

PERFORMANCE OF STUDENTS IN PRE-VOCATIONAL EDUCATION IN ABA EDUCATIONAL ZONE, ABIA STATE NIGERIA

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ABSTRACT

This paper investigated the performance of students in pre-vocational subjects in Aba Educational Zone, Abia State, Nigeria. It was a descriptive survey research. Two research questions and two hypotheses were formulated. The population of the study consisted of 92 junior secondary schools in the Zone made up of 530 head teachers and pre-vocational teachers. Stratified random sampling technique was used to select a sample of 46 junior secondary schools representing 50%. While 219 head teachers and pre-vocational teachers were selected from these schools. The instrument for data collection was questionnaire which was designed and properly validated by experts in the department of educational management. A test re-test was used to get a reliability coefficient of 0.675 using Pearson Product Moment Correlation Coefficient. Mean and standard deviation were used to answer the research questions while a t-test was used to test the hypotheses at 0.05 significant level. The findings of the study show that the student's level of participation in pre-vocational subjects is very poor and there was no significant difference in both males and females participation in these subjects in both public and private schools. It was recommended among others that the schools should be well equipped to provide incentives to encourage the study of the subject. This will help to stimulate and maintain the student's interests in pre-vocational subjects.

Keywords: Pre-vocational subjects, student's performance

INTRODUCTION

One of the most serious socio-economic problems facing Nigeria as a Nation is the high rate of unemployment. This has continued to ratchet upwards unabated. United Nations Education scientific and cultural organization UNESCO (2009) noted that it moved from 4.3% in 1985 to 5.3% in 1986, then to 7.0% in 1987 and jumped to 60% in 1997. The weak economy has exacerbated the unemployment condition. The report from World Bank 2009 said that it was between 60% and 70% and that only 10% of the graduates can be absorbed in the Nigerian Labour Market. There is no gain saying that this high rate of unemployment must have contributed to a large extent to the high rate of crime which has graduated in this country from social disturbances and armed robbery attacks to kidnappings and killings. It appears that these unemployed youths are taking it back on the society that has failed to give them proper sense of direction through sound and functional education. This is because many of those who dropped out of school and those who managed to pass through schools lack the requisite skills to compete in the rather weak economy and tight labour market. Therefore they loiter about from dawn to dusk while battling with poverty and frustration. (UNESCO, 2009)

Functional skills acquired through technical and vocational education are the key to national development. All developed nations of the world lay strong emphasis to technical and

vocational education. Adejoh (2008) added that this is an area that produces highly skilled manpower which means that no economy can function effectively without vocational and technical education. He also argued that those who attended regular schools are unable to employ themselves after schools and mostly depend on the government to create employment opportunities for them. However because of the recent changes in the world's economy many schools have shifted emphasis on training in computer, information communication technology and the related fields. Investment in skill training and trade schools is a worthwhile social investment because a rich society enjoys economic and political stability especially if it is industrially buoyant, agriculturally sufficient and technically up to date (Yusuf and Brown 2001). Government of Nigeria has two levels in secondary school. The Junior Secondary School (JSS) this is both pre-vocational and academic where basic skills are taught to enable the pupils to acquire further knowledge and develop skills. The students who leave school at this level join apprenticeship system while the Senior Secondary School (SSS) is for those who are able and willing to have a complete six year secondary school. Babalola (2006) and Castro (2009) noted that products of vocational and technical education are faced with the challenges of not being able to practice in their chosen occupational field due to lack of requisite generic skills and competencies required in the era by ICT revolution. Collaborating with this fact, Okwori & Mafwalai (2005) noted that "our institutions of learning are yearly turning out large harvest of graduates who find it difficult to adjust to the social and economic problems of the society. The education they receive does not appear to equip them with skills beyond those required for passing exams.

It was documented that Nigeria's higher institutions lack the requisite and basic tools to give students the skills that employers need and this situation seems to apply to graduates in all disciplines. Babalola (2006) asserted that the results of West African Examination Council (WAEC) and technical craft exam have constantly registered very high failure rates of above 70% in the past two years, the effect of this result is that colleges are producing artisans instead of craftsmen since most of them failed the national exam that would have qualified them to be craftsmen. At the advanced crafts level which should produce potential instructors for teaching the programmes at the technical colleges, the case is still the same. It is obvious that the student's performance in pre-vocational and vocational subjects in secondary schools is very poor. However it has been observed that the present practice in vocational and technical education curriculum development in Nigeria encourages lack of harmony between the educational practice and the world of work. To buttress the above, UNESCO (1990) reported that the institutions responsible for manpower training are rarely in close contact with industries so as to help the students be in alignment as well as possess the right mix of qualities required to ensure adequate performance in the world of work. The increase in the number of unemployed youths, unskilled and half baked illiterates that loiter the streets desperately looking for means of livelihood made the researcher to embark on the study to find out the participation and the performance of the students in pre-vocational education.

STATEMENT OF PROBLEM

Since the introduction of prevocational subjects in secondary schools, efforts have been made by the school government to equip the schools with important laboratory and workshop equipment as well as the providing them with more qualified and motivated teachers. However comments made by many interest groups in education on the performances of most of the students in these pre-vocational subjects in many schools are not only disheartening but clearly indicate that all is not well. The researcher is therefore bothered to find out whether this is general with all the schools or is it particular to some schools. Then if it is general, the contributory factor is yet to be known. It is also necessary to ascertain sex preferences across

these vocational skills as most of them are sex stereotyped. These are the issues bothering the researchers therefore constitute the problem elements.

PURPOSE OF THE STUDY

The study is designed to achieve the following objectives

1. To ascertain the level of participation of boys and girls in pre-vocational education in both private and public secondary schools.
2. To find out the performance of student between 2005 and 2009.

RESEARCH QUESTIONS

The following research questions guided the study

1. What is the level of participation of male and female students in pre-vocational subjects in both private and public secondary schools?
2. What is the performance of the students in private and public school in pre-vocational subjects between 2005 and 2009?

HYPOTHESES

The following hypotheses were tested

1. There is no significant difference between male and female students in the level of participation in pre-vocational subjects in both private and public secondary schools.
2. There is no significant difference between the private and public schools in the performance of students in pre-vocational subjects between 2005 and 2009.

METHODOLOGY

The research design adopted for this study was a descriptive survey. The population consisted of all the 92 junior secondary schools (50 private and 42 public) schools in Aba Education zone and a total of 434 pre-vocational teachers (196 from private and 238 from public schools). The sample was made up of 46 head teachers selected from 46 junior secondary schools and 173 pre-vocational teachers (40%) which were obtained with the use of stratified random sampling technique by balloting to select 50% of the schools (25 private and 21 public) for the study. 40% of the total pre-vocational teachers totalling 219 respondents. Questionnaire was used and the instrument was named performance in prevocational subjects survey questionnaire (PPSSQ) made up of 58 items was validated by a team of experts from the Department of Educational Management in the University of Port Harcourt, Nigeria. It was also subjected to reliability tests using 30 head teachers and pre-vocational teachers who were not part of the sample. It was re administered to this group and the two scores generated were collated using Pearson Product Moment Correlation Coefficient (PPMCC) which yielded a coefficient of 0.675. Means were used to answer the research questions while the hypotheses were tested at 0.05 level of significance.

RESULTS

Research Question I

What is the level of participation of males and female students in pre-vocational education in both private and public secondary schools?

Table 1. Mean and SD of opinion of assessment of the extent of male participation in pre-vocational subjects

<i>Subjects</i>	<i>Public School</i>		<i>Private Schools</i>	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Agricultural Science	1.88	.32	1.97	.17
Business Studies	1.90	.31	.194	.24
Computer Science	1.26	.44	1.17	.39
Home Economics	1.08	.27	1.03	.17
Introductory Technology	1.18	.29	1.11	.33
Local Craft	1.09	.30	1.10	.31
Music	1.02	.14	1.03	.18
Aggregate Mean	1.39	.30	1.35	.13

As clearly evident by the weighted mean in table 1, the level of male participation is high in only Agricultural science and Business Studies in both private and public schools see mean score of 1.88 and 1.97 and 1.90 and 1.94 for the two subjects. For the remaining five subjects, their participation is low (with the mean scores ranging between 1.02 and 1.26 in table 1).

On the aggregate, their participation is low see mean of 1.39 for public and 1.35 for private. The standard deviation is generally low for both schools in each subject showing that the variations among the respondents were very low.

Table 2. Mean responses and standard deviation of opinion of the extent of female participation in pre-vocational subjects

<i>Subjects</i>	<i>Public School</i>		<i>Private Schools</i>	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Agricultural Science	1.61	.49	1.56	.50
Business Studies	1.73	.45	1.74	.45
Computer Science	1.14	.35	1.09	.29
Home Economics	1.84	.37	1.97	.17
Introductory Technology	1.04	.20	1.03	.17
Local Craft	1.04	.19	1.00	.00
Music	1.10	.29	1.13	.35
Aggregate Mean	1.35	.33	1.36	.27

For the female participation, the evidence in table 2 reveals high participation in Agric science, Business studies and Home economics in both private and public schools (see mean scores of 1.61 & 1.56, 1.73 & 1.74 and 1.84 & 1.97 respectively for the three subjects) for the remaining four subjects their participation is low (see mean participation ranging between 1.00 and 1.14 for these subjects for the two types of schools. Then on the aggregate scale, their participation is low with mean of 1.34 for public and 1.38 for private schools. The SD here is again low for both schools for each subject showing that the variations are low among the respondents. Evidences from these two tables have clearly shown that the level of participation of male and female students in Agricultural science and Business studies is high in both public and private schools while females in addition participate highly in Home economics in both private and public schools. The participation of male and female students in the remaining prevocational subjects is also seen as being low.

Research Question 2

What is the performance of the students in both private and public schools in pre-vocational subjects from 2005-2009.

Table 3. Mean responses of performance of students in pre-vocational subjects in private and public schools achieved by collecting and analyzing the Junior WAEC results for both schools from 2005-2009 for seven pre-vocational subjects.

<i>Pre-vocational Subjects</i>	<i>Private (Mean)</i>	<i>Public (Mean)</i>	<i>Mean Set</i>
Home Economics	1.02	1.84	1.57
Computer	1.73	0.75	1.24
Fine Arts	-	1.46	1.46
Music	-	0.56	0.58
Business Studies	1.21	1.52	1.39
Agricultural Science	1.73	1.64	1.69
Introductory Technology	1.63	1.53	1.61
Aggregate Mean	1.04	1.32	1.36

The evidence in table 3 above clearly shows that the performance of students in pre-vocational subjects is not good enough (moderate for private schools with an aggregate mean of 1.51 and poor for public schools with 1.47. The mean set in the table shows that the students are making an approximately credit passes in agricultural science, introductory technology and home economics (see mean set of 1.69, 1.61 and 1.57 for these subjects). The average performance for the remaining four subjects approximates just pass (see mean set of between 0.58 and 1.46 in table 3). With regards to the comparison between public and private schools, private schools show better performance in three out of five subjects that have comparable data (see mean for computer, agricultural science and introductory technology. It is not surprising that the aggregate mean for private schools (1.51) is higher than that of the public schools (1.47). All the above shows that the student's performance in pre-vocational subjects in both public and private schools is poor, but it is relatively better in private schools compared to public schools.

TESTING OF NULL HYPOTHESIS

The following null hypotheses were tested at 0.05 level of significance.

Hypothesis 1

There is no significant difference between male and female students in the level of participation in pre-vocational subjects in both private and public secondary schools.

Table 4. Test of differences between public and private schools in the participation of males and females in prevocational subjects

Prevocational Subjects	Means		T-Value	2 Tailed Value	Remarks
	Public N=78	Private N=86			
Male Participation	1.39	1.35	1.005	0.317	Not Sig.
Female Participation	1.39	1.38	0.451	0.653	Not Sig.

Table 7 above shows the comparison between public and private schools in the level of male and female participation in prevocational subjects. This has yielded a t-value of 1.005 for males and 0.451 for females. These values are statistically significant at 0.317 and 0.653 respectively. Since the significant values are higher than the alpha value of 0.05 which was used to test the hypothesis, the difference obtained here is judged not significant. Therefore the null hypothesis is not rejected. This means that there is no significant difference between the public and private schools in the level of participation of males and females in prevocational subjects.

Hypothesis 2

There is no significant difference between the public and private schools in the performance of students in pre-vocational education.

Table 5. t-test of difference between public and private schools performance of student in prevocational subjects

Subjects	Means		T-Value	2 Tailed Value	Remarks
	Public N=78	Private N=86			
Fine Arts	1.46	-	-	-	-
Music	.58	-	-	-	-
Agricultural Science	1.64	1.73	-.441	.666	Not Sig.
Introductory Technology	1.53	1.70	-.300	.776	Not Sig.
Computer	.75	1.73	-	-	Not Sig.
Home Economics	1.84	1.02	2.063	.287	Not Sig.
Business Studies	1.52	1.21	1.240	.232	Not Sig.

As shown in the above table, the result of the t-test, the performances of students in pre-vocational subjects in both public and private schools show t-values of -.441 for agricultural science, -.300 for introductory technology, 2.063 for home economics and 1.240 for business studies. No comparison could be carried out for the remaining three subjects because of inadequate results among categories. These obtained t-values were found to be significant at 0.666, 0.776, 0.287 and 0.232 respectively. Since these significant values are all greater than 0.05, we consider the differences not to be significant and therefore the null hypothesis is not rejected.

DISCUSSION OF RESULTS

The first issue examined is the level of participation of male and female students in pre-vocational subjects in both private and public secondary schools. The results show that the level of participation of male and female in Agricultural Science and Business Studies is high in both schools while females in addition participate highly in Home Economics. The participation of both male and female students in pre-vocational subjects is low. The study did not find any significant difference between public and private schools in the level of their participation in prevocational subjects. The level of participation depends on individual learning because when students do not have the required facilities and textbooks to learn, their interest may not be there. Therefore their participation would definitely be low. It is even worse when there is no teacher at all or qualified and competent teacher to teach the subject. Masokano (2005) and Babalola (2006) noted that students of today lack much interest in prevocational subjects as a result of poor learning environment coupled with ill equipped teaching classrooms and laboratories. Nwagwu (1998) added that teachers have poor teaching competence thereby not exposing these students to the needed areas in prevocational subjects that may arouse and maintain their interests. Such can be in computer science, woodwork, and metal work. And so on. These will help to enhance the academic preparedness.

The second issue was the performance of the students in pre-vocational subjects in both schools. The analysis of this survey has shown that student's performances in these subjects are very poor, although relatively better in private schools. However, there was no significant difference between public and private schools in the performance of students in these subjects. The evidence may be expected, considering the fact that many people have been lamenting on poor conditions in the reading and learning of these subjects in these schools. Nwagwu (1998), Castro (2009) and Adejoh (2008) added that trained and qualified teachers are hard to come by to the extent that teachers who are trained in other areas are assigned to teach these subjects under this condition, poor performance is expected. Yusuf and Brown (2001) said that the results of WAEC (Technical) craft level examinations have consistently registered a very high failure rate of more than 70% in the past 20 years. This poor performance is also confirmed by Uyouko and Akpan (2008) who asserted that personal observations reveal that some of these students lack the basic foundations in business related subjects during their secondary school academic programme; some of them are so poor that they cannot cope with the training tasks required.

CONCLUSION

The participation of the students in pre-vocational subjects is generally low because they have not been given full attention by the school, government and other stake holders in education. The students themselves are not equally making efforts on their own to learn. Proper awareness about the importance of these subjects is not adequately created. All the above invariably contribute to general poor performance of these subjects both in public and

private schools. Therefore the prospects of the society having any technological breakthrough from the development of vocational education are therefore still far away.

RECOMMENDATIONS

In the view of the above the researcher made some recommendations.

1. Government at all the levels should come out with tangible and concrete plans to equip pre-vocational schools and provide some incentives to encourage the study of these subjects. This will stimulate and maintain students interests in the study of pre-vocational subjects.
2. The government and private schools proprietors should subsidize the cost of pre-vocational practical work in schools by providing the equipment that are not adequate, this will help to encourage more participation of both males and females in these subjects.
3. Well trained and competent teachers in these areas should be employed in school to enhance the level of exposure in these students which in turn enhances their participation and performances in these pre-vocational subjects.

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