STRATEGIES FOR ENHANCING THE ENROLMENT OF TRAINEES INTO BUSINESS APPRENTICESHIP TRAINING CENTRES (BATCS) IN KADUNA STATE

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ABSTRACT

The purpose of this study was to identify strategies that could be used to combat the problems of poor enrolment into Business Apprenticeship Training Centres (BATCs) in Kaduna State, Nigeria. Two research questions were posed and two null hypotheses formulated to guide the study. Survey research design was adopted for the study while the area of the study is Kaduna State. The population of the study comprised 172 instructors and 2,701 trainees of BATCs, totaling 2,873 subjects. Proportionate stratified sampling technique was used to sample 574 subjects for the study. The instrument for data collection is a structured questionnaire containing 52 items. The instrument was validated by three experts. The instrument was pilot-tested and Pearson Product moment formula was used to determine a correlation co-efficient of 0.63. Z-test was used to test the null hypotheses at 0.05 level of confidence, while mean and standard deviation were used to analyze data for the research questions. Findings revealed among others that problems associated with the enrolment of trainees in BATCs are: Lack of public enlightenment on the prospects of BATC graduates; Lack of guidance and counseling of students at Primary and Junior Secondary School level; Lack of goals and aspirations on the part of students/trainees of BATCs; Lack of campus resources (e.g., computer, library, athletic, college union) to create sense of belonging in students. Consequently, it is recommended among others that: Career guidance services should be provided in schools to encourage both boys and girls to enroll in BATCs; the present workshop facilities in each trade area of BATC should be upgraded to acceptable standard so as to make skill acquisition worthwhile to trainees/students.

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Introduction

Business Apprenticeship Training Centres (BATCs) are vocational training institutions under the supervision of the State Ministry of Science and Technology, and open to those coming out of the formal educational system at the basic or post-basic levels, to learn a trade. These training centres are used by the State Government to train youths in nine (9) different trades (Block laying & Masonry; Carpentry & joinery; Electrical installation; Motor vehicle mechanic work; Pipe fitting & plumbing; Radio & Television; Sewing & Knitting; Tailoring; Welding and fabrication) for self reliance after graduation. The objective of establishing BATC is to produce artisans who will meet the lower-level manpower demand of the nation's economy (Kaduna State Government, 2004). Specifically, the BATC was designed to:

1. Produce artisans for industries.
2. Produce artisans for government establishments.
3. Produce craftsmen/craftswomen who shall be self-reliant economically.

The BATC operates a policy of equality of opportunity and encourage girls by operating a quota system. The minimum entry requirement is JSIII attempted (basic education). Entry is based on interviews conducted by teachers/instructors at various training centres. This method of selection represents about 60% of the intake the remainder is between private applications and formal sector employees. However, Mshalbwala (2008) observed that due to aptitude problems, corruption, sharp practices during admission, inability of the program to fully attract the target audience, inadequate funding, enrolment, retention and attrition, distance to school, socio-cultural and socio-economic factors this programme have not achieved the purpose for which it was established. Hence, the need to determine the enrolment pattern of trainees into BATCs with the aim of determining problems affecting enrolment into the training centres and strategies for combating same cannot be overemphasized. This paper in a way will help to identify possible strengths and weaknesses for improvement and optimal productivity.

Statement of problem

Technical Vocational Education and Training (TVET) is the factory for the production of

the needed technologists, technicians and craftsmen as well as skilled artisans who are required to turn the nation's economy around and usher in the desired technological advancement which is very much required for the elevation of Nigeria from a "consumer nation'' to a "producer nation'', from a developing nation to a developed nation (NBTE, 2003). Acquisition of appropriate technological skills is necessary to cope with the challenges presented by the evolving needs of available working places in our industries and ever-growing non-formal sector. But this desire cannot be achieved under a significant level of poor enrolment in TVE, dropout of students from TVE institutions and gender disparity in science and technology programs as compared with other areas of study. Table 1 presents a summary of trainees' enrolment for five sessions.

Table 1: Summary of BATCs trainees' enrolment statistics

	2005/2006		2006/2007		2007/2008		2008/2009		2009/2010		Average	
SEX	No	%	No	%	No	%	No	%	No	%	No	%
Male	1091	94.8	1110	93.4	1119	93.4	1151	91.5	1173	87.8	1129	92.2
Female	60	5.2	78	6.6	72	6.6	107	8.5	163	12.2	96	7.8
Total	1151	100	1188	100	1191	100	1258	100	1336	100	1225	100

Source: (Kailani, 2011)

The statistics in Table 1 revealed that average student enrolment for the five sessions is 1,225, out of which average for male enrolment is 1,129 (92.2%), and the average for female enrolment is 96 (7.8%) only. This level of enrolment is not good enough. Table 1 further revealed that the enrolment of female trainees for each of the five sessions is less than 13% of each respective set of students, which signify gross gender disparity in the detriment of females.

Purpose of the study

The purpose of this study was to identify strategies that could be used to combat the problems of poor enrolment into Business Apprenticeship Training Centres (BATCs) in Kaduna State. Specifically, the study sought to:

1. Identify problems associated with enrolment of trainees into BATC in Kaduna state.
2. Determine the strategies that could be used to improve trainees' enrolment into BATCs in Kaduna state.

Research questions

The following research questions were posed to guide the study:

1. What are the problems associated with enrolment of trainees into BATCs in Kaduna state?
2. What are the strategies that could be used to improve trainees' enrolment into BATCs in Kaduna state?

Hypotheses

The following hypotheses formulated were tested at 0.05 level of confidence:

Ho_1. There is no significant difference between the mean response of instructors and trainees on the problems associated with enrolment of into BATCs in Kaduna state.

Ho_2. There is no significant difference between the mean response of instructors and trainees on the strategies for improving the enrolment of students into BATCs in Kaduna state.

Methodology

The study adopted a Survey research design. The geographical area of study is Kaduna state. The population of the study consist all the 172 teachers/instructors and 2701 trainees of the BATCs in Kaduna state. However, the total population is 2,873 subjects. The proportionate stratified sampling technique was used to choose 20% of the population of the entire teachers and students in the BATCs. This decision is inline with Uzoagulu (1998) which stated that 20% should be used to draw sample from a population of up to 1,000, 10% from a population up to 5,000 and 5% from a population up to 10,000. The strata used are senatorial districts in the state, namely: Kaduna Central (BATCs in Mando, Birnin Gwari, Birnin Yero, Kakau and Kajuru); Northern Kaduna (BATCs in Sabon-Gari Zaria, Saminaka, Ikara, Zaria city, Makarfi, Soba and Hunkuyi); Southern Kaduna (BATCs in Kagoro, Fadan Kamantan, Kauru, Kachia, Kwoi, Fadan Kagoma, Gwantu and Zonkwa). The proportionate stratified sampling constitutes 574 subjects (34 teachers and 540 students of BATCs) as follows in Table 2 below:

Table 2: Proportionate stratified Sample of teachers/instructors and trainees of BATCs

Senatorial Districts	Kaduna Central	Northern Kaduna	Southern Kaduna	Total
Population of Teachers	46	62	64	172

Proportion of Teachers	0.27	0.36	0.37	1.00
Sample of Teachers	9	12	13	34
Population of Students	729	1026	946	2701
Proportion of Students	0.27	0.38	0.35	1.00
Sample of Students	146	205	189	540

The instrument for the study is a structured questionnaire adapted from Kailani (2011). The instrument was validated by three experts from Abubakar Tafawa Balewa University, Bauchi, Department of Education (Technical) Kaduna Polytechnic, and Kaduna State Ministry of Science and Technology, Kaduna. The instrument for data collection was pilot-tested at BATC, Katsina in order to determine its reliability, information obtained from the pilot study was analyzed using Pearson Product moment correlation formula and a correlation co-efficient of 0.63 was obtained. Data for the study was collected by the use of the structured questionnaire. The instrument was administered through extensive use of researcher assistants. Therefore, any item having a mean value of 3.50 and above was judged as agree or accepted. While any item having a mean value of 3.49 and below was judged as disagreed or rejected. The two null hypotheses formulated to guide the study were tested with Z-test statistics at 0.05 level of confidence, the reason for choosing Z-test is because the sample size is large. This is in agreement with the opinion of Nworgu (1991) who stated that 'generally, a sample is considered to be large if its size is equal to or greater than 30.

Results

Research Question One:

What are the problems associated with the enrolment of trainees into BATCs in Kaduna state?

The results of data analysis in Table 3 shows that both instructors and trainees agreed that items 1, 2, 3, 4, 8, 9, 10 and 11 are problems associated with enrolment of students into BATCs in Kaduna state, this is because the items had grand means ranging between 3.53 and 3.95 which is above the bench mean of 3.50. However, the respondents disagreed with items 5, 6, 7, 12 and 13 with grand mean of 3.30, 3.09, 3.27, 3.07 and 3.14 respectively which is less than the bench mean of 3.50.

Table 3: Mean Ratings and Standard Deviation of Instructors and Trainees on the problems associated with enrolment into BATCs in Kaduna state.

S/No	ITEMS	$\bar{X}_I$ N=34	$\bar{X}_S$ N=540	$\bar{X}_G$	SD_T	SD_S	Decision
1	Lack of public enlightenment on the prospects of BATCs	3.84	4.05	3.95	.066	.041	Agreed
2	Poor public perception of technical/vocational education	3.92	3.46	3.69	.033	.001	Agreed
3	Low prestige accorded to vocational/ technical discipline or profession.	3.67	3.60	3.64	.067	.001	Agreed
4	The BATC has not been given enough publicity it deserves	3.79	3.54	3.67	.018	.001	Agreed
5	Low economic status hinders parent from enrolling children in BATC	3.30	3.29	3.30	.014	.041	Disagreed
6	Long walking distances to BATCs discourages parents from children enrolling their children in the centres	2.67	3.50	3.09	.026	.041	Disagreed
7	Lack of role models in BATCs	3.30	3.24	3.27	.014	.041	Disagreed
8	Lack of interest of youths in BATC/ Technical &Vocational Education	3.30	3.78	3.54	.014	.041	Agreed
9	Lack of guidance and counseling of students at Primary and Junior Secondary School level	4.01	3.67	3.84	.065	.041	Agree
10	Most girls/women don't enroll into BATC due to gender stereotyping attitude in career choice	3.50	3.56	3.53	.069	.001	Agree
11	Some parents and members of the public regard BATC as institutions for those who don't have career opportunities	3.71	3.73	3.72	.051	.041	Agree

12	There is a general wrong notion in the society that BATC is meant for small children and young adults only	3.24	2.90	3.07	.039	.001	Disagreed
13	Some prospective candidates refused to enroll in BATC as a result of the withdrawal of allowances by the state and some local government.	3.10	3.17	3.14	.070	.041	Disagreed

NOTE: $\bar{X}_I$ – Instructors' Mean; $\bar{X}_S$ – Trainees' Mean; X_G – Grand Mean;
SD_T – Instructors' Standard deviation; and SDs – Trainees' Standard deviation

Research Question Two.

What are the strategies that could be used to improve trainees' enrolment into BATCs in Kaduna state?

The results of data analysis in Table 4 revealed that both instructors and trainees accepted all the items (28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39 and 40) as strategies that could be used to improve students' enrolment into BATCs in Kaduna state**.** This is because the items have grand mean ranging between 3.60 and 4.40 which is above the cut-off mean of 3.50.

Table 4: Mean Ratings and Standard Deviation of Instructors and Trainees on the strategies for improving trainees' enrolment into BATCs in Kaduna State.

S/No	ITEMS	$\bar{X}_I$ N=34	$\bar{X}_T$ N=540	$\bar{X}_G$	SD_I	SD_T	Decision
14	There should be financial aid for students of BATC/TVET programmes	4.18	4.06	4.12	.044	.041	Accepted
15	Reduction in tuition fees for BATC/TVET programme	3.52	3.68	3.60	.014	.001	Accepted
16	Government should offer public grant like Scholarship award to BATC trainees	4.56	4.13	4.35	.025	.001	Accepted
17	Philanthropists and non-governmental organizations should be encouraged to offer private grants to deserving trainees in	4.30	3.78	4.04	.052	.041	Accepted

	BATCs						
18	Linkage of BATCs to the labour market	3.94	3.56	3.75	.022	.041	Accepted
19	Adequate infrastructure/facilities should be provided in BATCs to make learning worthwhile to students.	4.54	4.25	4.40	.059	.041	Accepted
20	Career guidance services should be provided in schools to encourage both boys and girls to enroll in BATCs	4.28	4.05	4.17	.014	.041	Accepted
21	There should be regular provision of training materials in BATC workshops.	4.69	4.11	4.40	.032	.001	Accepted
22	Assisting students in identifying area of specialization that will suit their area of choice of careers.	4.30	4.15	4.23	.017	.041	Accepted
23	Encouraging students' participations in related professional seminar.	4.09	3.90	4.00	.039	.041	Accepted
24	Encouraging students to persuade/recruit friends and prospective candidates from basic education to join them in BATCs.	3.96	3.97	3.97	.034	.041	Accepted
25	The society and students should be made to understand that age is not a barrier to skill acquisition in BATCs	4.24	3.85	4.05	.014	.041	Accepted
26	The State government should re-introduce the allowance given to trainees to motivate prospective candidates to enroll in BATCs	4.01	4.51	4.26	.077	.041	Accepted

Hypothesis I: There is no significant difference between the mean response of instructors and trainees on the problems associated with enrolment into BATCs in Kaduna state.

The result of the paired z-test presented on Table 5 showed that the z-calculated 0.078 is less than z-critical value 1.96 at 0.05 level of confidence (z-cal* < 0.05). Hence, we uphold $H_{O1,}$

by accepting that there is no significant difference between the mean response of instructors and trainees on the problems associated with the enrolment of students into BATCs in Kaduna state. This implies that both instructors and trainees shared similar opinion in regard to the problems associated with enrolment of students into BATCs in Kaduna state.

Table 5: Summary of z-test of instructors and trainees on the problems associated with enrolment into BATCs in Kaduna state.

Group	Mean	Standard Deviation	n	Standard error	z-cal	z-critical	Decision
Teachers	3.49	0.36	13				
Students	3.50	0.29	13	0.128	0.078	1.960	NS

P<0.05; **NS** – Not Significant

Hypothesis II: There is no significant difference between the mean response of instructors and trainees on the strategies for improving enrolment into BATCs in Kaduna state.

The result of the paired z-test presented on Table 6 showed that the z-calculated 1.916 is less than t-critical value 1.96 at 0.05 level of confidence (z-cal* < 0.05). Hence, H_{O3} was upheld; therefore, there is no significant difference between the mean response of instructors and trainees on the strategies for improving the enrolment of students into BATCs in Kaduna state. This implies that both instructors and trainees share similar perception of the strategies that could be used to improve the enrolment of students into BATCs in Kaduna state.

Table 6: Summary of z-test of teachers and students on the strategies for improving the enrolment of trainees into BATCs in Kaduna state.

Group	Mean	Standard Deviation	n	Standard error	z-cal*	z-critical**	Decision
Teachers	4.20	0.29	13				
Students	4.00	0.24	13	0.104	1.916	1.960	NS

P<0.05; **NS** – Not Significant

Discussion of Findings

The findings from table 6, research question 1, items (1, 2, 3, 4, 8, 9, 10 and 11) highlights the problems associated with low enrolment into BATCs namely; Lack of public enlightenment on the prospects of BATC graduates. This agrees with Nwabudike (2008) who stated that TVET has not been given enough publicity it deserves as such many people are ignorant of the great opportunities that awaits graduates of this sector in the nearest future. Another problem is that of poor public perception of technical/vocational education in Nigeria. This also agrees with Abdullahi (2010) who stated that the larger societies were led to believe that vocational and technical education is for those who are incapable of pursuing their academic programmes. Another finding of this study also revealed lack of interest as a factor responsible low enrolment in BATCs. This agrees with Palmer, Akabzaa, Casely-Hayford (2007) who stated that in some communities poor youth, in a quest for 'quick money' to survive and also take care of their families, choose to engage in income generating activities that do not require any technical or vocational skills as an alternative to learning a skill. Gender stereotyping has also been identified as factor responsible for low female enrolment in BATCs. This agrees with Sule (2009) who stated that girls are often encouraged by parent and society at large to take courses often termed as feminine subjects and this result in gender disparity in education and low level of girls' enrolment in TVET.

Recommendations

The Strategies to be adopted for improving trainees' enrolment into BATCs in Kaduna State were recommended as follows;

- Financial aid for students of BATC/TVET programme. This corresponds with a suggestion made by Paulsen and John (2002) on the relevance of financial incentives in attracting more prospective candidates to TVET sector. It is necessary to look at such factors as tuition levels, student financial aid, average wages for vocational school graduates, and the difference in lifetime earnings between vocational school and college graduates. In this way, the socio-economic relevance of TVET can be enhanced.

- Provision of adequate facilities like furniture, textbooks/instructional materials, motor able access roads, water and electricity in BATCs. This agrees with Enemali (2010) who held the position that adequate facilities like furniture, textbooks and instructional materials must be provided in schools to make learning attractive and worthwhile to students.
- Regular provision of training materials in BATC workshops. This agrees with Nwabudike (2008) who advocated regular provision of training materials in college workshops.
- Assisting students in identifying area of specialization that will suit their area of choice of careers. Just as suggested in FME (2005) who advocated the exposure of all students to the full range of career choice including gender, and help them in determining skills and interest they have which are transferable to technical/vocational education and training (TVET).
- Encouraging students to recruit friends and other prospective candidates. This agrees with the position of African Union (2007) when it opined that students' enrolment can be enhanced in technical/vocational education by encouraging students to persuade and recruit their counterparts in secondary schools to join them in TVET institutions. The society and students should be made to understand that age is not a barrier to skill acquisition in BATCs. This will greatly lead to an increase in enrolment and retention of students in schools.

Conclusion

Problems associated with low enrolment of trainees into BATCs in Kaduna state among others are; lack of public enlightenment on the prospects of BATC graduates, poor public perception of technical/vocational education in Nigeria, low prestige accorded to vocational/technical discipline or profession, Lack of adequate publicity of BATCs, lack of interest of youths in BATC, lack of guidance and counseling of students at Primary and Junior Secondary School level, most girls/women don't enroll into BATCs due to gender stereotyping attitude in career choice, some parents and members of the public regard BATCs as institutions for those who don't have career opportunities, withdrawal of allowances to trainees by the state and some local government, Lack of goals and aspirations on the part of some trainees of BATCs; Trainees' low level of proficiency in reading, writing, and mathematics; Lack of campus resources (e.g., computer, library, athletic, college union) to create sense of belonging in trainees. Consequently, strategies for overcoming these problems have been proffered with view

to facilitating the desired technological advancement and consequence transformation of Nigeria from a consumer to producer nation.

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