



Managerial Strategies for Enhancing Students' Skills Acquisition in Block/Brick Laying and Concreting Trades in Technical Colleges in South-South Nigeria

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ABSTRACT

The study investigated the managerial strategies for enhancing student's skill acquisition in block/brick laying and concreting trades in technical colleges in south - south Nigeria. Four research questions and null hypotheses were formulated and tested at .05 level of significance. The study adopted a descriptive survey design. The population of the study consisted of 84 and 62 block laying and concreting trade teachers and instructors respectively. The entire population was used therefore no sampling was made. The instrument used for the study was a self made questionnaire tagged "Managerial Strategies for Enhancing Students Skills Acquisition in Block Laying and Concreting Trades". The instrument was validated by two experts. The reliability of the instrument was established using Cronbach Alpha reliability co-efficient which resulted in .81 reliability coefficient. Mean and Standard deviation were used in answering the research questions while z-test was used in testing the hypotheses. This study found that initiating a logical step in facility management, adequate integration of practical's in the curriculum, preparing list of specification necessary for practical, ensuring that tools and equipment are used harmoniously, ensuring a more appropriate functioning training center, maintaining cordial relationship between students and teachers during the programme and carrying out regular inspection during and after practical sections are strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in south-south Nigeria. It was recommended among others that technical teachers should prepare practical guidelines and list of specifications necessary for practical before any practical activities since it will help in ensuring that practical activities are properly managed.

Keywords: Managerial, Strategies, Skill Acquisition, block/brick laying Concreting Trades.

INTRODUCTION

Education is a tool for national development. It is a vehicle through which different skills are passed on from one generation to another. To achieve educational aims, different curriculum, methodologies and schools are introduced to solve modern concerns. For instance, the concern for skill acquisition brought about the introduction of technical colleges in Nigeria. Today, this type of education has gained so much relevance; hence so many definitions have been made. Ochogba and Ordu (2019) described technical college as an institution that prepares individuals with vocational skills relevant for employment, self-reliance or for admission into tertiary institutions. It is a type of education that is specialized in equipping students with sealable practical skills in different areas of specializations such as motor vehicle mechanics, mechanical craft, electrical installation and even block laying and concreting trades that is necessary for a country like Nigeria that experiences building collapse.

Block/brick laying and concreting trade involves the teaching of skills, processes, techniques, tools and raw materials needed for the erection and maintenance of buildings (Anaele & Okoro, 2014). The importance of building and concreting trade cannot be over emphasized; since this field of study represents core indices of national development. Block/brick laying and concreting trade trains students in the various building technology skills to be able to establish and operate small-scale companies like block industry, production of pre-cast concrete elastic poles, concrete rings, culverts, flowerpots, interlocking tiles, fancy blocks, bricks, among others. In the same vein, Odu (2012) stressed that block laying and concreting operations in technical colleges curriculum involve the skills required in accomplishing a given tasks in mixing of mortars by hand, moulding of blocks, laying of blocks, rendering of walls, wall tiling, pointing of top walls and laying. Block/brick laying and concreting trades graduates also have the option of being foremen, craftsmen, and technicians in building construction sites.

Meanwhile, the ability of Block/brick laying and concreting trades graduate to function in the positions listed above is dependent on relevant skills acquired. Therefore, Block/brick laying and concreting trades is geared towards skill acquisition. Aliozor in Ogbuzuru (2011) described skill acquisition as the process by which individual are expected to learn with continuous practice in a particular task till the learner becomes proficient in operation and can perform them when required. Despite the importance of Block/brick laying and concreting trade in the country, some students who are supposed to practice the skills after graduation do not demonstrate enough building skills. Okorie (2002) in John (2004) opined that skilled job opportunities in industries are not filled, because technical college graduates are not technically competent enough to take up the available skilled jobs.

Consequently, Oyeboode in Ogbuzuru (2011) lamented that the ineffective skill acquisition of technical graduates results in robbery, psychological and financial stresses, fear, anxiety, aggressions, frustration, prostitution, drug addiction other social vices such as kidnapping, vandalization of pipeline, cultism among others. This is indeed regrettable owing to the fact that some technical college students may be involved in these heinous activities even when they are supposed to be self reliant. However, the incompetence of technical college students may be due to different reasons which may include management of technical college schools. In line with this, Tripney, Hombrados, Newman, Hovish, Brown, Steinka-Fry and Wikey (2013) observed that poor workshop management strategies adopted in technical college workshops by both the teachers and workshop attendants have caused a lot of problems ranging from waste of materials, indiscriminate missing of tools, poor quality work, piecemeal purchase due to lack of planning, poor housekeeping, damaged equipment, students exposure to workshop hazard, cases of accident and students graduating without acquiring the required skills for effective use in their occupation.

Management strategies entail two concepts: management and strategy. Management is the co-ordination of people's efforts to accomplish goals by using available resources efficiently and effectively (Olaoye, 2016). On the other hand, Amesi (2011) described strategy as a careful plan or method for achieving a particular goal usually over a long period of time. Management strategies includes planning, organizing, directing, coordinating, and leading, motivating and controlling strategies that are geared towards the accomplishment of organizational set goals (Fayol, 2010). In a research carried out by Isiodu (2017), it was found among others that planning for content based on objectives, arrangement of tools and materials before use, grouping students to execute specific project and designing the workshop with high level window to reduce outside distraction are some of the management techniques for training students of building construction trades in technical colleges in Rivers State. Considering the ineptitude of some technical college students as a result of poor management, this study has been designed to ascertain the managerial strategies for enhancing students' skill acquisition in block laying and concreting trades in technical colleges in south-south Nigeria.

Purpose of the Study

The main purpose of the study was to investigate managerial strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria. Specifically, the objectives of the study were to:

1. Examine the planning strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria.
2. Determine the organizing strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria.
3. Ascertain the coordinating strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria.
4. Determine the controlling strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in south-south Nigeria.

Research Questions

Based on the stated purpose of the study, the following research questions guided the study:

1. What are the planning strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria?
2. What are the organizing strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria?
3. What are the coordinating strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria?
4. What are the controlling strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

1. There is no significant difference in the mean responses of teachers and instructors on the planning strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria.
2. There is no significant difference in the mean responses of teachers and instructors on the organizing strategies for enhancing students' skill acquisition in block/brick laying and concreting trade in technical colleges in south-south Nigeria.
3. There is no significant difference in the mean responses of teachers and instructors on the coordinating strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria.
4. There is no significant difference in the mean responses of teachers and instructors on the controlling strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria.

METHODOLOGY

The study was carried out in technical colleges in south-south zone of Nigeria. The core south-south geopolitical zone comprises Bayelsa, Delta and Rivers, and spreads in influence and proximity to Akwa-Ibom, Cross River and Edo. This region is noted for oil exploration activities which encourage skills acquisition. Thus, there are different skills acquisition centers which include several technical colleges with several teachers and instructors. Therefore, this region was used for this study because adequate sample size could be got for the study. The study adopted a descriptive survey design. The population of the study consisted of 84 and 62 block laying and concreting trade teachers and instructors respectively. The entire population was used, therefore no sampling was made. The instrument used for the study was a self made questionnaire tagged "Managerial Strategies for Enhancing Students Skills Acquisition in Block Laying and Concreting Trades" (MSESSABLCT). This instrument was structured in the pattern of five point Likert scale of agreement. It was validated by two experts in the Department of Management Science and tested for reliability using Cronbach Alpha correlation coefficient which gave a coefficient of .82. Mean and standard deviation were used to answer the research questions while z-test was used to test the hypotheses at .05 level of significance. Mean values less than 3.00 were rejected while mean scores equal or greater than 3.00 were accepted. Meanwhile, z-calculated less than z-critical were accepted while z-calculated greater than z-critical were rejected.

RESULT AND DISCUSSION OF FINDINGS

Table 1: Mean Scores of Respondents on Planning Strategies for Enhancing Students' Skill Acquisition

S/N	Planning Strategies	Teachers (n ₁ =84)		Instructors (n ₂ =62) df=144		Decision
		M	SD	M	SD	
1	Initiating a logical step in facility management	3.84	.08	3.76	.73	Agree
2	Adequate integration of practical's in the curriculum	3.21	1.51	3.32	.04	Agree
3	Preparing list and specifications necessary for practicals	3.35	.63	3.44	1.03	Agree
4	Adequate interview for teachers and appointment.	3.52	.75	3.04	.77	Agree
5	Preparing practical guidelines	3.23	1.11	4.04	1.11	Agree
6	Adequate directive of teachers on the methods to be used when carrying out instruction during practical.	3.91	.89	3.61	.64	Agree
7	Investigation of a conducive environment suitable for adequate skill acquisition	3.83	.72	3.67	.69	Agree
8	Preparing a set of decision for future goals by optimal means.	4.21	.62	4.23	.84	Agree
GM & SD		3.55	.91	3.64	.73	

Sources: Field survey, 2020

Result in Table 1 above shows the responses of teachers and instructors on planning strategies for enhancing students' skill acquisition in block/brick laying and concreting trade. The result indicated that the two groups were homogenous in their responses and that all the strategies listed are planning strategies for enhancing students' skills acquisition in block/brick laying and concreting trades in technical colleges. This is evident in the mean and standard deviations of the two groups which shows mean and standard deviation of 3.55 with .91 for teachers and 3.64 with .73 for instructors respectively. This is in line with Isiodu (2017) that found among others that planning for content based on objectives, arrangement of tools and materials before use, grouping students to execute specific project and designing the workshop with high level window to reduce outside distraction are some of the management techniques for training students of building construction trades in technical colleges in Rivers State.

Hypothesis 1

There is no significant difference in the mean responses of teachers and instructors on the planning strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria

Table 2: z-Test Analysis on Planning Strategies for Enhancing Students' Skill Acquisition in Block/brick Laying and Concreting Trade

Categories	N	\bar{x}	SD	Df	z-cal	z-crit	Decision
Teachers	84	3.55	.91	144	.66	1.96	Not Significant
Instructor	62	3.64	.73				

Table 2 shows that z-cal (.66) is less than z-critical (1.96) at df of 144 and .05 level of significance for a two tailed test. This means that the null hypothesis was accepted. The result therefore shows that there

was no significant difference in the mean responses of teachers and instructors on the planning strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria.

Table 3: Mean Scores of Respondents on Organizing Strategies for Enhancing Students' Skill Acquisition in Technical Colleges

S/N	Organizing Strategies	Teachers (n ₁ =84)		Decision	Instructors (n ₂ =62) df=144		Decision
		M	SD		M	SD	
1	Identification of essential tools and material for used.	3.21	.69	Agree	3.81	1.04	Agree
2	Ensuring that tools and equipment are used harmoniously.	3.22	1.19	Agree	3.66	1.11	Agree
3	Ensuring a more appropriate function & training center.	3.17	.56	Agree	3.04	.51	Agree
4	Making sure that materials provided are relevant in block laying and concreting trades.	4.27	.53	Agree	3.88	.31	Agree
5	Ensuring that equipment is arranged properly.	3.73	1.14	Agree	4.24	.11	Agree
6	Initiating guideline on the process of enrollment in acquisition of block laying and concreting trades.	4.18	.79	Agree	3.67	.14	Agree
7	Assigning of equipment, tools and provision of safety device during practical.	4.35	.56	Agree	3.66	.55	Agree
	GM & SD	3.73	.78		3.71	.39	

Source: field survey, 2020.

Result in Table 3 above shows the responses of teachers and instructors on organizing strategies for enhancing students' skill acquisition in block/brick laying and concreting trade. The result indicated that the two groups were homogenous in their response and that all the strategies listed are organizing strategies for enhancing students' skills acquisition in block/brick laying and concreting trades in technical colleges. This is evident in the mean and standard deviations of the two groups which shows mean and standard deviation of 3.73 with .78 for teachers and 3.71 with .39 for instructors respectively. This is in line with Isiodu (2017) that found among others that planning for content based on objectives, arrangement of tools and materials before use, grouping students to execute specific project and designing the workshop with high level window to reduce outside distraction are some of the management techniques for training students of building construction trades in technical colleges in Rivers State.

Hypothesis 2

There is no significant difference in the mean responses of teachers and instructors on the organizing strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical in south-south Nigeria

Table 4: z-Test on Organizing Strategies for Enhancing Students' Skill Acquisition in Block/brick Laying and Concreting Trade

Categories	N	\bar{x}	SD	Df	z-cal	z-crit	Decision
Teachers	84	3.73	.78	144	.20	1.96	Not Significant
Instructor	62	3.71	.39				

Table 4 shows that z-cal (.20) is less than z-critical (1.96) at df of 144 and .05 level of significance for a two tailed test. This means that the null hypothesis was accepted. The result therefore shows that there was no significant difference in the mean responses of teachers and instructors on the organizing strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria.

Table 5: Mean Scores of Respondent on Coordinating Strategies for Enhancing Students' Skill Acquisition in Technical Colleges

S/N	Coordinating Strategies	Teachers (n ₁ =84)		Instructors (n ₂ =62)		df=144	
		M	SD	Decision	M	SD	Decision
1	Involving relevant teachers in the status of the program.	3.80	.89	Agree	3.58	1.30	Agree
2	Determining the number of authorities to be involved in during the program.	3.94	.62	Agree	4.22	1.02	Agree
3	Maintaining cordial relationship between blocking laying and concreting students' and teachers during the program.	3.87	1.02	Agree	4.75	1.04	Agree
4	Measuring the students' practical ability.	4.12	1.19	Agree	4.15	1.21	Agree
5	Involving the students' in to relevant activities in the workshop.	3.12	.13	Agree	3.28	1.29	Agree
6	Provision of an enabling environment that will be frustration an aggression free during practical's	4.13	1.05	Agree	3.19	1.02	Agree
GM & SD		3.83	.65		3.86	1.14	

Source: field survey, 2020

Result in Table 5 above shows the responses of teachers and instructors on coordinating strategies for enhancing students' skill acquisition in block/brick laying and concreting trade. The result indicated that the two groups were homogenous in their response and that all the strategies listed are coordinating strategies for enhancing students' skills acquisition in block/brick laying and concreting trades in technical colleges. This is evident in the mean and standard deviations of the two groups which shows mean and standard deviation of 3.83 with .65 for teachers and 3.86 with 1.14 for instructors respectively. This is in line with Isiodu (2017) that found among others that planning for content based on objectives, arrangement of tools and materials before use, grouping students to execute specific project and designing the workshop with high level window to reduce outside distraction are some of the management techniques for training students of building construction trades in technical colleges in Rivers State.

Hypothesis 3

There is no significant difference in the mean responses of teachers and instructors on the coordinating strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria

Table 6: z-Test Analysis on Coordinating Strategies for Enhancing Students' Skill Acquisition in Block/brick Laying and Concreting Trades

Categories	N	\bar{x}	SD	Df	z-cal	z-crit	Decision
Teachers	84	3.83	.65				
Instructor	62	3.86	1.14	144	.19	1.96	Not Significant

Table 6 shows that z-cal (.19) is less than z-critical (1.96) at df of 144 and .05 level of significance for a two tailed test. This means that the null hypothesis was accepted. The result therefore shows that there was no significant difference in the mean responses of teachers and instructors on the coordinating strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria.

Table 7: Mean Scores of Respondent on Controlling Strategies for Enhancing Students' Skill Acquisition in Block/brick Laying and Concreting Trade

S/N	Controlling Strategies	Teachers (n ₁ =84)		Instructors (n ₂ =62) df=144			
		M	SD	Decision	M	SD	Decision
1	Carrying out regular inspecting during and after practical sections.	4.12	0.56	Agree	3.82	1.03	Agree
2	Regular observation of healthful ventilation.	3.86	0.72	Agree	3.04	0.59	Agree
3	Enforcing noise control on machine and equipment.	4.13	1.13	Agree	3.22	0.96	Agree
4	Adequate guideline for students' on the proper usage of material and equipment.	3.18	0.66	Agree	4.12	4.12	Agree
5	Adequate guideline to avoid anxiety	4.18	0.62	Agree	3.02	1.06	Agree
	GM & SD	3.89	0.74		3.44	0.89	

Source: Field survey, 2020

Result in Table 7 above shows the responses of teachers and instructors on controlling strategies for enhancing students' skill acquisition in block/brick laying and concreting trade. The result indicated that the two groups were homogenous in their response and that all the strategies listed are controlling strategies for enhancing students' skills acquisition in block/brick laying and concreting trades in technical colleges. This is evident in the mean and standard deviations of the two groups which shows mean and standard deviation of 3.89 with .74 for teachers and 3.44 with .89 for instructors respectively. This is in line with Isiodu (2017) that found among others that planning for content based on objectives, arrangement of tools and materials before use, grouping students to execute specific project and designing the workshop with high level window to reduce outside distraction are some of the management techniques for training students of building construction trades in technical colleges in Rivers State.

Hypothesis 4

There is no significant difference in the mean responses of teachers and instructors on the controlling strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria

Table 8: z-Test Analysis on Controlling Strategies for Enhancing Students' Skill Acquisition in Block/brick Laying and Concreting Trades

Categories	N	\bar{x}	SD	Df	z-cal	z-crit	Decision
Teachers	84	3.89	.74	144	3.24	1.96	Significant
Instructor	62	3.44	.89				

Table 8 shows that z-cal (3.24) is less than z-critical (1.96) at df of 144 and .05 level of significance for a two tailed test. This means that the null hypothesis was rejected. The result therefore shows that there was a significant difference in the mean responses of teachers and instructors on the coordinating strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria.

CONCLUSIONS

This study concludes that initiating a logical step in facility management, adequate integration of practical's in the curriculum, preparing list of specification necessary for practical, adequate interview for teachers and appointment among others are planning strategies for enhancing students' skill acquisition in block/brick laying and concreting trades in technical colleges in south-south Nigeria. More so, identification of essential tools and materials, ensuring that tools and equipment are used harmoniously, ensuring a more appropriate functioning training center among others are organizing strategies for enhancing skill acquisition of student in technical colleges in south-south Nigeria. Equally, involving relevant teachers in the status of the programme, determining the number of authorities to be involved during the programme, maintaining cordial relationship between students and teachers during the programme, measuring students' practical ability among others are coordinating strategies for enhancing students' skills acquisition in block/brick laying and concreting trades in south- south Nigeria. Finally, carrying out regular inspection during and after practical sections, regular observation of healthful ventilation, ensuring noise control on machines and equipment and adequate guideline to avoid anxiety are controlling strategies for enhancing students' skill acquisition in block laying and concreting trades in south-south Nigeria.

RECOMMENDATIONS

Based on the finding of this study, the following recommendations were made:

1. Technical teachers should prepare practical guidelines and list of specifications necessary for practical before any practical activities. This will help in ensuring that practical activities are properly managed.
2. Technical teachers should ensure that students practice the act of arranging tools and equipment after use. This will help in preventing accident and it will also sustain the life of tools so that they could be used for practical activities.
3. Technical teachers should ensure that there is a cordial relationship between students and teachers during the programme so that students can be able to freely ask teachers about any practical difficulty they may come across.
4. Government should ensure that they control the skill acquisition programme of students through carrying out regular inspection during and after practical sections in block laying and concreting trades in technical colleges in south-south Nigeria. This will help in mitigating practical skills acquisition challenges confronting teachers and students.

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