

*Full Length Research Paper*

# Challenges of women in technical and vocational education: A case study of federal college of education (technical), Gusau

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**This study investigate challenges of women in technical and vocational education; a case study of Federal College of Education (Technical), Gusau. The concept of technical and vocational education was discussed and review of related literature was done. The use of questionnaire to get data for this study was employed. Tables and percentages were used to analyze the data and chi-square was used to test impact of the variables and it was found that women in technical and vocational education face the challenges of financial constraint, sexual harassment, child birth during course of study and inadequate educational facilities/unqualified lecturers. These challenges have a negative impact on the quest of women in technical and vocational education. The study concludes that government should provide stipends, good learning environment and necessary educational facilities to women who are into vocational and technical education.**

**Key words:** Technical, vocational, education, women, challenges.

## INTRODUCTION

Education has been universally accepted as one of the catalysts for social, economic and technological development. In fact, no nation, which aspires unto greater heights, will easily neglect the need for the provision of education to all its citizens. Vocational and Technical Education remains a vital form of education that serves as foundation for the development of small and medium scale businesses, which is the launching pad for an industrial economy. National Policy on Education (FRN, 2004) defined Technical Education, in its Section 6, as that aspect of education which leads to

the acquisition of practical and applied skills through the application of basic scientific knowledge and technology. According to Alam (2008) as cited by Ali Idris et al (2013), the knowledge of technical and vocational skills is the prime mover of economic and social development of any nation; therefore, investment in human capital is an investment for the future of any country. Education and training could be regarded as a bedrock for improvement and has to be problem oriented, person centered, community centered and should be able to carter for social problems which include unemployment, crimes,

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poverty, health, drug abuse etc. Skill development and training is central to youth employment and enable the youths to be prepared for work in formal and informal sectors of the economy, and thus play important role in employment opportunity.

Because the government's emphasis that the girl-child is entitled to equal access to education as a human right, statistic shows that there has been a tremendous improvement in enrollment of girls at primary, secondary and at University education in Nigeria. But this is not the case in Technical and Vocational education; there are very few girls who enroll for vocational courses especially technical, because of the big challenges girls face at school and even in their places of work after qualifying.

Federal College of Education (Technical) Gusau was established in 1989, and academically took off in May, 1990. It is one among the colleges of education which offer technical and vocational education to its students who are basically female. Several provisions has been made by the government to provide conducive learning environment for the students such as adequate infrastructure, provision of tools and machines for practical's, social amenities, etc. But, In spite of all these, there are challenges that are faced by students of this college. Therefore, the aim of this study is to examine the challenges faced by women in technical and vocational education.

### Hypothesis

H<sub>0</sub>: The challenges of women in technical and vocational education have positive impact on their quest for vocational knowledge.

H<sub>1</sub>: The challenges of women in technical and vocational education have negative impact on their quest for vocational knowledge.

### LITERATURE REVIEW

Vocational and Technical Education is conceived to mean the provision of relevant and functional education, which would lead to acquisition of practical and applied creative skills. It allows the individual to be productive and resourceful, so as to make progressive contributions to societal development. Nnabua (1996) listed some pre-vocational subjects to include woodwork, metal work, electronics, mechanics, local crafts, home economics and business studies. Olaitan (1996) asserts that in Nigeria, technical and vocational education is offered at the secondary and tertiary levels.

Arikpo (2007) defined vocational education as that training which helps Nigerians to gain the needed skills and know-how for occupation. Omoruyi and Osunde (2004) further contribution on the advantages of vocational Education, assert that, it is capable of ensuring gainful employment opportunities to other members of

the society. It is pertinent to note that vocational education is a matchless and dynamic human resources development field of study. In effect, Dokubo (2010) revealed that numerous studies have shed more light on the relevance of vocational education programmes on the empowerment of rural adults and poverty reductions in River State.

Kolawole and Adepoju (2007) remarked that vocational education is the ability to use one's skills gainfully and display one's intellectual and economic horizon well enough to be able to effectively manage the many economic problems confronting individuals and the country as a whole. According to these authors, the state of affairs where many able-bodied men and women in the society are not gainfully employed in Nigeria, has led to various intervention efforts on the parts of the governments. This state of unemployment has made researchers to question whether the people are actually vocationally empowered. This is for the reason that, in a fast changing and unpredictable environment, fostering flexibility relies on solid general education and broad vocational skills which can be updated and completed through vocational education programmes (Kolawole et al., 2007). Vocational education, according to Arikpo (2007) is that education which assists Nigerians to acquire the necessary skills and competence for occupation.

Some studies suggest that girls and women receive less encouragement, experience and opportunities in these areas because teachers and school managers consider it a 'male' subject, for which women do not have skills, understanding or aptitude. Subsequently, girls are discouraged from following what are traditionally viewed as 'male' subjects of science, engineering, technology or maths subjects (Daniel and Zsolt, 2015). Attitude of teachers, classroom atmosphere and learning methods all contribute to constructing gender stereotypes which are reproduced by both teachers and students. For example, male and female teachers may reproduce traditional male and female roles in the classroom - female teachers may follow the 'supportive sympathetic' archetype, whilst male teachers follow the 'authoritative'. Other study finds that across ages that boys are given more attention than girls by teachers, although male teachers 'attention to girls is higher with older girls. Female teachers give more attention to the boys than girls whatever their ages. The writers conclude that unconscious gender related processes which may be aggressive or even 'libidinous' in nature may play a role in teachers' approaches to their students. Teachers' gender roles may be perpetuated via the teacher-training system. Research reviewed describes vertical and horizontal segregation in the teacher-training institutions, with more men in secure and senior positions in the institutions' hierarchies. Gender segregation, both vertical and horizontal is also found to be a factor in higher education institutions. For example, research shows the

subtle ways of expectations regarding how women dress and present themselves have a detrimental impact on women's career. Other research argues that management processes such as Quality Assurance in universities may contain 'disguised messages' which favoured male identities and which disproportionately disadvantaged female academics.

### **Challenges of women in technical and vocational education**

Hodges (2000) stated that there is serious gender bias in terms of education against girls in Nigeria, especially in northern part of Nigeria. He further stressed that, 47% of girls aged 6 to 15 years are enrolled in schools compared with 63% boys. A lot have been reported on the low enrolment and attendance of females in vocational and technical education. Women and girls, no doubt, are the most influential but often neglected group in most African societies. This neglect, to a large extent has made women one of the disadvantaged groups in developing countries of the world, where they are marginalized on account of gender, social and cultural bias, as well as other stereotypes (UNESCO, 1992). The contention therefore, is that the way the society perceives woman especially the female child has placed a perpetual disparity between her and their male counterparts in respect to access to certain fundamental development opportunities; one of these opportunities is in the field of education. In some cases, parents do not want to send their daughters to school because they take care of the younger siblings and help in some household chores. Some families tend to be reluctant in sending their daughters to school for economic reasons. The daughters are involved in petty trading or hawking to support the parents due to poor background of the family (Saliba et al., 2008).

Imarhigbe (1992) while documenting on the state of vocational and technical institutions in Nigeria reported the lack of tools, equipment's, and infrastructure in some institutions. The teaching and learning environment has remained the same after so many years in many schools, while the existing equipment are fast getting worn out, in spite of the growing need for vocational and technical education. There is the lack of modern library complex, workshops etc (Ulinfun, 1999). The effect has been the increased lack of interest in the subject and the production of half-baked graduates. Some colleges that have equipment's lack trained skilled manpower to handle some of those equipment's.

The beliefs of parents are reflected on the educational aspiration of their female children for it is what parents believe that they will pass to their children. The present exploratory research attempts to address some of the gaps in the border literature identified by Rojewski (2005) by testing the nature of the relationships between female

occupational aspirations, expectations, and aspiration/expectation discrepancies and traditional research variables of gender and occupational status, and extending this examination to include career development constructs, namely career decision status, career decision-making self-efficacy, the perception of barriers, the development construct of career maturity and career indecision. The family is the first place where the child learns the appropriate behaviors patterns, attitudes, and activities of female secondary school, and higher institutions are significantly influenced by distinctive youth culture found among them. Many of them left their homes as adolescent for secondary school where they lack parents' adequate cultural socialization to mix up with other youths, values, attitude and modes of behaviour. Significantly, most of these youth variables have considerable effects on their future vocational choices either positively or negatively. Prideux (2007) argues that, it is therefore important that these career constructs be examined in addition to the demographic, cognitive- personal and contextual variables that have received so much attention in the study of vocational choices. However, Lapan et al. (2000) reported that female seventh graders expressed higher self-efficacy when they believe that their vocational choices matched their gender.

Jatau and Davou (2000) reported that Islam is usually associated with female non-participation in the formal education as a result of the ignorance of some parents regarding the sound teaching of Islamic education. Some parents prefer sending their daughters to Qur'anic schools as reported by Odaga and Haneveld (1995) due to their belief that western education promotes values and behaviour that are contrary to Islamic cultural norms. Some believed that to allow girls to get mature before they get married leads to moral decadence as expressed by Biola et al. (2002). However, it is observable that moral decadence today is common both among the educated and the uneducated girls in the society.

Overcoming economic vulnerability embraces a much wider set of abilities than just conventional technical and managerial competency. These include basic literacy and numeracy, social and gender awareness and life skills. It is generally accepted that enterprise development and income-generating projects require a more complex combination of capacities with heavier emphasis on social and management skills than narrowly defined technical competencies (Bennell, 1999).

Traditionally, male-dominated artisan training courses (plumbing, metalwork, carpentry etc.) have predominated in Technical and Vocational Education Training (TVET) in most countries. Training for women was offered in a narrow range of traditionally female-dominated activities. Training in social and business skills has also been fairly limited; particularly for women (Mayoux, 2005). Fees and indirect costs of TVET represent an obstacle for the poor and often a complete barrier for the poorest, especially

**Table 1.** Distribution of the respondents according to their age.

Variable	Respondents	Percentages
Less than 20	35	29
21 – 30	66	55
31 and above	19	16
Total	120	100

Source: Field survey, 2015.

**Table 2.** Distribution of the respondents according to their marital status.

Variables	Respondents	Percentages
Married	38	32
Single	62	52
Divorced	15	12
Widowed	5	4
Total	120	100

Source: Field survey, 2015.

**Table 3.** Distribution of the respondents challenges in technical and vocational education.

Variable	Respondents	Percentages
Financial constraint	31	26
Sexual harassment	25	21
Inadequate educational facilities	23	19
Child bearing during course of study	26	22
Unqualified lecturers	15	12
Total	120	100

Source: Field survey, 2015.

for women. In Ghana, for instance, the majority of students come from relatively well-off urban backgrounds, even at government-funded vocational training centres in remote rural locations (Bennell, 1999).

## METHODOLOGY

The data used for this study was gotten from primary sources through the administration of questionnaires. The questionnaires contained both closed and open ended questions. The research design for this study was descriptive research of the survey type. It aimed at finding the challenges faced by women in technical and vocational education. The population of the study was female students of Federal College of Education (Technical), Gusau, Zamfara state. The sample size was 120 female students. Purposive and Random Sampling Technique was used in selecting students of the school as respondents. The chi-square test was implored to check the impact of the challenges of women in technical and vocational education on their quest for vocational knowledge.

Table 1 shows the age distribution of the female students of Federal College of Education (Technical) (FCE(T)). It shows that 35 respondents representing 29% of the total respondents are below the age of 20. Whereas, majority of the respondents are within the age bracket of 21 to 30 with the number of respondents been 66 representing 55% of the total respondents. Very few of the respondents are within the age bracket of 31 and above with 19 of the respondents representing 16% of the total respondents.

Table 2 shows the distribution of the students according to their marital status. From the above it can be seen that 38 of the respondents are married, this represent 32% of the total respondents. 62 of the respondents are single, representing 52% of the total respondents. This is an indication that majority of the students of FCE(T), Gusau are not yet married. Of the 120 students of FCE(T) sampled, 15 representing 12% of the total respondents are divorced. Whereas, 5 representing 4% of the total respondents are widows.

Table 3 shows the challenges faced by students of FCE(T), Gusau. The table shows that the major problem faced by women in technical and vocational education is financial constraint with 31 representing 26% of the total respondents facing the same challenge. Whereas, 25 representing 21% of the total respondents

**Table 4.** Environmental influence on the academic performance of the respondents in vocational and technical education.

Response	Respondents	Percentages
Yes	78	65
No	42	35
Total	120	100

Source: Field Survey, 2015.

**Table 5.** Income status of parents affects the respondents in technical and vocational education.

Response	Respondents	Percentages
Yes	92	77
No	28	23
Total	120	100

Source: Field survey, 2015.

face sexual harassment from either the lecturers or non-academic staff of the institution. Also, inadequate educational facilities is another problem faced by women in technical and vocational education as 23 representing 19% of the total respondent attest to the fact that it is one of the challenges they face. The students who probably are married opine that child bearing during course of study is a challenge they face, with 26 representing 22% of the respondents yielding to the fact that child bearing constitute a great challenge to them. Another challenge is unqualified lecturers, as 15 representing 12% of the total respondents say they face a problem of unqualified lecturer, though this is the least of their challenges.

Table 4 shows that 78 representing 65% of the total respondents agreed that the immediate environment in which they found themselves has impact on their educational performance. Whereas, 42 representing 35% of the total responded denied the fact that their immediate environment has impact on their educational performance. Table 5 shows 92 respondents, that is, 77% of the total respondents attest to the fact that the income status of their parents has great impact on their quest for technical and vocational education. Meanwhile, 28 representing 23% of the total respondents said that the income status of their parents has nothing to do with their quest for technical and vocational education.

Table 6 shows the computation of chi-square. From the computation it could be seen that the chi-square calculated value is ( $X^2_{cal} = 5.67$ ). When compared to the tabulated value ( $X^2_{tab} = 9.49$ ) the calculated value is less than the tabulated value ( $5.67 < 9.49$ ) indicating that there exist a negative relationship between the challenges of women in TVET and their quest for vocational knowledge.

**Hypothesis testing**

The chi-square test was use to ascertain the level of significance of the challenges that women in technical and vocational education are faced with. The formula for chi-square is:

$$X^2 = \sum \frac{(O - E)^2}{E}$$

Where: O = Observe frequency

E = Expected frequency

N = Number of observation

$\Sigma$  = Summation

$X^2$  = Chi-square

If  $X^2_{cal} > X^2_{tab}$  the study accept  $H_0$  that challenges of women in technical and vocational education have positive impact on their quest for vocational knowledge. Otherwise, the study reject  $H_0$ .

$$df = n - 1 = 5 - 1 = 4$$

$$\alpha = 5\% = 0.05$$

$$X^2_{cal} = 5.67$$

$$X^2_{tab} = X^2_{0.05} = 9.49$$

**Decision rule**

Since  $X^2_{cal} < X^2_{tab}$  at 0.05 the study reject the null hypothesis ( $H_0$ ) and accept the alternative hypothesis ( $H_1$ ) that, the challenges of women in technical and vocational education have negative impact on their quest for vocational knowledge.

**DISCUSSION**

From the result it was discovered that the challenges of women in technical and vocational education have a negative impact on their quest for vocational and technical knowledge. The result of this research is in line with that of Nnachi (2008) who maintained that, barriers mediate negative consequences in the occupational career of females over males which was reinforced through circumscription and cultural belief that male are expected to perform better in science, mathematics and other technical subjects while females are more better in art subjects such as home economics, textiles, languages etc.

**Table 6.** Computation of  $X^2$ .

Variable	O	E	O - E	(O - E) <sup>2</sup>	$\frac{(O - E)^2}{E}$
Financial constraint	31	24	7	49	2.04
zSexual harassment	25	24	1	1	0.04
Inadequate educational facilities	23	24	-1	1	0.04
Child bearing during course of study	26	24	2	4	0.17
Unqualified lecturers	15	24	-9	81	3.38
-	-	-	-	-	$\Sigma = 5.67$

Source: Authors computation, 2015.

Therefore, the researchers believed that women should be encouraged to participate in the field of technical and vocational education for a better development.

## CONCLUSION AND RECOMMENDATIONS

This study has investigated into the challenges of women in technical and vocational education a case study of Federal College of Education (Technical), Gusau. It was seen from the findings that the major problems of female students in technical and vocational education is financial constraint, sexual harassment and inadequate educational facilities. Those who are married face the problem of child bearing during their course of study. The environment and income level of parents has a great impact on the educational performance of female students in technical and vocational education. These challenges faced by women in technical and vocational education have a negative impact on their quest for vocational knowledge. Based on the findings of this research work, the authors recommend that:

1. The learning environment should be provided with essential physical facilities and appropriate social working condition that are free from tension and dangers to the lives of the participants and properties.
2. Combined efforts of donors, Governments and the private sector should be strengthened to achieve better quality in training and fill the gap of years of neglect, also with regards to certification of vocational training and skills training; Provide infrastructure support and facilities to improve the participation of rural poor and young women in training, including hostels, stipends, transport facilities, child care centres, tool kits;
3. Lecturers or facilitators of technical and vocational education should be well trained and as a matter of fact be an expert in their field. A lecturer who has no qualification in this aspect should not be employed.

## Conflict of Interests

The authors have not declared any conflict of interests.

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