Comparative Performance Of Day And Boarding Students In Secondary School Certificate Mathematics Examinations: A Case Study Of Kasena-Nankana And Asuogyaman Districts Of Ghana

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ABSTRACT: This paper examined comparative assessment of performance of Day and Boarding students in senior secondary school certificate mathematics examination in Kassena-Nankana and Asuogyaman districts of Republic of Ghana. An ex-post facto research design was adopted, using a multistage probability proportion to size (MPPS) method to select the samples from the population used in this study. Out of 11 Secondary schools in the two districts 4 whose results were consistently released for years were selected for the study. Hypothesis was tested while the analyses of data were presented using t-test for differences between sample means. The study revealed that there was a significant difference between a student been a boarding student and day student. The study has implication for policy and practice in educational sector. [Academia Arena, 2009;1(4):7-10]. ISSN 1553-992X.

KEYWORDS: Performance, Day Students, Boarding Students, Senior Secondary School Certificate Mathematics Examination

INTRODUCTION

Evidence last show from students' reaction to mathematics in that not many of the students would sincerely want to go in for mathematics as a course of study in Higher Institution of learning. This is as a result of the erroneous impression created about Mathematics, that Mathematician is one of the most misunderstood people in the world just as the subject Mathematic. Most non-Mathematician see mathematics as just a theoretical and complex subject, with no practical applications especially in the "real world" they do not realize that Mathematical models ideas on which divisions are based and found in Mathematics, so mathematical foundations are needed. It is noteworthy to mention that right from childhood; in nursery classes, mathematics is one of the basic skill emphasied. This shows that mathematics forms the foundation of any solid education. Everybody is also aware that mathematics is the key to all field of studies be it the Sciences, Technology, Accounting and Social Sciences, or even Law in any University all over the world. But because of the quest for admission, majority of mathematics student reluctantly accept to study mathematics as a degree course.

As a result, the poor performance of secondary school student in the subject (mathematics) cannot be allowed to go unattended to. Hence the effort to look into the probable causes of students poor performance in the subjects and this paper will also try to dive into the comparative assessment of performance of day students and boarding students in secondary school certificate mathematics examinations, a case study in Kassenan-Nankana and Asuogyaman district in Republic of Ghana.

STATEMENT OF PROBLEM

Mathematic has been the impediment or hindrance to the progress of many students, out of all the subjects in the school curriculum it is mathematics that records the most woeful and heart-rending results in publicly-conducted examination. This disappointingly poor performance of students in mathematics year-in-year-out has been a constant source of concern, worry and anxiety to all stakeholders in the educational sector-governments, educationists, proprietors, principals, teachers, guardians etc. However, because of the failure rate that leads to the

research on the comparative assessment of performance of day students and boarding students in Senior Secondary School Certificate mathematics examinations,a case study of Kassena-Nankana and Asuogyaman districts in Upper East region and Eastern region of the Republic of Ghana respectively. Attempts were made to test the hypothesis below.

Ho: There is no significant difference between a Day student and a Boarding student they perform equally.

PURPOSE OF THE STUDY

The purpose of this work is to see the performance of a student been a day student or boarding student in relation to his/her senior secondary school mathematics examination.

MATERIALS AND METHODOS

The research study was conducted in the Kassena-Nankana District in Upper East Region and the Asuogyaman District in the Eastern Region. Four out of the eleven Secondary School in these districts were selected on the basis of
  (a) single sex school
  (b) public mixed school
  (c) private school
  (d) government coeducational school

STATISTICALLY ANALYSIS: Two schools each were selected from each district. Empirical descriptive research was carried out ex-post facto, and a multi-stage probability proportion to size (MPPS) sampling technique was used.

RESULTS ANALYSIS AND INTERPRETATION OF DATA ACCORDING TO THE QUESTIONNAIRES

Table I: Frequency distribution of students for Performance Analysis

REGION OF THE CHOICE OF SSS			SEX		Total
			Female	Male	
EASTERN	Schools	AKW	17	15	32
		AIS	12	11	23
		Total	29	26	55
UPPER-EAST	Schools	NDSS		30	30
		NAV	6	20	26
		Total	6	50	56

Table II: Residential status with course of study frequency distribution of Students for performance in terms of sex cross-tabulation

Sex			mathematics status		Total
			Non elective Maths student	Elective Maths student	
Female Residential status:	Boarder		57	17	74
	Day		47	11	58
	Total		104	28	132
Male Residential status:	Boarder		33	27	60
	Day		43	17	60
	Total		76	44	120

Table III: Showing descriptive for Course of Study

Students	Mean	Std. Deviation	Kurtosis	Skewness
Non elective maths student	40.186	17.6309	-.685	.298
Elective maths student	64.764	19.6284	.150	-.817
Total	47.208	21.3174	-.910	.190

Table IV: Showing descriptive for Residential Status

Boarder/day	Mean	Std. Deviation	Kurtosis	Skewness
Boarder student	49.280	22.6743	-1.058	.154
Day Students	44.856	19.4927	-.841	-.131
Total	47.208	21.3174	-.910	.190

TABLE V: ANOVA Table between results of Elective mathematics and non Elective mathematics Students

	Sum of Squares	df	Mean Square	F	Sig.
Elective maths.	31066.311	1	31066.311	93.577	.000
Non Elective maths.	82996.501	250	331.986		
Total	114062.8	251			

Table VI: Regression Model of results in terms of course of study, residential status and sex

Model	Unstandardized coefficient		standardized coefficient		
	B	Std. Error	Beta	T	Sig.
Constant	29.593	4.620		6.406	.000
Sex	10.662	2.245	.250	4.749	.000
Elective Maths status	22.225	2.490	.472	8.925	.000
Residential status	-3.047	2.225	-.071	-1.369	.172

Table VII: Regression Model of Results in terms of course of study and sex

Model	Unstandardized Coefficient		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
Constant	25.369	3.445		7.363	.000
Sex	10.418	2.242	.245	4.647	.000
Elective Maths Status	22.610	2.479	.480	9.122	.000

Table VIII: Correlations with Students' Marks

	Sex**	Elective Maths status**	Residential status
Person correlation	.327	.522	-.104
Sig. (2-tailed)	.000	.000	.000
N	252	252	252

From table VIII we can see that at $\propto$=0.05, we cannot reject the null hypothesis since the correlation of -0.104 is significant at $\propto$0.05. Hence we accept our Null Hypothesis.

That is at $\propto$=0.05 significance level, there is not enough evidence to prove that there is a difference between the performances of boarders and day students.

CONCLUDING REMARKS

The study investigated the performance of day students and boarder students in senior secondary school certificate mathematics examinations in Kassena-Nankana district in Upper East Region and Asuogyaman district in Eastern Region of the Republic of Ghana.

The study revealed that:

There was no significant difference between a student been a boarder or day student in terms of the performance in mathematics. There are some boarding students who will not study because there is no control over them.

There are however day students who will have no choice but to sit behind their books and study because their parents say so. The role of parents on day students is a factor for the insignificant difference in their performance otherwise boarding students should have done better than the day students.

RECOMMENDATIONS

Government should encourage the hall tutors or house master, to be given counseling to the boarding students so that they may know the need why they are in boarding school. The parent Teacher Association should also do like wise.

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