleges in South West, Nigeria. It is therefore imperative to examine the strategies that will bring forth appreciable improvement in the acquisition of practical skills among the students of construction trades in Government Technical Colleges in South West, Nigeria.

Statement of the Problem

Government Technical College is billed to produce middle-men workforce particularly on the construction trade works which will make industry produce adequate job and services, however due to poor performances of technical college graduate performance and low level of practical skills demonstration, many construction industries in South-West Nigeria are now run by technicians and craftsmen from neighbouring countries (Ideozu & Obed, 2024).

Most of the graduate of technical colleges in South-West are poor in practicals which have rendered these graduates unemployable and also unable to establish on their own, this have resulted to high rate of poverty, social-vices, lack of sustainable environment. These graduates possesses little or no skill to earn a living or employability. A number of researchers have attributed lack of these practical skills to some issues of constraints in the technical colleges (Isa et al. 2022). Practical skills acquisition are in South West Nigeria are battling with numerous problems among which are poor teaching strategies. Teaching of technical subjects or trades has been so theoretical teachers and instructor employ lecture method instead of demonstration method (Odu, 2010). Another observable problem is inadequate supervision of practical skill acquisition or activities, inadequate creative power, inability to put what taught in theoretical into practice.

Researcher have observed that inspite of many years of teaching construction trades in technical college in South-West, Nigeria, and due to the lucrative nature of the trades and low capital recruitment for establishing, not many technical graduates possessed adequate practical skills that will enable them to effectively fit into the world of work. These observables are what prompt the researchers to carry out a study to investigate strategies for improving students' acquisition of practical skills in construction trades in Government Technical Colleges in South-West, Nigeria.

Purpose of the Study

The main purpose of the study was to assess strategies for improving students acquisition of practical skills in construction trades in Government Technical Colleges in South-West, Nigeria.

Specifically, the study determined;

- i. The appropriate strategies for teaching practical skills in construction trades (CT) in Government Technical Colleges in South-West, Nigeria.
- ii. The supervisory strategies for practical skill acquisition of students in construction trade (CT) in Government Technical Colleges in South-West, Nigeria.
- iii. The strategies for assessing practical skills of students in construction trade in Government Technical Colleges in South-West, Nigeria.

Researcher Questions

The following three research questions guided the study:

- i. What are the appropriate teaching strategies to be used for teaching practical skills in construction trade in Government Technical Colleges in South-West, Nigeria.
- ii. What are the strategies for supervising students' practical work activities in construction trades in Government Technical Colleges in South-West, Nigeria?
- iii. What are the strategies for assessing students' practical skills acquisition in construction Trades in Government Technical Colleges in South-West, Nigeria?

Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance.

- H₀₁:** There is no significant difference between the mean responses of construction trades teachers and students on appropriate teaching strategies for teaching practical skills in Construction Trades in Government Technical Colleges in South-West, Nigeria.
- H₀₂:** There is no significance difference between mean responses of Construction Trades teachers and students' or supervisory strategies for practical skills acquisition in Construction Trades in Government Technical Colleges in South-West, Nigeria.

H0₃: There is no significant difference between the mean responses of Construction Trades teachers and school administrators on the assessment strategies for practical skills acquisition in Government Technical Colleges in South-West, Nigeria.

Methodology

A descriptive survey design was adopted, following Okoro (2017), where questionnaires or interview were used to collect data. This study was carried out in the six states of South-West, Nigeria which comprises; Lagos, Osun, Ogun, Oyo, Ondo and Ekiti States. The entire population was used since the population is of manageable size.

A structured questionnaire instrument was used to collect data for this study titled "Strategies for improving Section A was on general information, Section B was on Bio-data of the response section C item which solicited responses from trade teachers and students on appropriateness of teaching strategies to be used for teaching practical skills Section D consisted of 15 items which also solicited responses from trade teachers and students on the supervisory strategies for improving acquisition of practical skills by students in construction trade. While the section having 10 items were obtained from school administrators and trade teacher because this section addressed strategies for assessing acquisition of practical skills by students in technical colleges students acquisition of practical skills in construction trade in Government Technical Colleges in South-West, Nigeria (SISAPSCT). The instrument contained 56 items and was divided into six sections A-F.

The instrument was structured on five point response options of Very Much Appropriate (5) Much Appropriate (4) Inappropriate (3) Much Inappropriate (2) and Very Much Inappropriate (1). The population of the study comprised of 104 school administrators 82 trades teachers and 1208 final year students (TC III) making a total of 1394. The whole population was manageable, hence there was no sample for the study.

The instrument was face validated by three experts. Two experts from Department of Vocational and Technical University of Benin, Benin City and one expert from Government Technical

College Akoka, Lagos. The experts were requested to scrutinized each item of the questionnaire for clarity of statement. They also examined the appropriateness and suitability of all items on the instrument. The suggestion and corrections of the experts were used to modifying the instrument the validated instrument was then utilized for data collection.

Kuder Richardson (KR-21) formula was used to determine the reliability of the instrument the reliability test of the validated instrument was obtained by administering the questionnaire on 25 teachers on construction trades who were not part of the population for the study. The reliability co-efficient ranges between 0.78 and 0.86. the reliability coefficient of the entire instrument was 0.82. the researchers with the help of six research assistant administered the instrument.

The research questions were analysed by using mean, grand mean and standard deviation while t-test analysis was used to test the null hypotheses at 0.05 level of significance. The decision rule for the research questions was as follows. Any item with a mean response of 3.50 and above was considered as much as appropriate while any item with mean value of 3.49 and below was regarded as inappropriate. For testing the null hypotheses (H_0) if the calculated t-value was equal or greater than the t-table (t-critical) the null hypotheses were rejected. If the calculated t-value was less than the t-table (t-critical) the null hypotheses were accepted.

Table 1: Mean Responses and Standard Deviations on Appropriate Teaching Strategies to be used for Teaching Practical Skills in Construction Trade in Government Technical Colleges in South-West, Nigeria

S/No	Item Statement	t	n=22	\bar{X}	S	n=208	G	σ	Decision
1.	Guest lecture method	3.36	3.63	3.63	3.60	3.60			Much Appropriate
2.	Demonstration method	4.55	4.10	4.14	74				Much Appropriate
3.	Field trip method	3.32	3.51	3.49	.95				Inappropriate
4.	Project method.	2.96	3.59	3.53	1.10				Much Appropriate

5.	Assignment method	3.46	3.84	3.80	1.04	Much Appropriate
6.	Guided discovery method	3.50	3.67	3.65	1.04	Much Appropriate
7.	Drill and practice methods	3.91	3.73	3.75	1.07	Much Appropriate
8.	Apprenticeship (local attachment) method	3.77	3.51	3.54	1.08	Much Appropriate

Table 2: Mean Responses and Standard Deviations on Supervisory Strategies for Students' Practical Work Activities in Electrical Construction Trade in Government Technical Colleges in South-West, Nigeria

S/No	Item Statement	t n=22	s n=208 3.95	G	Σ	Decision
9	Taking attendance by workshop attendants at the beginning of every practical session.	4.36		3.98	.99	Much Appropriate
10	The workshop attendants should guide the students in selection of tools and materials for every practical session.	4.23	4.09	4.10	.95	Much Appropriate
11	The teacher should encourage students to be open minded and creative about the applications of techniques to their challenges during practical session.	3.86	3.98	3.97	.85	Much Appropriate
12	The teachers must make sure each individual is provided with needed materials at the beginning of the practical.	4.27	4.15	4.16	.87	Much Appropriate
13	The teachers should make sure that each student undertaking practical activities is well dressed during the practical lesson.	4.22	4.04	4.06	.92	Much Appropriate
14	The teachers should interact with students and ask for their opinions where necessary during the practical activities.	3.50	3.88	3.84	1.03	Much Appropriate

15	The teachers should give room for improvisation and seek for alternatives from students when difficulty arises during practical activities.	4.09	3.58	3.63	1.07	Much Appropriate
16	The workshop attendants should always encourage team work among students undertaking practical activities.	4.05	3.81	3.83	1.16	Much Appropriate
17	Teachers must enforce safety rules and regulation with regards to use of workshop tools and equipment.	4.09	4.02	4.03	.87	Much Appropriate
18	The workshop attendants must ensure that each student participates in the process of practical projects.	3.68	3.91	3.89	.93	Much Appropriate

Key: t = Mean Response of Teachers; s = Mean Response of Students; G = Grand Mean σ = Average Standard Deviation; n = Number of Respondents.

Table 3: Mean Responses and Standard Deviations on Strategies for Assessing Students’ Practical Skills Acquisition in Construction Trade in Government Technical Colleges in South-West, Nigeria

S/NO	Item statement			G	σ	Decision
		n=24	n=22			
19	Assessing students’ practical lesson using checklist assessment strategy.	4.21	3.59	3.91	.96	Much Appropriate
20	Allowing students to participate in assessment process.	3.54	3.50	3.52	.73	Much Appropriate
21	Using psycho-productive test to measure students’ practical ability in the workshop.	3.71	3.00	3.37	.94	Inappropriate

22	Using psycho-productive test to measure students' practical ability after instruction monthly.	3.79	3.59	3.69	.73	Much Appropriate
23	Giving different assignment to each student at the end of each lesson.	4.08	3.23	3.67	1.15	Much Appropriate
24	Giving oral examinations to students at the end of each lesson.	3.96	3.77	3.87	0.76	Much Appropriate
25	Measuring students' ability with standardized test every week.	4.38	3.64	4.03	.72	Much Appropriate
26	Giving project work to students every week.	2.17	3.73	2.92	1.05	Inappropriate
27	Administering written examinations to students every two weeks.	3.38	3.64	3.50	1.11	Much Appropriate
28	Interviewing and rating each student immediately after practical work.	3.25	3.45	3.35	1.05	Inappropriate

Key: = Mean Response of Administrators; \bar{t} = Mean Response of Teachers; \bar{G} = Grand Mean; \bar{x} = Average Standard Deviation; n = Number of Respondents.

Hypothesis 1

There is no significant difference between the mean responses of construction trades teachers and students on appropriate teaching strategies for teaching practical skills in Construction Trades in Government Technical Colleges in South-West, Nigeria.

Data presented in Table 4 shows that the t_{cal} (-1.86) was less than the p_{-value} (0.06) at 0.05 level of significance and at 228 degree of freedom. Hence, the null hypothesis H_{01} was accepted indicating that there is no significant difference between the mean scores of trade teachers and students on appropriate teaching strategies for teaching practical skills in Electrical Installation and Maintenance Work trade in technical colleges of Kano State.

Hypothesis 2

There is no significance difference between mean responses of Construction Trades teachers and students’ or supervisory strategies for practical skills acquisition in Construction Trades in Government Technical Colleges in South-West, Nigeria.

Data presented in Table 5 shows that the t_{cal} (-0.52) was less than p_{-value} (0.61) at 0.05 level of significance and at 228 degree of freedom. Hence, the null hypothesis H_{o2} was accepted indicating that there is no significant difference between the mean scores of trade teachers and students on supervisory strategies for practical skills acquisition in Electrical Installation and Maintenance Work trade in technical colleges of Kano State.

Hypothesis 3

There is no significant difference between the mean responses of Construction Trades teachers and school administrators on the assessment strategies for practical skills acquisition in Government Technical Colleges in South-West, Nigeria

Data presented in Table 6 shows that the t_{cal} (-0.57) was less than p_{-value} (0.57) at 0.05 level of significance and at 44 degree of freedom. Hence, the null hypothesis H_{o5} was accepted indicating that there is no significant difference between the mean scores of Electrical Installation and Maintenance Work trade teachers and school administrators on assessment strategies for practical skills acquisition in EIMW trade in technical colleges of Kano State.

Table 4: t-test Analysis of Mean Responses of Construction Trade in Government Technical Colleges in South-West, Nigeria

Respondents	N	SD	Std. error mean	df	tcal	p-value	Remark	
Teachers	3.55	82	0.91	0.19	1288	-1.86	0.06	NS
Students	3.94	1208	0.94	0.07				

Key:= Mean; N = Number of respondents; SD = Standard Deviation; Std. Error Mean = Standard Error Mean; df = Degree of Freedom; t_{cal} = Calculated t-value; p_{-value} = 2-tailed sig.; NS = Not Significant;

Construction Trade in Government Technical Colleges in South-West, Nigeria

Table 5: t-test Analysis of Mean Responses of Construction Trade in Government Technical Colleges in South-West, Nigeria

Respondents	N	SD	Std. error mean	Df	tcal	p-value	Remark
Teachers	4.09	82	0.79	0.17	1288	-	0.61 NS
Students	4.19	1208	0.81	0.06		0.52	

Key: = Mean; N = Number of respondents; SD = Standard Deviation; Std. Error Mean = Standard Error Mean; df = Degree of Freedom; t_{cal} = Calculated t-value; p-value = 2-tailed sig.; NS = Not Significant; Construction Trade in Government Technical Colleges in South-West, Nigeria.

Table 6: t-test Analysis of Mean Responses of Administrators on Assessment Strategies for Students' Practical Skills Acquisition in Construction Trade in Government Technical Colleges in South-West, Nigeria

Respondents	N	SD	Std. error mean	df	Tcal	p-value	Remark
Teachers	3.59	82	0.73	0.16	184	-	0.57 NS
Administrators	3.75	104	1.11	0.23		0.57	

Key:= Mean; N = Number of respondents; SD = Standard Deviation; Std. Error Mean = Standard Error Mean; df = Degree of Freedom; t_{cal} = Calculated t-value; p-value = 2-tailed sig.; NS = Not Significant; Construction Trade in Government Technical Colleges in South-West, Nigeria

Finding of the Study

Based on the results obtained from the analyzed data, the findings of the study are summarized as follows:

1. Teaching strategies for teaching practical skill acquisition in Construction Trade in Government Technical Colleges in South-West, Nigeria include guest lecture, demonstration, assignment, project, and guided discovery methods.
2. Appropriate supervisory strategies discovered for supervising students practical activities include taking attendance by workshop attendance at the beginning of every practical lesson, guide the students in selection of tools and materials for every practical session, encouraging students by the teachers to be open minded and creative about the applications of techniques to their challenges during practical session, ensuring that each individual is provided with needed materials at the beginning of the practical.
3. Appropriate strategies for assessing students' practical lesson in Construction Trade in Government Technical Colleges in South-West, Nigeria include using checklist assessment strategy, allowing students to participate in assessment process, using psycho-productive test to measure students' practical ability in the workshop, and giving different assignment to each student at the end of each lesson were discovered to be much appropriate for assessing students' practical skills acquisition in Construction Trade in Government Technical Colleges in South-West, Nigeria.
4. It was found out that there was no significant difference between the mean responses of trade teachers and students on appropriate teaching strategies for teaching practical skills in Construction Trade in Government Technical Colleges in South-West, Nigeria.
5. It was discovered that there was no significant difference between the mean responses of trade teachers and students on supervisory strategies for students' practical skills acquisition in Construction Trade in Government Technical Colleges in South-West, Nigeria.
6. It was also found out that there was no significant difference between the mean responses of trade teachers and school administrators on assessment strategies for students' practical

skills acquisition in Construction Trade in Government Technical Colleges in South-West, Nigeria.

Discussion of Findings

The findings of this study on practical teaching strategies indicated that trade teachers and students accepted the teaching strategies in this section as appropriate teaching strategies for teaching students acquisition of practical skills in Construction Trade in Government Technical Colleges in South-West, Nigeria. Items agreed upon include; guest lecture and inquiry/problem solving methods, demonstration and discussion methods, project and discussion methods, assignment and discussion methods, guided discovery and discussion methods, drill and practice and discussion methods, apprenticeship (local attachment) and discussion methods. The finding is in agreement with the findings of (Ideozu & Obed, 2024) who reported that teaching strategies such as guest lecture, demonstration, project, experiment, assignment, discussion, and field trip are appropriate for teaching vocational and technical education courses. However, the findings differ with the findings of (Ideozu & Obed, 2024) in that field trip and discussion methods were rejected by the respondents. (Isa et al. 2022) also pointed out that students benefit more when variety of teaching methods is applied within a lesson. (Isa et al. 2022) stipulated that teaching success depends on skilled application of teaching methods and stressed that field trips enable students to study industrial processes and also see the relevance of laboratory and workshop practical activities. A careful study of the findings in this section indicate that trade teachers and students believed that adopting the practical teaching strategies will definitely improve students' acquisition of practical skills in Construction Trade in Government Technical Colleges in South-West, Nigeria. Rejection of field trip and discussion methods by the respondents as appropriate strategy for teaching practical skills in vocational and technical education was contrary to the opinion of (Odu, 2010) and (Isa et al. 2022).

The findings on supervisory strategies revealed that the trade teachers and students agreed on all the 10 items in this section. The supervisory strategies include; Taking attendance by teachers at the

beginning of every practical session, guiding the students in selection of tools and materials for every practical session, encouraging students to be open minded and be creative about application of techniques to their challenges during practical session, making sure students are provided with the needed materials at the beginning of every practical session, making sure all students are systematically assessed during and at the end of every practical session, interacting with students and asking for their opinion where necessary, encouraging team work among students, enforcing safety rules and regulation with regards to use of workshop facilities. These supervisory strategies are in agreement with the view of (Ideozu & Obed, 2024) who viewed supervision as a process of operating in a close range by actually overseeing, controlling dealing with situation as they arise. On the other hand, (Ideosu & Obed, 2024) found out that to supervise means to direct, oversee, guide or make sure that expected standards are met. The findings in this section indicate that the supervisory strategies are in line with the assertion of (Odu, 2016) who emphasized that the teacher is expected in the course of his duty, to initiate several activities that will lead to a successful acquisition of required skills. The findings in this section also indicate that the trade teachers and students believed that adopting the supervisory strategies in this section will improve students' acquisition of practical skills in Construction Trade in Government Technical Colleges in South-West, Nigeria.

The findings on assessment strategies showed that both trade teachers and school administrators accepted the strategies for assessing students' acquisition of practical skills in Construction Trade in Government Technical Colleges in South-West, Nigeria. The assessment strategies accepted by the respondents include: assessment of students during practical using checklist assessment strategy, allowing students to participate in the assessment process, measuring students' ability with standardized test every week, using psycho- productive test to measure students' practical ability after instruction monthly, giving different assignment to each student at the end of each lesson, giving oral examinations to students at the end of every lesson and administering written examinations to students every two weeks. While the assessment strategies rejected by the

respondents include: using psycho-productive test to measure students' practical ability in the workshop, giving project work to students every week, and interviewing and rating each student immediately after practical work. The findings in this section were in agreement with that of (Ideozu & Obed, 2024) who opined that performance test should be used in assessing achievement of objectives in the psychomotor domain and practical performance test which involves setting students on a task and rating them as they work is the best for assessing psychomotor skills.

Findings on hypothesis one indicated that both trade teachers agreed that appropriate teaching strategies improve students' acquisition of practical skills in Construction Trade in Government Technical Colleges in South-West, Nigeria. This test was found to be statistically non-significant because the mean responses of the respondents obtained indicated that teaching strategies identified to teach practical aspect of Construction Trade in Government Technical Colleges in South-West, Nigeria are much appropriate for improving students' acquisition of practical skills. This finding is in agreement with the findings of (Isa et al. 2022) who found out that there was strong influence of teaching methods on students' acquisition of practical skills. also buttressed that appropriate teaching strategies should be employed in teaching practical subjects in technical colleges so as to achieve the National goals of education in Nigeria.

Findings on hypothesis two showed that trade teachers agreed that supervisory strategies for students' practical skills acquisition in Construction Trade in Government Technical Colleges in South-West, Nigeria were much appropriate for improving practical skills acquisition by students. This test was found to be statistically non-significant because the mean responses of the respondents obtained showed that the supervisory strategies identified to supervise practical activities of students in Construction Trade in Government Technical Colleges in South-West, Nigeria are much appropriate for improving students' acquisition of practical skills. This finding agreed with the view of (Isa et al. 2022) who reported that adequate supervision on the whole practical process has a major influence on the overall performance and efficiency of students' acquisition of

practical skills. The finding is also in line with the finding of (Mahamid, 2020) who found out that a teacher in the course of his duties must initiate several activities that will lead to successful acquisition of required skills. He further explained that supervision allows the supervisor to help improve the effectiveness of students through advice and assistance so that the students can contribute maximally towards the attainment of objectives.

Findings on hypothesis three revealed that the mean responses of trade teachers and school administrators on assessment strategies for students' acquisition of practical skills in Construction Trade in Government Technical Colleges in South-West, Nigeria were much appropriate for improving acquisition of practical skills. This test was found to be non-significant because the mean responses of trade teachers and school administrators obtained indicated that relevant assessment strategies identified to assess practical activities of students in Construction Trade in Government Technical Colleges in South-West, Nigeria are much appropriate. This finding is in agreement with the findings of (Odu, 2010) who discovered that teachers use various strategies to assess the student's outcome. The strategies include process, product, systematic observation, and rating scales. Assessment plays an important role in teaching and learning process because it points out areas of weaknesses and strength of the learners and also indicates how effective a particular teaching strategy.

Conclusion

Based on the results of this study it can be concluded that appropriate strategies for teaching practical skills acquisition are used in Construction Trade in Government Technical Colleges in South-West, Nigeria. Appropriate strategies for supervising and assessing students' practical work in Construction Trade in Government Technical Colleges in South-West, Nigeria are also being used to improve acquisition of practical skills by the students. Construction Trade is all about teaching skills to students for employment and wealth creation. In order for the students to acquire practical skills, teachers are required to teach relevant skills to students by adopting appropriate teaching, supervisory, and assessment strategies.

Recommendations

Based on the findings. The following recommendations were made.

1. Teachers of specific construction trade works should continue to adopt appropriate teaching strategies identified in the study for improving acquisition of practical skills by the students in GTC.
2. The teachers should identify appropriate strategies for assessing practical skills of students in construction trade works.
3. The finished product work constructed by the students in the GTC should be vested on exhibition.
4. Sales and sharing of proceeds should be employed with the participatory students as these strategies will motivate GTC students to focus on their study and ready to accomplish and exhibit the skills learnt on their trade and established as self-employer.

References

- Audu, R., Yusri, K., & Muhammad, S. S. (2013). Acquisition of Employability Skills in Technical Vocational Education: Necessity for the 21st Century Workforce. *Australian Journal of Basic and Applied Sciences*; 7(6): Pp 9-14.
- Chinonso, O. U. (2017). Management of woodwork workshops in Nigeria tertiary institutions: An analytical study. *MOJEM: Malaysia*
- Hassan, J. Y. and Mohammed, A. S. (2020). Effect of activity based learning and challenge based learning approaches on technical colleges students psychomotor achievement teknologi dan Kejuruan. 26 (1), 1-10.
- Ideozu, S. & Obed, O. (2024). 21st Century Skills Needed in Industrial Technology for Sustainable Development of Students in Technical Colleges in River State. <https://www.researchgate.net/publication/382652646>.
- Isa, M. U., Habeeb, A. Y., Usaini, L., Salihu, Y. I. and Shaibu, S. (2022). Application of Model Construction in Improving Practical Skills of furniture making students in Technical Colleges Bichi Journal of Technology Education
- Lasisi, B.T.(2022) Quality Electrical/Electronic Technology Programmes in Colleges of Education: A panacea for National Security and Socio - Economic Development. *Empire Journal of Vocational and Technical Programmes*. Vol. 10, Pp. 328 – 336

- Mahamid, I. (2020). Study of relationship between rework and labour productivity in Building Construction Projects. *Revista dela construction* 19(1): 30-40.
- Mohammed, D. S. and Ismail, S. (2014). Employability Skills Definitions and Framework for TVET Graduates' Employment. *Proceedings of the 1st TVEIS International Seminar on Technical and Vocational Education*, UTM, Johor Bahru, Malaysia. PP 682-694.
- Moses, B, Diraso, D. K., Yaduma, P. S., & Agbu, D. (2017). Industrial Installation Skills Acquired and Job Performance of Graduates of Electrical Installation and Maintenance Works Trade of Technical Colleges in North Eastern Nigeria. *International Journal of Engineering and Science (IJES)*. 6(6), Pp 2319-1805.
- Murtala, M., Yahaya, I. S., Haibu, I., Sani, U. and Sale, N. K. (2024). Strategies for Enhancing Skills Acquisition in Block Laying and Concreting Students in Technical Colleges in Kano State. *Journal of Centre for Technical Vocational Education, Training and Research (JOCETVETAR)*. 6(1).
- National Business and Technical Examinations Board. (2024). Brief History of NABTEB. nabteb.gov.ng.
- Nigeria Humanitarian Needs Overview. (2024). Informing Humanitarians Worldwide 24/7 a service provided by OCHA. Ocha.reliefweb.int.
- Nwanaka, C. R. & Amaefule, S. (2011). Skills acquisition: Imperative for business studies among secondary schools in Rivers State, *Mediterranean Journal of social sciences*: 2(7), Pp 123-134.
- Odu, K. (2010). Skills acquisition in Nigerian education system: problems and prospects in technical education. *Journal of Qualitative Education*, 6(1), 20-26.
- OECD. (2023). Education at a Glance 2023: OECD Indicators. https://www.oecd-ilibrary.org/education/education-at-a-glance-2023_e13bef63-en.
- Okoro, D. M. (2017). Principles and Methods in vocational and technical education, Nssuka University Press.
- Tumba, I. & Shuaibu, H. (2016). Strategies for Improving Student' Acquisition of Practical Skills in Electrical Installation and Maintenance Work Trade in Technical Colleges in Kano State. *International Journal of Engineering and Science (IJES)*. 5(10), Pp 2319-1805.
- Udofia, A. E., Ekpo, A. B., Nsa, S. O. and Akpan, E. O. (2012). Instructional variables and students' acquisition of employable skills in vocational education in Nigerian technical colleges, *International Journal of Engineering and Social Science*. 2(7):13-15.