

Town Planning Education: A Survey Of Students' Entrance, Performance And Prospects In Auchi Polytechnic, Auchi, Nigeria

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Abstract: Several empirical researches have been carried out to explore factors affecting students' choice of career path and academic performance. This paper examined relationship between modes of entrance into planning studies and academic grade performance, as well as factors that influenced choice of career in town planning education in Auchi polytechnic. Data were provided by 190 male and 70 female on a cross-sectional survey (N=260). SPSS was used to analyse data. Statistically significant relationships albeit, with inverse implication, at .05 level, were demonstrated in bivariate analysis between mode of entrance and GPA. The Chi-square test statistics revealed that students' academic performance depend on their modes of entrance into the programme ($X^2=198.71$, $p < 0.05$) with Cramer's $V = 0.62$; concluding that the Pre-ND programme did not impact on the quality of planning education. The paper recommended admission policy that permits change of course to town planning studies should be further encourage, with adequate orientation and career counseling programmes in the department.

Keywords: Town planning, Education, Mode of entrance, Academic performance, Career choice, Polytechnic, Auchi

1. INTRODUCTION

The present state of most worlds' settlements particularly the developing countries reflects a crisis state of multidimensional nature in terms of planning, functionality, management and sustainability. The scale and complexity of human settlement problems – physical, environmental, social, economic, is massive and attest in part, to the poor physical planning administration and management. Technical manpower and human resource development in town and regional planning is fundamental in order to revitalize core areas of settlements and secure livable, functional and sustainable settlements. Adequate training in planning education and practice will address the challenges of human settlements, robust articulations and implementation of efficient settlement policies geared towards sustainability. Town planning education and professionalism here embraces a branch of systemic knowledge and proficiency that seeks to build, reconstruct, plan, design, and develop sustainable communities with respect for both the natural environment and human nature in an intricate systemic sequence through disjointed incremental approach of the human habitat in cognizance with the complex tangle of physical, environmental, political, socio-economic and cultural priorities, pressures and constraints aimed at developing knowledge, skills and capabilities in individuals (Odufuwa, 2008).

Adeyeye (2008) chronicled the development of town planning education in Nigeria. Before Independence, the earliest persons in urban planning were geographers who trained abroad. Planning education in Nigeria begun in 1961 at The Polytechnic Ibadan. Later in 1974 and 1977 the Higher National Diploma (HND) and Full Professional Diploma (FTP) commenced respectively. The second planning school, Yaba college of Technology took off in 1972; while the first planning school in the north Nigeria was established in 1973 at Kaduna Polytechnic as Department of Town Planning and Estate Management; next is Auchi Polytechnic in 1974 as Department of Estate Management and Town Planning. At present, several universities and polytechnics offer planning education in Nigeria. In spite of these planning institutions, the number of qualified town planning professionals needed to marshal planning practice and administration in Nigeria are too few. Going By the last TOPREC induction ceremony in July, 2012 only 2700 planners qualify for practice in Nigeria (TOPREC, 2012). The necessity is compounded by the paucity of technical manpower and professionalism. This has led to travesty and the actions of quacks which further exacerbates the worsen settlement management problems. Against the backdrop of the foregoing there is a critical need to provide enabling Institutions for planning education in Nigeria. The objectives of this study are expressed in the following research questions: What are the motivating factors that influence students into urban and regional planning studies? Is there any association between mode of entry and students grade performance in urban and regional planning studies? Are students who originally choose urban and regional planning course at the UME level better in academic performance than those who chose urban and regional planning course on a second thought(change of course)?

2. LITERATURE REVIEW

From a survey of related literatures (Muggonzibwa et al, 2000; Pappu, 2000; Apori et al, 20003; Morenikeji & Shuaibu, 2006) on factors influencing students' choice of career reveals a miscellany of factors. The factor can be broadly identified as individual student characteristics and

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inert motivations, career prospects and nature of industry; and career counseling. At the individual level, some students pursue a particular career due to inert capabilities or have fit for the job personality endowment for the course. Others are either influenced by parents or incidentally take to a particular career as immediate option open to them when they fail to meet the minimum mandatory requirements original course they initially intended (Morenikeji & Shuaibu, 2006). The prospects and lucrative of a career in terms of nature of job, emolument, pleasant work environment, flexibility, intellectual stimulations, job security, prestige etc, do influence career choice (Pappu, 2000). The study of Muggonzibwa et al (2000) amplifies the role of guidance and counseling. One of the major tasks students face and have to overcome is the development of personal and career readiness. Super (1984) introduced the concept of career readiness or career maturity in his career developmental theory and defined it as one's readiness for career decision making. Thus, one's readiness toward a career is a manifestation of one's career maturity. Career readiness or maturity therefore is a continuous development process that can be segmented into a series of stages and tasks. These are orientated toward work, planning, consistency of vocational preference and wisdom of vocational preferences. Together with this process, individuals should increasingly gain the ability and skills to make sound career decisions. Failure to do so results in career indecision. Slaney (1988) noted that career indecision has been used to refer to the problems individuals may have when making career decisions. Guay et al., (2003) postulated that career indecision is one major career-related problem students have to contend with and has been a major focus of vocational research over the last few decades. Swanson and D'Achiardi, (2005) added that this includes the antecedents that may influence or delay their decision on making a career choice. Individuals who are undecided often delay the process of making career-related decisions while they acquire additional information about themselves, occupations and the world of work, or the decision-making process. Therefore, knowledge of student's career indecision will help to predict whether they are considered as 'decided' or 'undecided' on their career choices. In line with this, Callanan (2006) suggested that information on student's career indecision helps personnel dealing with students and educators to understand factors that might explain student's inability to choose an occupation or major field of study. Trusty and Niles (2004) found that relationship exists between career indecision and student's achievement of self-awareness, knowledge of occupations and the development of planning capability. Naidoo (1998) too provides evidence that career indecision can be influenced by age, race, and ethnicity, locus of control, socioeconomic status, work salience, and gender. Akos and his colleagues (2004) found a correlation between midyear calculations of Grade-Point Average (GPA) and career indecision and suggested that career indecision might relate to scholastic aptitude, as a cognitive career choice process. Blinne and Johnston (1998) in their three-year longitudinal study found no relationship between academic achievement and career indecision in a college student population. However, study by Hampton (2006) revealed that career indecision is not related to GPA and mathematics achievement respectively. A career is a

sequence of jobs an individual holds during one's work history. While success in one's career is a natural expectation of individuals, the nature of that success depends on what one expects from it. Indeed individuals have different definitions of career success based on their assessment of their career prospects (Ebadan & Winstanley, 1997). Career success has been operationalised by objective and subjective measures. Objective measures of career success pertain to those that can be observed and verified by others (Judge et al., 1995). Several researchers have studied career success using objective measures such as total compensation (Kraimer & Liden, 2001; Whitely, Dougherty & Dreher, 1991), number of promotions (Whitely, Dougherty & Dreher, 1991; Whitely & Coetsier, 1993), and current pay grade (Daley, 1996). Subjective measures of career success (Judge et al., 1995) pertain to the individuals' own judgment of their career attainment. Studies on subjective career success used measures such as career satisfaction (Kraimer & Liden, 2001), job satisfaction (Judge et al., 1995), advancement satisfaction (Martins, Eddleston & Veiga, 2002), and perceived career success (Turban & Dougherty, 1994), among others.

3. RESEARCH SETTING AND METHOD

The setting for this research is the department of Urban and Regional Planning, Auchu Polytechnic, Auchu, Edo State, Nigeria. Auchu Polytechnic is one of the first Generation Polytechnic in Nigeria and the only tertiary institution in the former mid-western states and now the South-South geopolitical zone to offer courses in Professional Town Planning. It began as a Technical College in 1963, and later converted to a full-fledged Mid-western State of Nigeria Polytechnic with the mandate to produce middle-level technical manpower for the economy in a limited range of Engineering and Business subjects. In 1974, the name of the institution was changed to Auchu Polytechnic, Auchu and assumed the status of a federal institution in 1994, following the take-over of the polytechnic by the Federal Government. The department of Town Planning was established in 1974/75 as the Department of Estate Management/Town Planning in the School of Engineering. At its inception, the department offered a combined programme leading to the award of National Diploma (ND) in Estate Management/Town Planning. This position remained unchanged until 1978/79 session when the Department started to offer separate programmes in Estate Management and Town Planning respectively, albeit under one leadership. In 1981, the Department of Estate Management and Town Planning was moved from School of Engineering to School of Environmental Studies. It became a department of its own from 11th November, 1985 when erstwhile Department of Estate Management and Town Planning was split into two separate respective departments with different headships. The product of the ND programme graduated in July, 1978 while the first set of HND Graduates passed out in July, 1980. In 1996, the Post-HND programme was established, to cater for more professional manpower production. Ever since, the ND, HND and Post-HND programmes of the Department have enjoyed both academic and professional accreditation by the National Board for Technical Education (NBTE) and the Town Planners Registration Council (TOPREC) of Nigeria.

The focused group for this research is the 2010/2011 session students in the various levels of the Urban and Regional Planning Training in Auchu Polytechnic. It was a cross-sectional survey of the 260 students in the programme (NDI: 58, NDII: 47, HNDI: 62, HNDII: 62 & Post HND I&II: 31). In order to eliminate sampling error/bias and for the fact that the total population (260) is not too large, the research employed total sampling technique, by ensuring that all students in the various classes were administered with structured questionnaire, on their socio-economic and academic profiles right in their classes and requested to fill and returned to the researcher. The responses via questionnaires were coded and analyzed using Statistical Package for Social Science (SPSS) version 11. Descriptive and inferential analysis was done to examine the effects of peculiar variables on students' choice of study, academic performance, and future career paths.

4. ANALYSIS AND DISCUSSION OF DATA

4.1 Students' Background

Gender-wise, male students dominate in the study with 73.1% against 26.9% for female. This gender skewness is in line with an earlier and similar work by Morenikeji and Shaibu (2006) where in male dominance is evident among the planning students in Five Nigeria University. This perhaps could be explained by the studio and field practical base of the course. However, this findings confirms / collaborate the conclusion in literatures about the glaring imbalance between male / female in enrolment, attendance and completion rates at all levels of education in Nigeria due to socio-cultural and religions factors (Ogboagu, 2009; APRM, 2008; Enem 2008; and Ikpenrua, 2005). The mean age of the students surveyed was 25 years. The mean Last Grade Point Average (GPA) was 2.8 (Lower Credit) with a distribution of 60.4% for lower credit, 29.2% pass and 10.4% upper credit. This average performance, though, not adequate for a sound practice of the profession in view of the challenges to manage cities in the future, could be explained by the entry mode and qualifications of the students, learning difficulties in school and reason for choosing Town Planning as a course of study as reflected in Table 1.

4.2 Prospects of Town Planning Profession as a Future Career Path.

From Table 2, only 23.1% of the students intentionally choose Town Planning as their desired course of study leading to a life career, 38.5% were influenced by their parents while 38.5% eventually accepted the programme as a last resort when the admission to their intended course failed them. On the aggregate therefore, most of the students interviewed 77.0% got into the planning programme against their wish. The conclusion also confirms the findings of Morenikeji and Shaibu (2006). It does mean that only few of the students would be willing to practice the profession as a life career; as Table 2, also indicates on the aftermath of Town planning study that as few as 6.5% are willing to join public planning organization 15.8% would seek higher degree in planning, while as much as 77.7% in aggregate would go into business or seek any other profitable jobs / employments; even though

98.1% of the respondents consider the practice of the profession is interesting with as much as 92.3% indicated having no regret studying town planning.

4.3 Students' Approach and Attitude to the Planning Programme

From Table 3, most of the students (52.7%) entered into the programme through Preliminary Studies known as Pre-ND, 26.9% came in through Direct Unified Tertiary Matriculation Examination (UTME), while 20.4% entered the programme through U.T.M.E change of course when they failed to secure admission into their initial course of choice. The student whose original course was not Town Planning cited courses in Business Studies (50.8%), Engineering (29.2%), Information and Communication Technology (6.9%), Applied Sciences (6.5%) among others as their originally preferred course of study. With respect to entry qualifications only few could meet the basic 5-credit at one sitting requirement. It explains why most of the students entered the programme through remedial studies. From Table 3, only 36.9% had five credits at entry including Mathematics and English Language, while 63.1 lacked basic entry qualifications. Areas of subject interest among the students on Table 4 showed that Theoretical subjects (40.4%) followed by Design (23.1%) and Quantitative analysis (21.2%) are the most interesting to students while Term paper/ Seminar scored the subjects with the least interest (15.4%). On aspects they find not interesting among subjects on the order of percentage score are term paper/ Seminar (37.3%), Quantitative analysis (30.8%), Design (18.5%) and Theory (13.5%). This was almost the picture with the findings of Morenikeji and Shuaibu (2006:23). On areas of learning difficulties in school, attitude of lecturers ranked high with 27.7%. Other factors are buying of design studio materials (26.5%), method of teaching (18.8%), and academic calendar (13.8%) among others. In line with the findings of Morenikeji and Shuaibu (2006:23), Table 5 showed that as many as 91.9% of the respondent agreed that the prospect of Town Planning in Nigeria is very bright. Among others only 2.3% considers the prospect bleak. On the wish of the students after graduation, 72.3% indicated they would pursue professional registration with the Town Planners Registration Council (TOPREC) to qualify them for professional practice while 27.7% intends to diversify from planning into other discourse. In terms of preference for other built environmental courses, 93.5% of the surveyed students indicated preference for town planning while 6.5% preferred other related environmental courses.

4.4 Hypothetical Findings on Mode of Entrance and Academic Performance

The hypothesis that students' academic performance depends on the mode of entrance to the programme was tested using the Chi-square test. Being a non-parametric test, the general assumption on the randomness of samples and independence of observation were satisfied by the data. Specifically, the assumption on Chi-square that the lowest expected frequency in any cell should not be less than 5 was also satisfied. The analysis revealed that '0 cells (.0%) have expected count less than 5' (in our case, greater than 5.50) see Table 6b. The Chi-square test statistics result reveals that Students Academic Performance

depends on their mode of entrance to the programme as, $X^2(4, n=260) = 198.71, p = 0.001$ (See Table 6b). This means that the mode of entrance of students to Town Planning Programmes in Tertiary Institution has a significant impact on their academic performance. The effect size which is a correlation coefficient that can range from 0 to 1 with values indicating a stronger relationship between the two variables was also calculated. The result as shown in Table 6c reveals Cramer's $V = 0.62$, which is considered as large effect using Cohen's (1988) criteria of 0.07 for small effect, 0.21 for medium effect and 0.35 for large effect. The percentages of each mode of entrance to the programme that had Pass; Lower Credit and Upper Credit are shown in Table 6a and Figure 1. The table revealed that all the students that had Pass, entered the programme through Pre-ND, while only 38.9% of the students that entered through Pre-ND had Lower Credit with none at the Upper Credit Grade. Also surprising in the output is that all the students that had Upper Credit Grade entered the programme through Unified Tertiary Matriculation Examination (UTME Change of Course). These are students who though entered the programme through U.T.M.E, but did not originally seek to study Town Planning as their 1st and even 2nd choice.

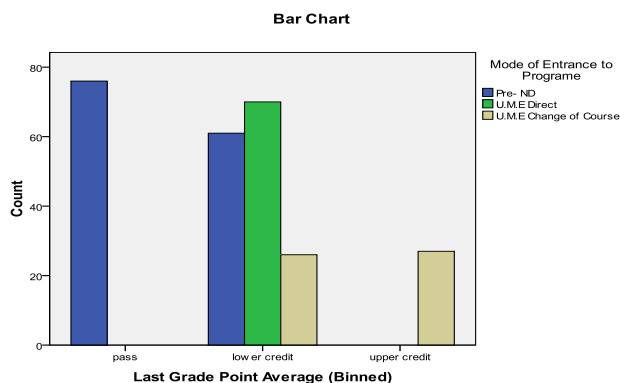


Fig. 1: Measures between Mode of Entrance and Grade Point Average.

5.0 Conclusion and Recommendations

Students' choice of town planning is influenced by numerous factors including parental influence, personal choice and optional resort due to inability to secure desired admission. Those who came in through Pre-ND had deficiency in the basic entry requirements, and such could not even perform in terms of grades compared to those who came in through UME, even though they had preliminary exposure to basic town planning studies. Interestingly, even when majority of respondents had no regrets studying town planning and found the course interesting, only few intends to pursue post graduation career in town planning. Base on the research findings the study recommends the following:

1. The Pre-ND programme did not impact on the better course orientation and grade performance on the students. The Pre-ND programme for town planning should be scraped; however, admission policy that permit change of course to town planning studies should be further encourage, with

adequate orientation and career counseling programmes in the department.

2. Core foundation courses should be assign to very senior and experienced lecturers in the department so that new entrant would be tutored and grounded on the rudiments and principles on which to build future studies and professional development on. This will make it easy for the students to grapple with the course at higher classes.
3. Senior and experienced course adviser should be assign to the ND1 and HND1 to provide students counseling that expand their exploration process and wide range of information on the available specializations in town planning education.
4. NITP and TOPREC should facilitate professional accreditation of planning programmes in Nigerian polytechnics and Universities, so as to increase the number of institutions offering professional town planning courses; as well as boost the numbers of town planning graduates to meet the manpower demand for planning practice.
5. NITP and TOPREC should vigorously pursue advocacy for appreciation of planning practice and image laundering. This is to check the disincentives associated with the Institute, Council and profession in Nigeria. This will engender in prospective students and practicing planners the respect and commitment necessary to make effective community consultations and interdisciplinary collaboration crucial to town planning practice.
6. Flexible and liberal opening should be encouraged among other environmental professionals who are interested in town planning education, to promote multi-skilled professionals in addressing the multi-dimensional and complex planning problems of society.

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APPENDIX

Table 1: Gender and Last Grade Point (GPA) of Students

VARIABLES	FREQ.	PER. (%)
Student Gender:		
Male	190	73.1
Female	70	26.9
Total	260	100
Grade Point Av. (GPA):		
Pass	76	29.2
Lower Credit	157	60.4
Upper credit	27	10.4
Total	260	100

Source: Authors Field Work, 2011

Table 2: Why Town Planning, Aftermath, Practice and Regret Studying Town Planning

VARIABLES	FREQ.	PER. (%)
Why Study of Town Planning:		
My wish	60	23.1
Parents wish	100	38.5
Last Resort	100	38.5
Total	260	100
Aftermath of Plg. Study:		
Seek Higher Decree in Plg.	41	15.8
Join Public Plg Organization	17	6.5
Seek Profitable Employment	95	36.5
Go into Business	107	41.2
Total	260	100
Practice of Town Plg Prof.:		
Interesting	255	98.1
Not Interesting	5	1.9
Total	260	100
Regret Studying Town Plg.:		
Yes	20	7.7
No	240	92.3
Total	260	100

Source: Authors Field Work, 2011

Table 3: Mode of Entrance, Intended Course and Number of Credit including Maths & Eng.

VARIABLES	FREQ.	PERC. (%)
Mode of Entrance to Prog.:		
Pre-ND	137	52.7
UTME (Direct)	70	26.9
UTME (Change of Course)	53	53
Total	260	100
Intended Course/School:		
Engineering	76	29.2
Business Studies	132	50.8
Applied Sciences	17	6.5
Info. And Communication	18	6.9
Others	17	6.5
Total	260	100
Five Credit at Entry Including Maths & English:		
Yes	96	36.9
No	164	63.1
Total	260	100

Source: Authors Field Work, 2011

Table 4: Most Interested/Dislike Area in Town Plg. Education and Learning Difficulties

VARIABLES	FREQ.	PER.(%)
Most Interested Area in Town Plg Educ.:		
Design	60	23.1
Theory	105	40.4
Quantitative Analysis	55	21.2
Term Paper/Seminar	40	15.4
Total	260	100
Most Dislike Area I Town Plg Educ.:		
Design	48	18.5
Theory	35	13.5
Quantitative Analysis	80	30.8
Term Paper/Seminar	97	37.3
Total	260	100
Learning Difficulties in School:		
Buying of Books	10	3.8
Buying of Design Materials	69	26.5
Attitude of Lecturers	72	27.7
Method of Teaching	49	18.8
Academic Calendar	36	13.8
Subject Difficulties	24	9.2
Total	260	100

Source: Authors Field Work, 2011

Table 5: Town Plg Prospect, Student Wish and Preference for other Environmental Courses

VARIABLES	FREQ.	PER. (%)
Town Plg. Prospect in Nigeria.:		
Very Bright	239	91.9
Average	15	5.8
Bleak	6	2.3
Total	260	100
Wish as a Town Plg Student.:		
To be a Chartered Planner	188	72.3
To Diversify	72	27.7
Total	260	100
Prefer other Environmental Courses:		
Yes	17	6.5
No	243	93.5
Total	260	100

Source: Authors Field Work, 2011

Table 6a: Crosstabulation between GPA and Mode of Entrance

			Mode of Entrance			Total
			Pre-ND	U.M.E Direct	U.M.E Change of Course	
			Count	76	0	
Last GPA	Pass	% within GPA	100.0 %	.0%	.0%	100.0 %
		% within Mode of Entrance	55.5 %	.0%	.0%	29.2%
		% of Total	29.2 %	.0%	.0%	29.2%
		Count	61	70	26	157
Lower credit	% within GPA	38.9 %	44.6%	16.6%	100.0 %	
	% within Mode of Entrance	44.5 %	100.0 %	49.1%	60.4%	
	% of Total	23.5 %	26.9%	10.0%	60.4%	
	Count	0	0	27	27	
Upper credit	% within GPA	.0%	.0%	100.0%	100.0 %	
	% within Mode of Entrance	.0%	.0%	50.9%	10.4%	
	% of Total	.0%	.0%	10.4%	10.4%	
	Count	137	70	53	260	
Total	% within GPA	52.7 %	26.9%	20.4%	100.0 %	
	% within Mode of Entrance	100.0 %	100.0 %	100.0%	100.0 %	
	% of Total	52.7 %	26.9%	20.4%	100.0 %	

Table 6c: Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.874	.000
	Cramer's V	.618	.000
N of Valid Cases		260	

Table 6b: Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	198.712 ^a	4	.000
Likelihood Ratio	205.915	4	.000
Linear-by-Linear Association	128.874	1	.000
N of Valid Cases	260		

- a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.50.
- b.