

Assessment of Students' Participation in Planning Studio at Ladoke Akintola University of Technology, Ogbomosho, Nigeria

Akinyode, B. F.

Department of Urban and Regional Planning, Faculty of Environmental Sciences,
Ladoke Akintola University of Technology, P.M.B. 4000, Ogbomosho, Oyo state, Nigeria. Postcode 210214,

Corresponding Author E-mail: bfakinyode@lautech.edu.ng; Tel: +2348033955103, +2348053028722

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Abstract

Studio work is designed into the curriculum of Urban and Regional Planning in Nigerian Universities as one of the core courses to acquire professional skill in planning education. This helps the students to apply theoretical aspects of the profession to real life settings to aids their practical learning skill and equip them to adapt to challenges and scenarios in the profession. This study assessed planning students' participation in studio work to determine various factors that influence their participation. Questionnaire were administered among 292 planning students at Ladoke Akintola University of Technology for data collection. Multi-stage and purposive sampling techniques were adopted. Only 206 planning students which is 70.5% response rate successfully completed their questionnaires. Factor analysis, Likert scale, relative index and linear regression were used for data analysis. The result revealed that only students' mode of admission has significance influence of 0.356 on students' participation in studio work at the significance level of 0.05. One-way ANOVA test revealed no difference exist ($P < 0.05$) in terms of students' participation in studio work based on their socioeconomic attributes except the marital status. The students' level of participation revealed the average mean of 3.16 which implies that, majority of the students participate in studio work. However, advice from Lecturers or Technologists on studio work has less significance compared with other factors. The study suggested among others the need for Lecturers and Technologists to build and improve their personal relationship with students to influence their participation and achieve greater productivity.

Keywords: Classroom Participation; Pedagogy of Learning; Students' Participation; Studio Pedagogy; Studio Work

Introduction

Studio work has a long history in planning education, it was originally categorized as 'design on the job' approach in the training (Dalton, 2001). Planning studio work lays more emphasis on group work when compared with the traditional architectural studio (Forsyth, Lu, and McGirr, 2000). As a result, collaboration is one of the main features in the process of acquiring professional skill in planning education. This aids impartation of knowledge in training the planning students towards becoming professional Planners. Peterson (2018) observed in his study that every student tends to learn differently and their learning style differs from one another, ranging from visual, aural, verbal, to physical or logical learning styles. Stirling and Alquraini (2017) noted that practical learning style tends to benefit most students.

Practical learning technique is being designed into the curriculum of Urban and Regional Planning training in Nigerian Universities. The importance of practical understanding of the profession and the techniques of applying the theoretical aspects of the profession to real life settings cannot be over emphasised. This equips the students after the graduation to adapt to challenges and scenarios in the profession (Akinyode and Khan, 2016). The Urban and Regional Planning profession aids the cities to grow in a planned manner and maximize the benefits of living in a city through balancing distribution of resources, improving quality of life and offering a healthy lifestyle and achieving sustainability (Uchegbu, 2010). Positive impact on economy, better utilization of resources, provision of safe environment, making cities resilient and reducing

susceptibility to disasters are also the goals of the profession. These goals can be achieved when the theoretical knowledge is converted into real situation and the practical learning is seen as a cornerstone supporting the training in the profession (Higgins, Aitken-Rose and Dixon, 2009).

Practical learning exposes students to various design techniques that can be applied in solving various planning-related problems in the environment (Burroughs, Brocato and Franz, 2009) through data collection and analysis for decision-making in land use planning and the provision of facilities (Uchegbu, 2010). However, the level of students' participation in studio work varies amongst students. Non-participation of students in studio impedes their technical development in teamwork, creativity, communication skills, healthy competition among their colleagues and a platform to demonstrate their theoretical knowledge (Higgins et al., 2009). This may affect the quality of professional performance and consequently pose significant threats to the practice of the profession in the future, thereby preventing the achievement of the goals of the profession (Riyad, Pramana, Munakib and Maseleno, 2020). It is on this note that this study aims at assessing students' participation in studio work with a view to appraise various factors that influence their participation, using Urban and Regional Planning students at Ladoke Akintola University of Technology (LAUTECH), Ogbomosho as a case study.

The results presented in this article can certainly help the management of the Nigerian universities offering Urban and Regional Planning understand factors responsible for non-participation of students in studio work and adopt better strategies in handling the students to overcome potential obstacles. This will lessen the non-participation of students during studio work. Moreover, scholars in the Urban and Regional Planning education can use the findings of this research as a base to initiate other similar studies in the studio work and planning education. The introductory section of the article is followed by the reviewing of related literature. A research design is then described in section three of the article which is followed by the analysis and presentation of the results in section four before the conclusion in section five.

The effect of aesthetics in planning the studio on students' participation has been demonstrated in the literature. For instance, Sommer and Olsen (1980) established that refurbishing an old classroom led to the growth in participation from 7% to as high as 87%. Rocca (2010) found that a reduction in involvement was seen when the physical layout of student desks in the studio was arranged in the conventional forward-looking rows with the lecturer positioned in front of a classroom. Class was also noted to impact student participation and class attendance (Rocca, 2010). For instance, students in courses with more than 65 students had lower attendance and participation rates compare to students in smaller classes with higher attendance and participation rates (Feld and Grofman, 1977). Students' reluctance to participate in large courses may be due to a variety of factors, including a concern of slowing down the delivery of class content, negative reactions from classmates and professors, and a wish to retain anonymity (Rocca, 2010). Professors' teaching styles may also be influenced by large class sizes. Larger class sizes have been linked to a preference for passive lecture, whereas active pedagogies have been linked to smaller class sizes (Feld and Grofman, 1977). Increased class size is commonly described as a barrier to active learning and engagement (Rocca, 2010).

Several research have shown that carefully planned activities can enhance participation in a large classes (Salter and Persaud, 2003). Small group work with individual presentation to the wider class could be one of such practices (Salter and Persaud, 2003). Although class size has been shown to affect participation, it is possible that Faculty's choice of pedagogical techniques has a bigger impact, so that more engaging pedagogies generate more engagement regardless of class size (Becker and Luthar, 2002; Becker and Kaldenberg, 2000; Becker, Sommer, Bee and Oxley, 1973). The frequency of student participation has been shown to rise when professors incorporate participation as a proportion of the course grade; however, the quality of participation is not always clearly described (Bean and Peterson, 1998). Some students, for example, may want to get the highest participation percentage by dominating the discourse, but they may

fail to contribute to group teaching (McCleary et al., 2011). It is critical to have a set of standards to evaluate both the level and quality of involvement (Bean and Peterson, 1998; Daggett, 1997).

In addition to atmosphere and size of the class, behaviour, teaching strategies and the capacity to regulate the classroom environment as well as peer pressure relating to academic performance are some of the characteristics of the Faculty members that influence students' participation (Rocca, 2010). Students generally have regard to Faculty members who recall students' names and show an interest in their lives outside the classroom (Loftin, Davis and Hartin, 2010). Although some Faculty members have reservations about such behaviour because of the fear of losing authority and/or the need to preserve classroom discipline but some students may view such behaviour in a different perspective (Salter and Persaud, 2003). Humour can promote closeness between students and Faculty members. However, if humour is interpreted incorrectly, it can affect the student- Faculty member closeness or relationship and consequently quieting students. Sexual, racial and ethnic jokes as well as insulting statements directed at students are examples of inappropriate humour that can affect the student-Faculty member closeness or relationship and more importantly class participation (Frymier, Wanzer and Wojtaszczyk, 2008). Classroom participation may be increased by using teaching strategies that attempt to actively engage students in the classroom (Crookes, Crookes and Walsh, 2013). Questioning, case studies, small group discussion, role playing, gaming, clicker technology and simulation are some of the teaching strategies that can be used (Meyers and Jones, 1993).

Students' self-perception as a member of a group, which was impacted by peers' behaviour both outside and within the classroom, was found to be the biggest indication of involvement (Fassinger, 1997). Student's preparedness for class, ability to know other students in the class, and forming relationships promote classroom participation, whereas students that could not finish their reading or homework were less likely to participate in class. Classroom participation has also been linked to personal variables such as age, gender, race and/or ethnicity, and primary language as well as students' levels of stress (Hirschy and Wilson, 2002; Howard, Zoeller and Pratt, 2006; Campbell, 2007). Male and older students have both showed higher rates of class participation than female and younger students (Rocca, 2010). Students who are stressed out due to financial or psychosocial problems may find it difficult to concentrate in class (Musial, 2011; Czekanski and Wolf, 2013). Students who must work to pay for their education may only have a limited amount of time to dedicate to their studies, putting them under more stress than students who do not have such time constraints. Studio-based learning is gaining prominence in a variety of fields of study, owing to its effective devices for developing articulate thinkers (Burroughs et al., 2009). Bringing students closer to professional practice in a group setting has the potential to foster the development of general abilities (Raidal and Volet, 2009). Collaboration, according to Gross and Do (1997), is regarded to be vital to design practice. According to Farivarsadri (2001), the design studio is an ideal setting for the type of education that encourages students to consider their responsibilities as moral citizens, to participate in the creation of conditions and critique that promote social transformation.

Materials and Methods

Both primary and secondary data were sourced for the study. Primary data were collected through questionnaires administration among 292 students which is total survey. The secondary data basically on students' population was collected through class representative of each level at the department. Besides, other scholars' work were reviewed as the secondary information utilised in this study. A cross-sectional research design was utilized for the study, adopting multi-stage and purposive sampling techniques. Departments of Urban and Regional Planning, Ladoke Akintola University of Technology, Ogbomosho was purposively selected for the study. All the students with exception of year four students in their Students Industrial Working Experience Scheme (SIWES) were purposively selected for sampling because their overall population was very moderate. A set of pre-tested questionnaire was administered on each of the students, to obtain information on their socio-economic characteristics, level of participation in studio class, and perception on actors influencing their participation in studio work.

Although, the entire students volunteered to participate in the study and were selected as the sample size for questionnaires administration but total number of 206 students successfully completed filling their questionnaires. This indicates 70.5% response rate. This response rate was achieved as a result of personal interaction and consultation as well as the willingness of the students to participate in the study. The willingness of the students to participate in the study and 70.5% response rate in questionnaire administration indicated that students themselves found the topic interesting and relevant to their future career. This finally formed the basis for data analysis. Both descriptive statistics (percentage distribution) and inferential statistics (principal component analysis, linear regression and relative index) were used in analysing the data collected for the study. Descriptive analysis technique was used to determine the influence of socio-economic characteristics of students on their participation in studio work. Factor analysis with the aid of principal component analysis was used to evaluate the critical factors that influence students' participation in Studio Work while linear regression was used to test the hypothesis that there is no factor influencing Urban and Regional Planning students' participation in Studio Work. Likert scale and relative index analysis were used to appraise the level of students' participation in studio work. These aim at understanding the level of students' participation and the factors that affect their participation in studio work among the students of Urban and Regional Planning.

Results and Discussion

Results of the investigations of the study are presented under four subheadings: Socio-economic characteristics of the students; association between students' socio-economic characteristics and participation in Studio work; Factors Influencing Student's participation in Studio Works; and Level of Students' participation in Studio work.

Socio-Economic Characteristics of the students

The results presented in Table 1, revealed that 83.0% of the students were male and 17.0% were female. Observed higher proportion of male students owe much to Urban Regional Planning profession being generally perceived as men's profession. More than half (50.5%) of the students were less than 21 years of age; 49% were between aged 21 and 30 years; and only 0.5% were more than 30 years. The implication of this is that majority of Urban and Regional Planning students are in the active age. The higher proportion of male students in the profession confirmed the assertion of Rocca (2010) that Male showed higher rates of class participation than female but negate his assertion that older students showed higher rates of class participation than younger students. With the age bracket of students admitted into the discipline, every student would be expected to have the capability of participating fully in studio work regardless of their sex. On marital status of the students, only 0.5% were married, and the rest were single. From the age and marital status distributions, It is expected that the majority of the students should participate more in studio classes.

Close to nine out of ten (85%) students were admitted through the UTME; 97.6% earned less than ₦30,000.00 (about 34 USD as at the time of survey) per month, implying that most of the students were full time students, not engaged in any business or employment. Personal interaction with some of these students revealed that their general low income status made them unable to purchase and own expensive instruments that are needed for studio practical. This adversely affecting their participation in studio classes. Less than a quarter (24.8%) of the students resided within less than a kilometre to the campus, while 25.6% resided at least four kilometres away from the university campus, implying possible influence of hostels' distance on participation in studio classes.

Table 1: Socio-Economic Characteristics of the students

Socio-Economic Characteristics		Frequency	Percent
Sex	Male	171	83.0
	Female	35	17.0
	Total	206	100.0
Age	Less than 21 years	104	50.5
	21-30 years	101	49.0
	31-40 years	1	0.5
	Total	206	100.0
Marital status	Single	205	95.5
	Married	1	0.5
	Total	206	100.0
Religious affiliation	Christianity	161	78.2
	Muslim	45	21.8
	Total	206	100.0
Mode of Admission	Pre-Degree Sci.	31	15.0
	UTME	175	85.0
	Direct Entry	0	0.0
	Total	206	100.0
Monthly income	Less than ₦30,000.00	201	97.6
	₦31,000.00 - ₦50,000.00	5	2.4
	₦51,000.00 - ₦90,000.00	0	0.0
	Total	206	100.0
Hostel proximity	Less than 1km	51	24.8
	1 – 2km	36	17.5
	2 – 3km	45	21.8
	3 – 4km	21	10.2
	4 – 5km	28	13.6
	Above 5km	25	12.1
Total	206	100.0	

Source: Author’s Field survey, 2022

Association between Students’ Socio-Economic Characteristics, and Participation in Studio Classes

The results of Poisson correlation tests conducted on the possible association between students’ socio-economic status and participating in studio classes, presented in Table 2, revealed that only’ mode of admission’ had significant association of 0.356 on students’ participation on studio work at the significance level of 0.05. It can therefore be deduced that, none of the socio-economic indicators had any statistically significant association with students’ participation in studio work except students’ mode of admission. This result contradicts the assertion of some other scholars that were of opinion that classroom participation has link to personal variables like age, gender, race and/or ethnicity, and primary language as well as students’ levels of stress (Hirschy and Wilson, 2002; Howard, Zoeller and Pratt, 2006; Campbell, 2007). There are likely some other variables besides socio-economics variables that influence students’ participation in studio work. This might owe much to the fact that the majority of the student were admitted through the UTME, unlike the few that were admitted through the Direct Entry, did not have prior experience of studio work, which might adversely affect their level of participation.

Table 2: Influence of Socio-Economic Characteristics on Student's participation

		Sex	Age	Marital status	Religion	Mode of admission	Monthly income	Hostel Proximity	Level of participation
Sex	Pearson Correlation	1							
	Sig. (2- tailed)								
	N	206							
Age	Pearson Correlation	.007	1						
	Sig. (2- tailed)	.921							
	N	206	206						
Marital status	Pearson Correlation	.142	-.080	1					
	Sig. (2- tailed)	.041	.253						
	N	206	206	206					
Religion	Pearson Correlation	.100	.004	.125	1				
	Sig. (2- tailed)	.151	.956	.073					
	N	206	206	206	206				
Mode of admission	Pearson Correlation	.097	-.075	-.014	.033	1			
	Sig. (2- tailed)	.165	.286	.841	.637				
	N	206	206	206	206	206			
Monthly income	Pearson Correlation	-.132	-.084	-.060	-.083	.261	1		
	Sig. (2- tailed)	.059	.228	.388	.234	.000			
	N	206	206	206	206	206	206		
Hostel Proximity	Pearson Correlation	-.016	.086	-.155	-.145	.231	.201	1	
	Sig. (2- tailed)	.822	.217	.026	.038	.001	.004		
	N	206	206	206	206	206	206	206	
Level of participation	Pearson Correlation	.040	.017	-.052	.083	.356	-.042	.166	1
	Sig. (2- tailed)	.573	.809	.454	.238	.000	.546	.017	
	N	206	206	206	206	206	206	206	206

Source: Author's Field survey, 2022

Further investigations on statistical significance of the above association between the students' socio-economic characteristics and participation in studio classes, using the analysis of variance (ANOVA) revealed that no statistically significant difference exist ($P < 0.05$) in terms of students' participation in studio work and their socio-economic attributes, with exception of the marital status (Table 3). This suggests that, regardless of any socio-economic attribute of the students, with exception of marital status, their level of participation in the studio work remains the same. The marital status that revealed significant difference in students' participation in studio work is in line with the claim of Hirschy and Wilson (2002; Howard,

Zoeller and Pratt (2006) and Campbell (2007) who were opinion that classroom participation has relationship with personal variables like gender and students' levels of stress. Personal interaction with only married female student among the respondents confirms that, it is stressful for married female students to combine the rigour in studio work with family activities at home if not for the assistance of the colleagues in the class.

Table 3: One-way ANOVA test showing the influence of socio-economic on students’ participation in studio work

		Sum of Squares	df	Mean Square	F	Sig.
Sex	Between Groups	9.954	18	.553	4.642	.000
	Within Groups	22.279	187	.119		
	Total	32.233	205			
Age	Between Groups	19.893	18	1.105	6.742	.000
	Within Groups	30.655	187	.164		
	Total	50.549	205			
Marital status	Between Groups	.722	18	.040	.494	.959
	Within Groups	15.200	187	.081		
	Total	15.922	205			
Religion	Between Groups	17.263	18	.959	8.931	.000
	Within Groups	20.082	187	.107		
	Total	37.345	205			
Mode of admission	Between Groups	8.549	18	.475	7.637	.000
	Within Groups	11.630	187	.062		
	Total	20.180	205			
Monthly income	Between Groups	31.132	18	1.730	4.396	.000
	Within Groups	73.572	187	.393		
	Total	104.704	205			
Proximity	Between Groups	132.428	18	7.357	9.327	.000
	Within Groups	147.499	187	.789		
	Total	279.927	205			

Source: Author’s Field survey, 2022. Significant at 0.05 level (two tailed)

Critical Factors Influencing Student’s participation in Studio Works

Critical Factors that influence Student’s participation in Studio Works were derived through the application of factor analysis technique. Four different dimensions were examined to measure these factors. These dimensions include students’ dimension, studio works dimension, drawing instrument dimension, design dimension and student environment dimension. The results of the Cronbach’s coefficient alpha of Reliability test and Kaiser-Meyer-Olkin (KMO) of Validity test justify that the factor analysis can be employed to determine the critical factor among these four dimensions. The application of latent root criterion reveals the extraction of various factors but factors having values greater than 1 but with only loading values which are greater than 0.5 are initially considered. At the final stage, the use of varimax orthogonal rotation of principle component analysis to group the factors was adopted. The factor with more than two variables as shown in Table 4 are considered as the critical factors that influence student’s participation in studio works while the remaining factors with only two variables or less are considered as residual factors and are not considered as the critical factors.

The following factors were therefore considered as the critical factors that influence student’s participation in studio works.

Student’s Knowledge on the use of drawing instruments and software: There are seven variables that contribute to the knowledge on the use of drawing instruments and software. These are either related to the accessibility to the previous studio works, materials, use of drawing instruments and software as well as

interpersonal relationship with colleagues. These include Going through the previous Studio works; Confidence in working with software; Adaptation to drawing instrument and software; Downloading useful materials for studio Work; Searching information through books and internet; Desire to ask questions from class mates for enlightenment and Studying books on studio works. Accessibility to the previous studio works enlighten students on how to handle their work. This serves as sample for what the Lecturers or Technologists handling the studio works expect. The level of student's confidence in handling or using drawing instruments and software depends on the skill such student possess in using the drawing instruments and software. This influences their participation in the studio works. A student that cannot easily adapt to the use of drawing instrument and software will find it difficult to participate in studio work. Enlightenment through useful materials, books, internet and interpersonal relationship with colleagues can also increase students' knowledge on studio work and how tasks should be done. This will consequently assist in solving many challenges during the course of working on their own and thereby enhance their participation in studio work.

Table 4: Factor Analysis Loading Results

Factors	Components					
	CF1	CF2	CF3	CF4	CF5	CF6
Going through the previous Studio works	.914					
Confidence starting software	.908					
Adaptation to drawing instrument and software	.836					
Downloading useful materials for studio Work	.730					
Searching information through books and internet	.726					
Desire to ask questions from my class mates for enlightenment	.685					
Studying books on studio works	.658					
Ability to schedule studio work with other assignment		.955				
Ability to manage classes participating in Studio work		.895				
Ability to arrange and combine studio works with other class work		.748				
Quality of studio work contents compared to other courses			.710			
Advantages in studio participation compared to disadvantages			.646			
Having studio work as source of interest in discipline			.624			
Flexibility of software				.950		
Ease of software usage				.934		
Software flexibility				.840		
Simplicity in use of software				.833		
Ease in achieving desired result					.791	
Ease in participating					.775	
Ability of participation to enhance productivity					.706	
Quality of group discussion						.839
Serving as aid to learning						.833
Quality of learning						.829

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.a

a. Rotation converged in 15 iterations.

Source: Author's Field survey, 2022

Studio Work Schedule/Task management: Ability to schedule studio work with other assignments, Ability to manage class's participation in Studio work and Ability to arrange and combine studio works with other class work are the variables that constitute Schedule/Task management. With these, student possesses the capability to schedule his daily routine to ascertain that no other assignment or class work affect his participation in studio work.

Studio Work Interest in the discipline: The quality of Studio work done by the students compared with their performance in other courses within the discipline indicates their interest in the discipline. Urban and Regional Planning is practical oriented profession. Anyone that is not interested in practical work will lack interest in the profession. As a result, students participating in the studio work will know its benefits. This will improve their skill in the profession and prepare them for the future task.

Drawing Software Usage: The flexibility of software makes it easy and simple for the students to use. The consultation of the students with book and internet to find more information on how to go about the studio work make it easy and simple for the students to use the required software in the discipline. The use of required software makes the studio work easy, simple and interesting. This consequently influences students' participation in studio work and enhances their productivity.

Efficiency in Design Participation: Students are efficient in participating in studio work. As a result of cooperation among themselves through interaction, it is very easy for them to achieve desired result and they do not find it difficult to participate. This consequently enhance students' productivity. Students who are able to achieve desired result in the discipline when participating in studio work will feel more fulfilled and be encouraged to participate more in future studio work which also make it easy to participate further in order to be more productive.

Students' Environment: This informed the quality of interaction among students. The quality of group discussion among the students aids learning and quality of learning. The quality of group discussion during studio work encourages and aids students to learn from one another. Conducive students' environment enhances better student-to-student relationship to improve their knowledge and practical skills in their carrier.

Level of Students' participation in Studio work

Various variables are used to determine the level of students' participation in studio work. Level of Participation Index (LPI) was developed to measure the level at which the students participate in Studio Work. Students' responses were rated into five classes to calculate the level of agreement to the variables. Fourteen variables were rated in respect to Likert scale as either "Strongly Agree", "Agree", "Neutral", "Disagree" or "Strongly Disagree" to understand the general attitude of students towards Studio Work and each of the rating were assigned a weight value of 5,4,3,2 and 1 respectively. The Overall Sum of Weighted Value (OSW) was calculated by adding the products of the frequency of response to each identified variable and the weight attached to each rating as shown in Table 5. For example $(a \times 5) + (b \times 4) + (c \times 3) + (d \times 2) + (e \times 1)$.

The result on students' level of participation at LAUTECH reveals the average mean of 3.16. Variables with the Level of Participation Index (LPI) above the average mean include: "Participated in a group work", "Participated in questionnaire administration", "Worked on Studio Work assignments that require drawing instruments", "Worked with other students on Studio Work", "Discussed ideas with classmates about Studio Work", "Engaged in group discussions about a Studio Work assignment", "Worked on Studio Work assignments that require drawing software", "Spent the night participating in Studio Work", "Worked harder than you thought you could on Studio Work" and "Worked hard to master difficult aspect of Studio Work" which have the value of 4.09, 3.88, 3.75, 3.65, 3.60, 3.53, 3.52, 3.51, 3.49 and 3.31 respectively. This implies that, majority of the students in the university participate in studio work. The fact that the Level of Participation Index (LPI) of these variables is above the average mean value indicates that the level of students' participation in studio work is high. "Participated in a group work" has the highest average value of 4.09.

Table 5: Level of Students' Participation in Studio Work

S/N	Level of Participation	Ratings					OSW	SW (NR)	LPI = OSW/SW	\bar{X}	$d =$ $\frac{(X - \bar{X})}{\bar{X}}$	d ²
		5	4	3	2	1						
1	Participated in a group work	490	236	60	56	1	843	206	4.09	4.09	16.7281	
2	Participated in questionnaire administration	460	184	60	94	1	799	206	3.88	3.88	15.0544	
3	Worked on Studio Work assignments that require drawing instruments	390	156	150	76	1	773	206	3.75	0.59	0.3481	
4	Worked with other students on Studio Work	355	192	117	78	9	751	206	3.65	0.49	0.2401	
5	Discussed ideas with classmates about Studio Work	310	188	150	92	1	741	206	3.60	3.60	12.9600	
6	Engaged in group discussions about a Studio Work assignment	290	160	186	90	1	727	206	3.53	3.53	12.4609	
7	Worked on Studio Work assignments that require drawing software	290	236	63	136	0	725	206	3.52	0.36	0.1296	
8	Spent the night participating in Studio Work	255	236	156	66	11	724	206	3.51	0.35	0.1225	
9	Worked harder than you thought you could on Studio Work	295	156	153	114	0	718	206	3.49	3.49	12.1801	
10	Worked hard to master difficult aspect of Studio Work	160	268	123	128	2	681	206	3.31	0.15	0.0225	
11	Prepared my Studio Work assignments days before submission	90	272	150	116	12	640	206	3.11	-0.05	0.0025	
12	Be taught or be tutored by university student on a studio assignment	145	164	90	96	58	553	206	2.68	-0.48	0.2304	
13	Sought advice from Lecturers or Technologists on Studio Work	90	40	150	102	77	459	206	2.23	-0.93	0.8649	
14	Tutored or taught other university students on a studio assignment (paid or voluntary)	105	68	84	116	82	455	206	2.21	-0.95	0.9025	
TOTAL									25.28			2.6327

Source: Author's Field survey, 2022. (Note: 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree)

This implies that, there is agreement among the students to work together as team since the studio work is a team work and no student can work in isolation. However, "Prepared my Studio Work assignments days before submission", "Be taught or be tutored by university student on a studio assignment", "Sought advice

from Lecturers or Technologists on Studio Work” and “Tutored or taught other university students on a studio assignment (paid or voluntary)” with average values of 3.11, 2.68, 2.23 and 2.21 respectively have the average value that is less than the average mean value of 3.16. This implies that these variables are less important in determining the level of students’ participation in studio work. It can therefore be inferred that, planning students at Ladoke Akintola University of Technology, Ogbomosho, Nigeria can work independently without or with little supervision after the studio work might have been assigned to them. This is resulted from the fact that, cooperation, handwork, the use of drawing instruments and software, sharing of ideas and discussion among the students assisted them in their studio work and other practical assignment.

Conclusion and Policy Implications

This study assessed Students’ participation in Studio Work in tertiary institutions, using Ladoke Akintola University of Technology (LAUTECH) as a case study. The result revealed high level of students’ participation in Studio Work. However, advice from Lecturers or Technologists on Studio Work has less significance in students’ participation in studio work compared with other factors such as their participation in a group work, questionnaire administration, working with other students on studio work and discussing ideas with classmates about Studio work as well as engaging in group discussions about a studio work assignment, working on studio work assignments that require drawing software and spending night in studio work. This study focuses on the students’ perception and the administration of the questionnaire is limited to them. This can therefore be considered as a limitation to this study. The study can be replicated among the Lecturers and Technologists to determine their own perception on students’ participation on studio work. In addition, the future investigation can also be made to include both the students and the Lecturers as well as Technologists in the survey in order to have cross-sectional results between the students and the staff. The results from future investigations will therefore compliment the present one to formulate policy in encouraging the students in participating in studio work as well as proven the efficiency of the Lecturers and Technologists.

Although some Lecturers and Technologists may have reservations about having personal relationship with students because of the fear of losing their authority and the need to preserve classroom discipline, the author is of opinion that Lecturers and Technologists need to build and improve their personal relationship with students in order to influence students' participation in studio work and achieve their greater productivity. Otherwise, some students may view such behaviour in a different perspective. This will enable them to impact practical knowledge of the discipline on students. The availability of Technologists through their personal relationship will also enable them to give comprehensive explanations on the process involved in carrying out every studio work and other practical assignment. This will reduce the complexity of the studio work and become more interesting to the students. Through these, time spend during night on studio works and other practical assignments by the students will be reduced and consequently help them to complete their assignment on time. Students should give priority to reorganisation and restructuring of studio work schedule to give more time for studio work and other practical courses during the day. Proper monitoring and correction by both the Lecturers and the Technologists as the studio work progress will enhance quality of the work. Well-equipped computer laboratory with necessary software should also be provided for students to carry out their studio work.

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