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TECHNICAL AND MANAGERIAL SKILL NEEDS OF BLOCK LAYING AND CONCRETING GRADUATES FOR EFFECTIVE ENTREPRENEURSHIP IN NIGERIA

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ABSTRACT

This study was conducted to identify the technical and managerial skill possessed by technical college prospective graduates of blocklaying and concreting in Delta State. To obtain information about the research, three research questions were raised. Information was collected through the questionnaire administered to the 30 prospective graduates of blocklaying and concreting. All the prospective graduates returned their copies of questionnaire representing a 100 percent return rate. Thus, the population for the study was 30 subjects. No sampling was done as the population size was small. Completed copies of the questionnaire collected from all the institutions were analyzed using mean and standard deviation. The results of the study showed that: (1) blocklaying and concreting prospective graduates have adequate work skill for entrepreneurship (2) prospective graduates do not possess managerial skills to go into entrepreneurship (3) lack of capital hinders prospective graduates from entering into entrepreneurship ventures. Based on the results of the study, the following recommendations were made among others: a) Entrepreneurship Education should be introduced and implemented as a course in technical colleges, and b) Government should provide the initial capital for intending blocklaying and concreting graduates that have the desire for entrepreneurship.

Keywords: blocklaying, concreting, , technical college

INTRODUCTION

Blocklaying and concreting is offered at both intermediate and advanced levels in technical colleges. The curriculum of intermediate blocklaying and concreting in addition to what may be termed general education subjects such as Mathematics, English Language, Physics, Chemistry, Social studies, etc has the core trade subjects to include: Introduction to Building Construction, Concreting, Blocklaying, Bricklaying, Land surveying, Quantity Surveying, Technical Drawing, Building Drawing and Construction Management.

At the end of the programme, the students are registered to take one or all of the technical certificate examinations listed below:

a. National Business and Technical Examination Board (NABTEB)
b. Trade Test III/II
c. Federal Craft Certificate Examination

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NABTEB Examination in Blocklaying and concreting consists of written examinations and practical test in the above mention papers exception of English Language, Mathematics, Social Studies and Construction Management which are purely based on written examination. In each level of the examination, the candidates are expected to pass in the written paper(s) as well as the practical test to earn a certificate.

Blocklaying and Concreting operations in the technical college curriculum involve the skills required in accomplishing given tasks in Mixing of Mortars by hand, Moulding of Blocks, Laying of Blocks, Rendering of Walls, Wall Tiling, Pointing Top Walls and Laying of Curved Walls (Arches). It also involves Workability Test on Concrete Slump Test), Placing of Concrete, Application of Admixture to Concrete, Compaction, Curing of Concrete and Fixing of Concrete Joint Materials.

The students will perform these operations using tools and necessary equipment while teachers or examiners assess their performance based on their skills and competencies. Blocklaying and concreting operations are based on actual jobs and not pseudo jobs. The training should be carried out to the extent carried out to the extent where it gives the trainee a productive ability with which he can secure and hold employment and be able to profit by it. To achieve such level, proper instructional/training materials and skills must be utilized in the course of instruction. The use of training materials as Ogwa (1991) put it, involves using materials and skills that are most appropriate and commonly available in communicating more correctly and practically the concepts of technology.

Concept of Entrepreneurship and Entrepreneurship Education

The concepts of entrepreneurship and entrepreneurship education have been defined by academics according to their orientation and the understanding of the subject matter. Osborne (2000) define entrepreneurship as the process of looking at things in such a way that possible solution to problems, needs, ethics, standards and dealings are involved based on morals and values. This symbolizes that entrepreneurship is geared towards creating new systems, processes, mobilizing men, materials, machines and financial resources in order to produce new products or serve new materials. Entrepreneurship is a vital factor in the process of economic development. To be an entrepreneur, it is not sufficient to be a business man, just managing an enterprise. The entrepreneur has to be an originator of profitable business ideas.

Entrepreneurship education is about learning the skills needed to assume the risk of establishing a business (Obikeze, 2008). Entrepreneurship education is a fast growing area in tertiary education institutions in Nigeria. Many universities, polytechnics and Colleges of education offer entrepreneurship at the graduate and undergraduate levels.

Blocklaying and concreting is an integral part of vocational and technical education which leads to the acquisition of skills and techniques to enable an individual earn a living. For graduates of blocklaying and concreting to practice entrepreneurship in their trades, technical and managerial skills practiced in school have to be put to test on their own outside the school environment.

Another important skill that is inevitable for self-employment is the entrepreneurial skill. Entrepreneurial skills can be learnt. A person can be trained on how to identify a business

opportunity, how to plan a business, how to organize and manage a business. Ogalanya (1997) identified the following as some of the entrepreneurial skills needed for self-employment. These are managerial/administrative skills, human relation skill, innovative/enterprising skills, competitive skills, communication skills, conceptual/planning skill, supervisory/guidance skills accounting skill and investigative/problem solving skill and risk-taking.

McClelland and Winter (1996) in their study for entrepreneurship found that people are likely to excel in entrepreneurship are those who could assume reasonable level of risks, show self-confidence, work hard, set goals, are accountable and innovative, must be able to anticipate and forecast what customer will want as well as possible changing economic conditions. Odu (1995) emphasized that competence and skill based hardwork are the pivots on which the success of an entrepreneur rests. They added that an experience that is not skillful and competent at work cannot stand the test of time. If blocklaying and concreting trade in technical colleges is to succeed in producing graduates who can gain and hold employment in a competitive world, it must endeavour to provide its graduates with adequate skills for entrepreneurship.

A good entrepreneurship for blocklaying and concreting graduates cannot thrive in the absence of sound practical skills, work knowledge and work attitude acquired by the graduates in the course of their training in the school. It should be emphasized here that while millions of people from among the educated are unemployed, millions of jobs are awaiting to be done because people with the right education and training cannot be found.

The reason for this, might not be unconnected with the rapid and uncoordinated expansion of educational facilities by the various governments in Nigeria on the one hand and lack of meaningful linkage between school and industry on the other hand (Okorie, 2001). Okoye (2007) observed that entrepreneurship education can fail among graduates if the educational system fails to turn out graduates that are trained on the basis of the prevailing circumstances on the environment.

Studies have shown that the degree of the contributions to national economy and effective entrepreneurship education by graduates on graduation is dependent upon the degree of the appropriateness of practical skills and work knowledge acquired (Okoye, ibid). The emphasis laid on the appropriateness of vocational technical training (Blocklaying and concreting inclusive) in the developed countries emanates from the fact that such training is said to have on job performance.

In the Soviet Union, vocational technical training including (blocklaying and concreting craft practice) receives much attention of the government, training institutions and industries and as a result, the curriculum, method of training, staffing, equipment are carefully developed to ensure high standard and appropriate vocational technical training. Odu (1995) revealed that as much as 72 percent of the time allotted to the training of vocational technical students, is given to applied (practical) training to ensure that the graduates perform well on the job. In the United States (Okorie, 2001) and Germany (Mayor, 1992) the emphasis is the same. In Nigeria, (Nwaokolo, 2004) opined that vocational technical training is classroom oriented. This assertion is supported by UNESCO (1999) that vocational training in Nigeria lacks practical orientations. Ojukwu (2000) questioned the structure and content of vocational technical training in Nigeria while Okenwa (1999) attributed the poor vocational technical training (including blocklaying and craft)

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in Nigeria to the lack of industrial base, hence much of the training given are theoretical. The problem this study wants to examine is that: Do the graduates of blocklaying and concerting in the technical colleges have sufficient work skill and managerial abilities to go into entrepreneurship?

The study was guided by the following research questions:

a. What technical skills in Blocklaying and Concreting are needed by graduates of technical colleges for entrepreneurship?
b. What levels of technical skills in Blocklaying and concreting are possessed by graduates of technical colleges for entrepreneurship?
c. What levels of managerial skills in blocklaying and concreting are possessed by graduates of technical colleges for entrepreneurship?

METHODS

The population for this study comprised 30 blocklaying and concreting final year students of the six technical colleges in Delta State comprising Utagba-Ogbe Technical College, Kwale, Sapele Technical College, Sapele, Agbor Technical College, Agbor, Ogor Technical College, Ogor, Issele-Uku Technical College, Issele-Uku and Ofagbe Technical College, Ofagbe. Due to the fact that the population size is small, no sampling was conducted and the entire subjects in the population were utilized.

A three-part questionnaire was used to collect data from blocklaying and concreting final year students of technical college in 2010/2011 session. Part A dwelt on the blocklaying and concreting skills needed by graduates of technical colleges with 81 items; Part B dealt with the levels of blocklaying and concreting skills possessed by technical college final year students for entrepreneurship with 81 items, while Part C was focused on the managerial skills that are possessed by blocklaying and concreting final year students of technical colleges for entrepreneurship (17 items).

The instrument contained a bi-polar scale to collect information on the students' perceived importance and expressed performance of the technical and managerial skills areas of blocklaying and concreting. The scale used ranged from not important (1) to very important (4). Data collected from the 30 blocklaying and concreting final year students involved in the study were analyzed using the mean and standard deviations. The scale below was used.

Very important/Highly possessed – 3.50 – 4.00

Important/possessed – 3.00 – 3.49

Little Important/Little posses – 2.00 – 2.99

Not Important/Not possessed – 1.00 – 1.99

Any item that scores a mean of 2.50 and above is accepted as important or possessed while items that scored below 2.50 are regarded as not important or not possessed.

RESULTS

Table 1: Respondents' Mean Scores and Standard Deviations of Blocklaying and Concerting Skills Needed for Entrepreneurship

S/N	Blocklaying and Concreting Skills	Mean	SD	Remarks
	Mixing of Mortar by Hand			
1	Ability to measure cement and sand to the desired ratio of 1:4	2.50	0.80	Important
2	Ability to mix cement and sand dry to look homogenous having a colour of dark ash	2.50	0.76	Important
3	Ability to make a hollow or conical heap of the cement and sand constituents in order to receive the water for the mixing	2.62	0.85	Important
4	Ability to measure and add to the mix the desired amount of water required (30 litres) of water for one bag of cement and eight headpans of sharp sand	2.68	0.91	Important
5.	Ability to pour the water skillfully (gradually) to the dry mix	2.75	0.43	Important
6.	Ability to mix cement and sand after water has been add to obtain uniform consistency of dark ash colour	2.78	0.52	Important
7.	Ability to turn the mortar from the bunker (non-absorbent surface) to the headpan or gauge box for use	2.64	0.50	Important
8.	Ability to skillfully manipulate the shovel	2.50	0.63	Important
	Manufacture of lightweight blocks by hand	Mean	SD	Remark
9	Ability to measure cement, sand and sawdust (or fly ash) to a proportion of 1:3:6	2.86	0.50	Important
10	Ability to mix the batched constituents dry to obtain a dark brown colour	2.73	0.61	Important
11	Ability to add the required amount of water (60 liters for one bag of cement) to the batched constituents	2.51	0.42	Important
12	Ability to mix the semi-dry constituents in order to obtain a homogenous paste of dark brown colour	2.58	0.63	Important
13	Ability to place the semi-dry mix into the mould using the shovel or headpan and consolidate consistently with a wooden peg or tamping rod for at least fifty times	2.50	0.52	Important

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14	Ability to level up the compacted mix constituents to get a smooth surface on the mould	2.57	0.63	Important
15	Ability to raise the wooden partition of the mould to about 75mm above its surface and finally level up the constituents	2.76	0.54	Important
16	Ability to dismantle the block mould	3.09	0.40	Important
17	Ability to cure the moulded lightweight block after five days of moulding	3.03	0.38	Important
	Laying of stretcher Bond up to Lintel level	Mean	SD	Remark
18	Ability to set out the position of the wall on the floor using blocks, line and pins	3.09	0.47	Important
19	Ability to spread cement/sand mortar (mix 1:4) evenly on the floor of the marked position	2.56	0.65	Important
20	Ability to place the first course on the mortar screed as: Stretcher, half-bat, stretcher, stretcher, half bat and stretcher	2.50	0.70	Important
21	Ability to check for alignment of the blocks with a straight edge (Wooden float)	2.50	0.64	Important
22	Ability to check the first course for a horizontal level with the spirit level	2.69	0.55	Important
23	Ability to chuck in mortar into the bed joints of the first course by using the pointed end of the trowel to point the mortar down and positioning the chucking board along the lengths of two jointed blocks.	2.50	0.81	Important
24	Ability to maintain uniform perpends	2.50	0.63	Important
25	Ability to skillfully pick mortar from the bunker	2.68	0.42	Important
26	Ability to maintain perpendicular stop ends	2.62	0.63	Important
27	Ability to spread mortar screed evenly on the first course to a thickness of 13mm	2.50	0.52	Important
28	Ability to place the second course on the mortar screed as: stretcher, stretcher, stretcher, stretcher and stretcher	3.06	0.70	Important
29	Ability to check for the horizontal alignment of the blocks in the second course with a straight edge	2.72	0.52	Important

30	Ability to check for the vertical and horizontal levels of the first and second courses with the sprit level	2.93	0.68	Important
31	Ability to lay the third course as demonstrated on the first course	2.95	0.44	Important
32	Ability to lay the fourth course as demonstrated on the first course	3.09	0.55	Important
33	Ability to lay the fifth course as demonstrated in the first course	2.95	0.51	Important
34	Ability to lay the sixth course as demonstrated in the second course	2.80	0.64	Important
35	Ability to lay the seventh course as demonstrated in the first course	2.95	0.38	Important
36	Ability to lay the eight course as demonstrated in the second course	2.58	0.50	Important
	Cavity wall construction	Mean	SD	Remark
37	Ability to measure and set out the position of the wall on the floor using blocks, line and pins	2.50	0.60	Important
38	Ability to spread mortar screed (mix 1:4) evenly on the floor to carry the wall	2.50	0.49	Important
39	Ability to lay the inner leaf of the cavity accurate as: stretcher, half-bat, stretcher, stretcher, half-bat, stretcher, stretcher, and steer, for the second course	2.59	0.71	Important
40	Ability to measure out and set out the cavity of 50mm width using line, pin and measuring tape.	2.58	0.70	Important
41	Ability to lay the outer leaf accurately using stretcher bond as was demonstrated on the inner leaf.	2.64	0.58	Important
42	Ability to fix the wall ties at 900mm horizontally between ties	2.68	0.59	Important
43	Ability to fix the wall ties at 450mm vertically between ties.	2.86	0.51	Important
44	Ability to use the cavity lath to keep the cavity clear of mortar droppings	2.53	0.48	Important
45	Ability to use the builder's square to check for the squareness of the two leaves of the cavity wall angles	2.50	0.55	Important

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46	Ability to use the spirit level and the wooden float to check for the vertical and horizontal level of the cavity wall.	2.91	0.60	Important
47	Ability to use trowel and chucking board to fill in mortar into the bed joints of the wall	2.67	0.57	Important
	Rendering of Walls	Mean	SD	Remark
48	Ability to prepare the surface of the all by splashing water	2.62	0.53	Important
49	Ability to place plaster screed (of mix 1: 4) at convenient distances on the wall with trowel to guide for straightening the surface	2.78	0.61	Important
50	Ability to level up (smoothen the surface with the wooden float to form a sandy-gritty finish	2.64	0.45	Important
51	Ability to fix wooden lath or batten at the edge of the wall in order to get the thickness of the plaster	2.77	0.50	Important
52	Ability to smoothen the edge of the corners of the wall with corner rubber after removing the wooden lath	2.96	0.71	Important
53	Ability to cure the rendered wall by splashing water on it after two days of rendering	2.65	0.69	Important
	Wall Tiling using PVC Tiles	Mean	SD	Remark
54	Ability to hack the wall with club hammer and chisel	2.56	0.40	Important
55	Ability to clean and wet the hacked wall with water to received the tiles	2.53	0.50	Important
56	Ability to spread the mortar screed (or 1:2) evenly, on the surface and rule off with a straight edge to get a smooth surface	2.65	0.53	Important
57	Ability to fix wooden lath about 50mm width at the corners and base of the wall to guide the fixing of the PVC tiles	2.58	0.58	Important
58	Ability to fix the tiles on the mortar screed by making a gentle tap on it with the trowel handle	2.58	0.60	Important
59	Ability to test the tiles for vertical and horizontal level with spirit level and straight edge	2.59	0.45	Important
60	Ability to fix the tiles to get a uniform vertical and horizontal joint	2.50	0.52	Important

61	Ability to cut tiles and fix at corners of the wall	2.77	0.64	Important
62	Ability to rub the joints flush with a piece of cloth	2.61	0.48	Important
63	Ability to clean and polish the tiles after fixing and setting	2.59	0.51	Important
	Tuck-pointing to Walls	Mean	SD	Remark
64	Ability to set out and lay a stretcher bond wall of one brick thick up to eight courses on which the tuck-point will be made	2.54	0.44	Important
65	Ability to prepare a coloured mortar screed for the tuck-pointing to a mix of 1:1:3 (one part of cement to one part of colouring pigment and three parts of sharp sand)	2.67	0.52	Important
66	Ability to rake out the joints (i.e. joints made of cement and sand screed of mix 1:4) with wire brush	2.68	0.47	Important
67	Ability to fill in joints with the coloured mortar to stick out to about 6mm using a wooden lath and a trowel	2.50	0.48	Important
68	Ability to smooth the joints and cut the edge clean with the point of the trowel	2.66	0.80	Important
69	Ability to clean the joints with a soft brush after the initial setting to give an attractive appearance	2.51	0.62	Important
	Construction of semi-circular Arch	Mean	SD	Remark
70	Ability to set out the two abutments of the arch in Flemish bond of one brick thick using bricks, line and pins	2.50	0.69	Important
71	Ability to lay the two abutments with bricks up to eight courses	2.74	0.56	Important
72	Ability to measure and set out accurately the span of the arch which is 2m	2.86	0.62	Important
73	Ability to fix the arch centre, struts and folding wedges on the eight course of the abutments	2.64	0.60	Important
74	Ability to mark accurately the position of the key brick on the extrados and the width of the bed joints	2.80	0.71	Important
75	Ability to fix two nails at each of the striking points and attached a length of line for straightness of the arch that is to be constructed	2.54	0.48	Important

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76	Ability to check the arch straightness along its face by building up the brick work on each side	2.94	0.68	Important
77	Ability to mark and cut at an angle the bricks with bolster and club hammer using the template.	2.52	0.55	Important
78	Ability to fix in the cut bricks in their positions on the arch centres	2.82	0.70	Important
79	Ability to fix in the key brick	2.82	0.44	Important
80	Ability to fill in the joints of the arch with cement and sand mortar screed of 1:2 mix	2.83	0.63	Important
81	Ability to dismantle the folding wedges, struts and the arch centers after it has set and hardened	2.64	0.53	Important

The highest mean rating was on the ability to dismantle the block mould (x = 3.06, SD = 0.40) in item 16

Table 2: Respondents' Mean Scores and Standard Deviations of the Expressed Possession of Blocklaying and Concerting Skills Needed for Entrepreneurship

S/N	Blocklaying and Concreting Skills	Mean	SD	Remarks
	Mixing of Mortar by Hand			
1	Ability to measure cement and sand to the desired ratio of 1:4	2.50	0.80	Possessed
2	Ability to mix cement and sand dry to look homogenous having a colour of dark ash	2.52	0.42	Possessed
3	Ability to make a hollow or conical heap of the cement and sand constituents in order to receive the water for the mixing	2.61	1.21	Possessed
4	Ability to measure and add to the mix the desired amount of water required (30 litres) of water for one bag of cement and eight headpans of sharp sand	2.43	0.65	Possessed
5.	Ability to pour the water skillfully (gradually) to the dry mix	2.58	0.50	Possessed
6.	Ability to mix cement and sand after water has been add to obtain uniform consistency of dark ash colour	2.80	0.46	Possessed
7.	Ability to turn the mortar from the bunker (non-absorbent surface) to the headpan or gauge box for use	2.60	0.57	Possessed
8.	Ability to skillfully manipulate the shovel	2.50	0.52	Possessed
	Manufacture of lightweight blocks by hand	Mean	SD	Remark
9	Ability to measure cement, sand and sawdust (or fly ash) to a proportion of 1:3:6	2.70	0.39	Possessed
10	Ability to mix the batched constituents dry to obtain a dark brown colour	2.63	0.58	Possessed
11	Ability to add the required amount of water (60 liters for one bag of cement) to the batched constituents	2.20	0.62	Not Possessed
12	Ability to mix the semi-dry constituents in order to obtain a homogenous paste of dark brown colour	2.53	0.70	Possessed
13	Ability to place the semi-dry mix into the mould using the shovel or headpan and consolidate consistently with a wooden peg or tamping rod for at least fifty times	2.58	0.53	Possessed

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14	Ability to level up the compacted mix constituents to get a smooth surface on the mould	2.54	0.60	Possessed
15	Ability to raise the wooden partition of the mould to about 75mm above its surface and finally level up the constituents	2.42	0.51	Possessed
16	Ability to dismantle the block mould	2.69	0.81	Possessed
17	Ability to cure the moulded lightweight block after five days of moulding	2.78	0.64	Possessed
18	Laying of stretcher Bond up to Lintel level	Mean	SD	Remark
	Ability to set out the position of the wall on the floor using blocks, line and pins	2.38	0.71	Possessed
19	Ability to spread cement/sand mortar (mix 1:4) evenly on the floor of the marked position	2.73	0.48	Possessed
20	Ability to place the first course on the mortar screed as: Stretcher, half-bat, stretcher, stretcher, half bat and stretcher	2.07	0.48	Not Possessed
21	Ability to check for alignment of the blocks with a straight edge (Wooden float)	2.50	0.74	Possessed
22	Ability to check the first course for a horizontal level with the spirit level	2.60	0.60	Possessed
23	Ability to chuck in mortar into the bed joints of the first course by using the pointed end of the trowel to point the mortar down and positioning the chucking board along the lengths of two jointed blocks.	2.68	0.50	Possessed
24	Ability to maintain uniform perpends	2.53	0.62	Possessed
25	Ability to skillfully pick mortar from the bunker	2.99	0.49	Possessed
26	Ability to maintain perpendicular stop ends	2.90	0.67	Possessed
27	Ability to spread mortar screed evenly on the first course to a thickness of 13mm			Possessed
28	Ability to place the second course on the mortar screed as: stretcher, stretcher, stretcher, stretcher and stretcher	3.00	0.88	Possessed
29	Ability to check for the horizontal alignment of the blocks in the second course with a straight edge	2.62	0.60	Possessed

30	Ability to check for the vertical and horizontal levels of the first and second courses with the sprit level	2.53	0.51	Possessed
31	Ability to lay the third course as demonstrated on the first course	2.59	0.53	Possessed
32	Ability to lay the fourth course as demonstrated on the first course	2.70	0.60	Possessed
33	Ability to lay the fifth course as demonstrated in the first course	2.50	0.69	Possessed
34	Ability to lay the sixth course as demonstrated in the second course	2.74	0.70	Possessed
35	Ability to lay the seventh course as demonstrated in the first course	2.64	0.55	Possessed
36	Ability to lay the eight course as demonstrated in the second course	1.90	0.81	Not Possessed
	Cavity wall construction	Mean	SD	Remark
37	Ability to measure and set out the position of the wall on the floor using blocks, line and pins	2.51	0.63	Possessed
38	Ability to spread mortar screed (mix 1:4) evenly on the floor to carry the wall	2.80	0.49	Possessed
39	Ability to lay the inner leaf of the cavity accurate as: stretcher, half-bat, stretcher, stretcher, half-bat, stretcher, stretcher, and steer, for the second course	2.72	0.65	Possessed
40	Ability to measure out and set out the cavity of 50mm width using line, pin and measuring tape.	2.79	0.44	Possessed
41	Ability to lay the outer leaf accurately using stretcher bond as was demonstrated on the inner leaf.	2.50	0.50	Possessed
42	Ability to fix the wall ties at 900mm horizontally between ties	2.63	0.54	Possessed
43	Ability to fix the wall ties at 450mm vertically between ties.	2.55	0.68	Possessed
44	Ability to use the cavity lath to keep the cavity clear of mortar droppings	2.75	0.59	Possessed
45	Ability to use the builder's square to check for the squareness of the two leaves of the cavity wall angles	2.70	0.64	Possessed

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46	Ability to use the spirit level and the wooden float to check for the vertical and horizontal level of the cavity wall.	2.80	0.67	Possessed
47	Ability to use trowel and chucking board to fill in mortar into the bed joints of the wall	2.53	0.45	Possessed
	Rendering of Walls	Mean	SD	Remark
48	Ability to prepare the surface of the all by splashing water	2.50	0.81	Possessed
49	Ability to place plaster screed (of mix 1: 4) at convenient distances on the wall with trowel to guide for straightening the surface	2.51	0.83	Possessed
50	Ability to level up (smoothen the surface with the wooden float to form a sandy-gritty finish	2.81	0.70	Possessed
51	Ability to fix wooden lath or batten at the edge of the wall in order to get the thickness of the plaster	2.90	0.60	Possessed
52	Ability to smoothen the edge of the corners of the wall with corner rubber after removing the wooden lath	2.58	0.90	Possessed
53	Ability to cure the rendered wall by splashing water on it after two days of rendering	2.60	0.92	Possessed
	Wall Tiling using PVC Tiles	Mean	SD	Remark
54	Ability to hack the wall with club hammer and chisel	2.62	0.52	Possessed
55	Ability to clean and wet the hacked wall with water to received the tiles	1.71	0.48	Not Possessed
56	Ability to spread the mortar screed (or 1:2) evenly, on the surface and rule off with a straight edge to get a smooth surface	2.60	0.50	Possessed
57	Ability to fix wooden lath about 50mm width at the corners and base of the wall to guide the fixing of the PVC tiles	2.57	0.59	Possessed
58	Ability to fix the tiles on the mortar screed by making a gentle tap on it with the trowel handle	2.51	0.45	Possessed
59	Ability to test the tiles for vertical and horizontal level with spirit level and straight edge	2.84	0.54	Possessed
60	Ability to fix the tiles to get a uniform vertical and horizontal joint	2.55	0.79	Possessed

61	Ability to cut tiles and fix at corners of the wall	2.66	0.90	Possessed
62	Ability to rub the joints flush with a piece of cloth	2.58	0.85	Possessed
63	Ability to clean and polish the tiles after fixing and setting	2.63	0.70	Possessed
	Tuck-pointing to Walls	Mean	SD	Remark
64	Ability to set out and lay a stretcher bond wall of one brick thick up to eight courses on which the tuck-point will be made	2.52	049.	Possessed
65	Ability to prepare a coloured mortar screed for the tuck-pointing to a mix of 1:1:3 (one part of cement to one part of colouring pigment and three parts of sharp sand)	2.81	0.50	Possessed
66	Ability to rake out the joints (i.e. joints made of cement and sand screed of mix 1:4) with wire brush	2.52	0.62	Possessed
67	Ability to fill in joints with the coloured mortar to stick out to about 6mm using a wooden lath and a trowel	2.59	0.71	Possessed
68	Ability to smooth the joints and cut the edge clean with the point of the trowel	2.60	0.78	Possessed
69	Ability to clean the joints with a soft brush after the initial setting to give an attractive appearance	2.70	0.80	Possessed
	Construction of semi-circular Arch	Mean	SD	Remark
70	Ability to set out the two abutments of the arch in Flemish bond of one brick thick using bricks, line and pins	2.80	086	Possessed
71	Ability to lay the two abutments with bricks up to eight courses	2.59	084	Possessed
72	Ability to measure and set out accurately the span of the arch which is 2m	2.56	0.78	Possessed
73	Ability to fix the arch centre, struts and folding wedges on the eight course of the abutments	2.50	0.58	Possessed
74	Ability to mark accurately the position of the key brick on the extrados and the width of the bed joints	2.59	0.88	Possessed
75	Ability to fix two nails at each of the striking points and attached a length of line for straightness of the arch that is to be constructed	2.50	0.51	Possessed

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76	Ability to check the arch straightness along its face by building up the brick work on each side	2.62	0.60	Possessed
77	Ability to mark and cut at an angle the bricks with bolster and club hammer using the template.	2.70	0.55	Possessed
78	Ability to fix in the cut bricks in their positions on the arch centres	2.65	0.70	Possessed
79	Ability to fix in the key brick	2.50	0.51	Possessed
80	Ability to fill in the joints of the arch with cement and sand mortar screed of 1:2 mix	2.80	0.59	Possessed
81	Ability to dismantle the folding wedges, struts and the arch centers after it has set and hardened	2.14	0.66	Not Possessed

Blocklaying final year students of technical college possess the technical skills for entrepreneurship in all the items except 11, 20, 30, 55 and 81.

Table 3: Respondents' Mean Scores and Standard Deviations of the Expressed Possession of Managerial Skills for Entrepreneurship in Blocklaying and Concreting

S/N	Managerial skills	Mean	SD	Remarks
1	I have the ability to identify business opportunity in blocklaying and concreting	2.30	1.24	Not possessed
2	I have the ability to improve on my situation as my industry changes	1.04	0.42	Not possessed
3	I can evaluate the risk of new venture based on a careful assessment of the probability of success or failure	1.10	0.60	Not possessed
4	I have the ability to search for changes occurring in blocklaying and concreting industry and develop ways to exploit those changes for personal gain	1.00	0.38	Not possessed
5.	I have the ability to evaluate new and emerging markets and identify how to take advantages of them	1.20	0.34	Not possessed
6.	I can resolve conflict effectively in the workplace	1.19	0.56	Not possessed
7.	I have the ability to make a decision confidently and act upon them	1.24	0.39	Not possessed
8.	I can develop a plan and achieve it	1.15	0.41	Not possessed
9	I can write a proposal confidently without guidance	1.16	0.44	Not possessed
10	When I start a project and it proves difficult, I have the ability to persist till I get to the end	1.07	0.28	Not possessed
11	I can raise capital by myself for entrepreneurship in blocklaying and concreting projects	0.88	0.62	Not possessed
12	I have the ability to work with little or no supervision	1.02	0.50	Not possessed
13	I have accountability skill	1.20	0.41	Not possessed
14	I have the ability to listen to clients needs	0.96	0.49	Not possessed
15	I have the ability to keep records of purchase	2.52	0.62	Possessed
16	I have the ability to adhere to professional standard	1.14	0.47	Not possessed
17	I have the ability to manage people effectively in the workplace.	118.	0.45	Not possessed

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Results shown in Table 3 indicate that blocklaying and concreting final year students do not possess the managerial skills in all items except item 15 (x = 2.52, SD – 0.62) which is I have the ability to keep records of purchase

FINDINGS

This study has revealed the following findings:

i. Blocklaying and concreting final year students believed that they have adequate work skills for entrepreneurship.

ii. Students do not possess managerial skills to go into entrepreneurship

iii. Lack of capital hinders prospective graduates of blocklaying and concreting from entering into entrepreneurship ventures

DISCUSSION

This study has shown that blocklaying and concreting final year students of Delta State technical colleges possess the desirable work skill that could push them into entrepreneurship. Their ability to posses the work skill is in consonance with the opinion of (Nwaokolo, 2004) who stated that occupational skill is necessary for securing and holding employment in a recognized occupation.

The finding is also in collaboration with the perception of (Okorie, 2001) who opined that training for entrepreneurship must include thinking habit, doing habit and habit which enables individuals to conform to their environment and that this must be specific in terms of the job and its demand. He went further to say that this aspect of skill training should not be de-emphasized by technical teachers and other educators. This is because one of our major problems in Nigeria is our attitude towards work.

The case of prospective blocklaying and concreting graduates not possessing the managerial skill for entrepreneured captured the opinions of Ejikeme and Eke (2008) who stated that low motivation and lack of confidence of graduates, inability to identify business opportunities, inadequate support by the government are some of the managerial attributes that hinder prospective graduates from thinking about entrepreneurship.

The issue of lack of capital by the graduates to start off entrepreneurship was analyzed by (Akpan, 2007) who observed that of all the known obstacles in the part of an entrepreneur, more especially in the developing economy such as Nigeria is inadequate supply of capital, most especially at both start-up and rapid growth phases of the small business life cycle.

CONCLUSION

Blocklaying and concreting perspective graduates posses the desired work skill for entrepreneurship. However, they do not possess the necessary managerial skills for entrepreneurship. This may be due to the fact that entrepreneurship education is not yet introduced to technical colleges. Nevertheless, with the government intervention, blocklaying and concreting graduates will be equipped with these managerial skills in no distant time.

RECOMMENDATIONS

Based on the findings and the conclusions of this study, the following recommendations are made:

i. Entrepreneurship education should be introduced as a course in technical colleges and should also be implemented.

ii. Government should provide the initial capital for all intending blocklaying and concreting graduates that have the desire for entrepreneurship.

iii. Conferences, workshops, seminars, symposia should be organized by Ministry of Education and should be focused on entrepreneurship. Prospective graduates of technical colleges should be invited to participate in these activities.

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