









14.	Single Core Cable & Double Core Cable	3.55	2.81	3.16	2.214	.112
15.	Distribution Board & Change Over Switch	4.30	4.12	4.29	.352	.704
16.	0.55mm Aluminium Sheet & 0.75mm Aluminium Sheet	4.11	3.26	2.59	11.044**	.000
17.	20mm Aggregates & 40mm Aggregates	4.06	3.42	3.02	4.843**	.009
18.	12mm Iron Rod & 16mm Iron Rod	4.62	4.41	3.91	4.378**	.014
19.	Marble Floor & Terrazzo Floor	4.57	3.74	3.93	5.447*	.005
20.	Nipple & Union Connector	2.34	2.50	2.78	.905	.406
21.	2Gang Switch & 3 Gang Switch	4.30	3.71	4.02	2.203	.114
22.	Concrete 1:2:4Mix & Concrete 1:3:6 Mix	4.55	3.87	3.72	4.839**	.009

\* $p < 0.05$ ; \*\* $p < 0.01$

### 5. Discussion

The significant differences show that there are differences with the knowledge of the construction material among ARCH, BT and QS students. It was also found that student from ARCH scored the highest mean for all materials compared to students from BT and QS. These findings reveal that ARCH students were more familiar with the construction materials examined in this paper compared to BT and QS students. Since all students across the three departments have taught the same construction technology courses to their students, although by different lecturers, two

factors could be attributed to the findings of this research. First, it could be that students from the Architectural department are more engaged in construction related activities that enhance their knowledge about construction materials. These students, engagement can be underpinned by Astin's [20] Student Involvement Theory. This theory focuses on four areas: (i) student academic engagement; (ii) student engagement with faculty members, (iii) student engagement with peers, and (iv) student engagement in communities. Second, the nature of Architecture programme could be another factor contributing to high mean score by Architecture students

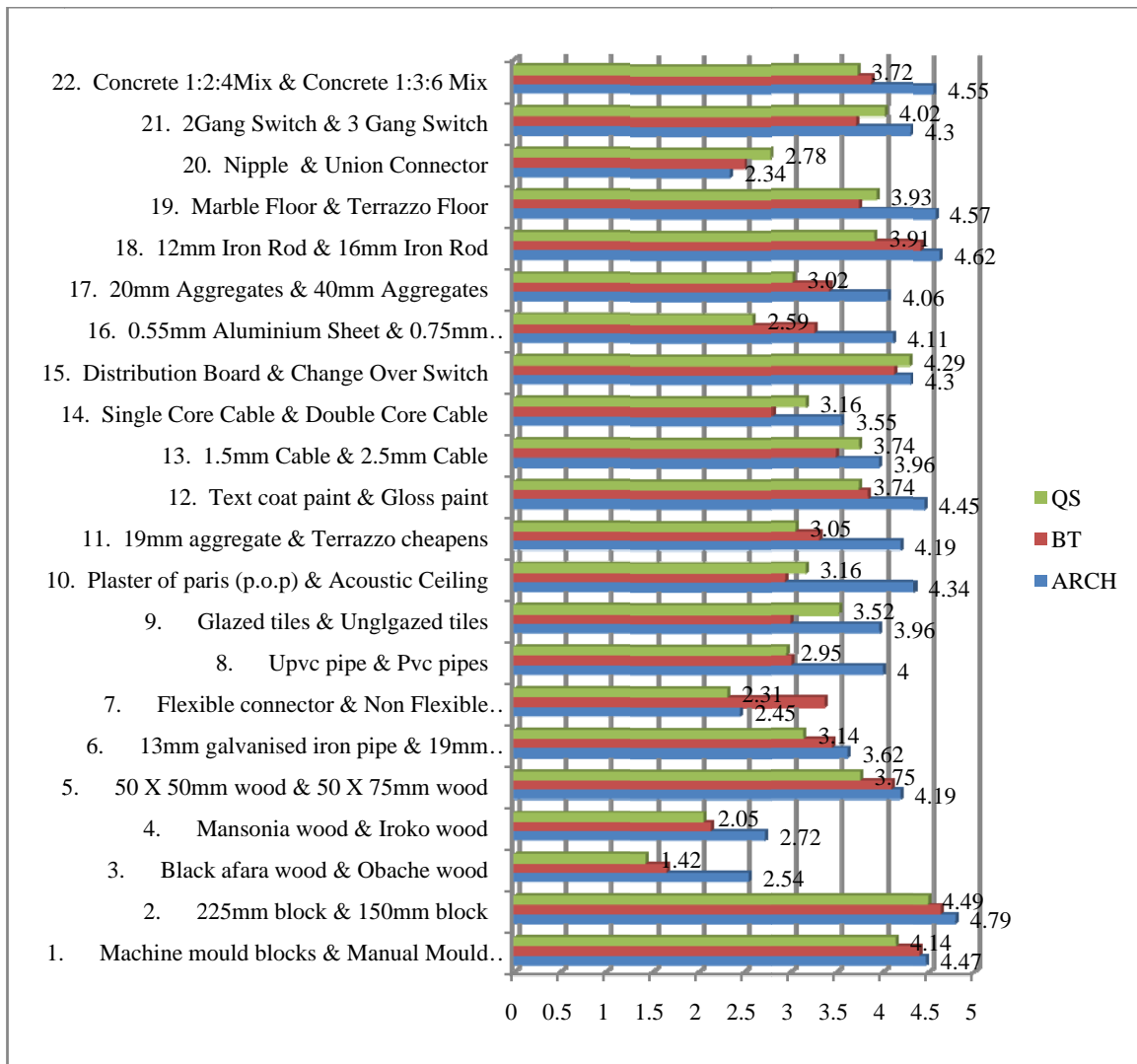


Figure 2: Mean score for knowledge of building materials among Arch, BT and QS students

We observe that architectural students are always busy with their design even during the early few weeks of semester break. They spend extra hours and efforts on semester studio design project, which perhaps involve the selection of building materials for specifications and particularly in the modelling of the Architectural design.

It is not surprising that few construction materials have mean scores of 4.00 – 4.63 as shown in Figure 2. These construction materials (block, reinforcement bar, wood examined based on size, electrical service equipment) are common and are easily seen. While wood size was scored 4.63, wood type received the least score (1.18). Different sizes of wood can be easily observed, but it is difficult to differentiate between Black Afara wood, Obeche wood, Mansonia and Iroko wood. To differentiate between them, one will need to understand their colour, texture and biological features

## 6. Conclusion and Recommendation

While scholars have examined in student learning among in higher educational institutions due to its importance for sharing of knowledge and advancement in educational sectors, Nigerian Polytechnic students have not received much attention. In recognition of this need, this paper seeks to determine whether there is any significance difference among students from three departments in the same polytechnic.

Knowledge of construction materials is essential for students in the built environment related programmes. It is required for effective material selection during design, measurement of building work and estimation, as well as management of materials on site. This paper therefore examines this requirement among polytechnic students in the school of Environmental Studies. We suggest that level of involvement in construction related activities such as building design can enhance the student familiarity of construction materials. In order to enhance the understanding of construction materials in Building and Quantity surveying departments, student should be motivated and encouraged to consistently participate in the construction related assignments, such as market survey, construction site visit and producing albums of construction materials. Future research should adopt a qualitative approach and longitudinal research design to explore a fundamental or common course that is taught to all students in the same school or college as the case may be.

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