BRIDGING THE GAP OF MANPOWER TRAINING FOR STATISTICS EDUCATION IN NIGERIAN COLLEGES OF EDUCATION: AN EMPIRICAL EVALUATION OF SOME SELECTED COLLEGES IN SOUTH-WESTERN NIGERIA

Oluokun Kasali Agunloye
Department Of Statistics, University of Botswana
Gaborone, Botswana
K.Agunloye@yahoo.com

Despite the monumental awareness campaign mounted on the importance of statistics education by various national professional statistical organizations and some international agencies committed to the advancement of statistics education, statistics education is not yet accorded due priority attention that it deserves as an independent discipline at both primary and post-primary levels of education in Nigeria. In Nigeria as in most African countries, statistics is still being taught as an appendage under mathematics at primary and post-primary levels of education and this precarious situation explains the prevalent under-development of statistics education as an independent discipline. This paper examines the state of statistics education in some selected colleges of education in south-western Nigeria with respect to manpower training for statistics education at colleges of education level.

INTRODUCTION

The teaching and learning of statistics as an independent branch of knowledge is yet to be accorded its deserved attention in the scheme of things as far as Nigerian educational sector is concerned most especially at the primary, post-primary and colleges of education levels. Policy makers in educational sectors as well as government at all levels have continued to downplay the significance of statistics education at these crucial levels of education and this precarious scenario has continued unabated. In Nigeria, colleges of education are the traditional centres of training teachers for primary and secondary schools. Till date there exists no college of education that offers a program in statistics as an independent discipline.

Tulya Muhika(1982) argue that statistics as a subject is taught in Uganda and other East African countries at advanced level. Steffens (1998) attributed the problem of teaching statistics in Southern Africa to the poor level of the school mathematics among students with a proviso that the problem is more prevalent among rural students. Ogum (1998) also itemized reasons for low level of statistical education in Nigeria.

This study employed a survey research design using both quantitative and qualitative approaches. One hundred randomly selected students drawn from five colleges of education participated in this study. Our finding shows that most of these trainee teachers which are classified into two groups namely mathematics and non-mathematics students complete their training as professional teachers without being well-grounded in statistics education. The mathematics students which constitute the first group had a less significant upper hand over the non-mathematics students which constitute the second group in terms of acquisition of necessary statistical skills required to teach statistics at post-primary level.

RESEARCH QUESTIONS

- 1. What is the impact of lack of curriculum for statistics education at primary and secondary schools on college students' level of proficiency in statistics?
- 2. What is the effect of non-availability of adequate statistics courses on level of analytical statistical skills of college students?

RESEARCH DESIGN

The descriptive survey design was used for this study. One hundred questionnaires were distributed to the respondents drawn from five colleges of education out of twelve public colleges of education located in south-western Nigeria but only 95 questionnaires were completed and returned to the researcher. The respondents were part 3 students from the selected colleges of

education who have taken a course in research methodology. The respondents were selected through purposive sampling techniques. Data collected were analyzed using frequency counts and percentage scores.

RESULTS AND DISCUSSION

Research Question 1: What is the impact of lack of curriculum for statistics education at primary and secondary schools on college students' level of proficiency in statistics?

S/N	ITEMS	YES	%	NO	%
1.	Lack of curriculum for statistics education as a subject in primary schools has negative impact on students' level of proficiency in statistics	84	88.4	11	11.6
2.	Teaching statistics as an appendage under mathematics instead of being taught as a core subject like mathematics has negative impact on students' level of proficiency in statistics	91	95.7	04	4.3

Research Question 2: What is the effect of non-availability of adequate statistics courses on level of analytical statistical skills of college students.

S/N	ITEMS	YES	%	NO	%
1.	Taking a single course in research methodology does not equip the	60	63.2	35	36.8
	college students with sufficient analytical statistical skills required for				
	carrying out data analysis of the final year project				
2.	Non-availability of adequate general statistics courses for students	74	77.9	21	22.1
	has negatively affected students level of analytical statistical skills				

Analysis of responses to research question 1 revealed that 84 respondents representing 88.4% were of the opinion that lack of curriculum for statistics education as a subject in primary schools has negative impact on students' level of proficiency in statistics whilst the remaining 11 respondents representing 11.6% disagreed.Similarly,91 respondents representing 95.7% were of the opinion that teaching statistics as an appendage under mathematics instead of being taught as a core subject like mathematics has negative impact on students' level of proficiency in statistics whilst the remaining 4 respondents representing 4.3% disagreed. In responding to research question 2, 60 respondents representing 63.2% were of the opinion that taking a single course in research methodology does not equip the college students with sufficient analytical statistical skills required for carrying out data analysis of the final year project, whilst the remaining 35 respondents representing 36.8% disagreed.Similary,74 respondents representing 77.9% were of the opinion that non-availability of adequate general statistics courses for college students has negatively affected students level of analytical statistical skills whilst the remaining 21 respondents representing 22.1% disagreed.

CONCLUSION AND RECOMMENDATION

This paper examined the status of statistics education in some selected colleges of education in south-western Nigeria and it was discovered that statistics education is yet to be introduced as a course of study hence the dearth of professionally trained statistics educators. Another important discovery is the poor level of proficiency in statistics by the respondents for this study. As a way of bridging the gap of manpower for statistics education in Nigeria, it is recommended that the policy-makers in education industry should introduce statistics education into the curriculum of our colleges of education as well as the curriculum of our primary and post-primary schools. The best time to act is now.

REFERENCES

- Ogum, G.E.O. (1998). *Statistical education in Nigeria: Problem and Prospect*. Paper presented at the Fifth International Conference on Teaching Statistics, Singapore. http://iase-web.org/documents/papers/icots5/Topic5c.pdf
- Steffens, F. E. (1998). Statistical education in the African region: Private experiences in South Africa and Namibia. Paper presented at the Fifth International Conference on Teaching Statistics, Singapore.
 - http://iase-web.org/documents/papers/icots5/Topic5d.pdf
- Tulya-Muhika, S. (1982). Statistical education in schools in Uganda and other East African States. In V. Barnett (Ed.), *Teaching statistics in schools throughout the world* (pp. 199-209). Voorburg, the Netherlands: International Statistical Institute.