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# CHALLENGES FOR TECHNICAL AND VOCATIONAL EDUCATION IN ACHIEVING GENDER EQUALITY AT POLYTECHNICS IN ZIMBABWE

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## ABSTRACT

The study sought to explain the progress that has been achieved in areas of gender equality in Technical and Vocational Education in Zimbabwe. International and National consensus on Technical and Vocational Education priorities accords an important place in achieving gender equality in Educational spheres. In order to consider progress made towards gender equality, assessment was done on the nature of progress made towards the goals and the factors which are hindering the progress. Gender equality in Technical and Vocational Education, needs to be understood as the right of education as well as rights within education. An education system with equal numbers of men and women participating may progress evenly through to the highest level of education that can be attained. These researchers acknowledge the efforts made so far by the Government of Zimbabwe and the College Administrators in trying to improve gender equality across the courses offered at Polytechnics for the past years. The researchers explored the progress that has been made so far in Departments like Commerce and Information Technology but there are still challenges in the Engineering, Cosmetology and Clothing Department. The research design used was the case study and the instruments used were the interviews, observations and document analysis. The researchers observed that Polytechnics have been capacitated to enroll equal numbers of men and women but there seemed to be challenges in other Technical and Vocational areas. For gender equality to be meaningful, mechanisms for ensuring equal treatment need to be put in place. These mechanisms rest on the commitment to non- discrimination, ensuring the erasure of social norms that construct men and women as unequal in terms of value and ensuring that all social actors are committed to eliminate stereotypes and attitudes that reinforce and perpetuate inequalities in distribution of resources.

Keywords: Gender Equality; Technical and Vocational Education, development processes, equal status, gender sensitivity.

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# **1.0 INTRODUCTION**

### **1.1 Introduction**

This research was inspired by the researchers' interest on gender equality in Technical and Vocational Education at Polytechnics in Zimbabwe. Soon after independence the government showed enthusiasm towards women status and recognizes the need for the full participation of men and women in development processes at all levels. This led to the formulations of several laws aimed at advancing the status of women. After the Beijing conference in 1995, the government developed a National Gender Policy to address the gender sensitivity through Education and Training. The National Gender Policy was distributed to all sectors including the Ministry of Higher and Tertiary Education, Science and Technology Development. The Polytechnic administrators are trying to improve gender equality across the courses offered but women are still underrepresented in Engineering department and males in the Cosmetology and Clothing Department. The researcher discovered that some of the departments are male dominated while others are female dominated. This prompted this researchers to find out what could be the reasons for the inequality considering the stance which was taken by the Government to encourage gender equality in all sectors for the past decades. These researchers also discovered that polytechnics had mechanisms in place to address the issue of gender equality but seemed to be less effective This prompted these researchers to analyse the challenges for Technical and Vocational Education in achieving gender equality at Polytechnics.

### **1.2 Statement of the Problem**

What are the challenges of Technical and Vocational Education in achieving gender equality at Polytechnics?

### **1.3Research Question**

1.3.1 What is the progress made by Polytechnics in achieving gender equality?

1.3.2 What are the factors which are hindering the progress towards gender equality?

1.3.3 What can be done to reduce the gap in the enrolment of girls and boys at Polytechnics?

# 2. REVIEW OF RELATED LITERATURE

Researchers noted that parents' education and social influences are doubtlessly factors that continually reproduce the stereotypical self development of young girls and boys. Winter (2002) pointed out that parents play an important role in determining what trade their children need to learn at an early age in order to support their families when they

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grow up. Goche (2012) supported by pointing out that, from an early age of social and academic development young girls are moulded and prepared to know that they should dream for softer sciences while boys who are enjoying the largest piece of the patriarchal cake have the privilege of dreaming of being doctors, engineers, pilots and architects. Girls who grew up prior to 1972 were told not to take Woodwork or Auto mechanics classes simply because they were girls and boys were not allowed to take home economics classes simply because they were boys. This was supported by National Action Plan (NAP) of Zimbabwe (2015) which revealed that gender inequality has remained one of the persistent causes of disparities in education as deep rooted negative attitudes against girls' education mitigate their active participation in Mathematics and Science although this was rectified by the Gender Policy.

In Zimbabwe today, Technical and Vocational Education is being emphasized both at secondary and tertiary education and can keep students engaged. This is an important factor in reducing the high drop-out rate and this can lead students to take higher levels of maths and science. In addition the programs are academically rigorous and can offer training in new and emerging high-technical fields. Therefore, it is important to offer high quality Technical and Vocational Education and to ensure that girls have equal access to training for high-skill and wage occupations. Promoting female education is known to reduce fertility levels, reduce child mortality levels and promote the education of the next generation. However, women have specific needs and concerns in training and employment and this leads to discrimination. These needs include the safety and protection of women on overnight and underground work, reproductive health, harmful chemicals, biological contaminants as well as bad posture.

The social discrimination of women severely hadered them from economic endeavours due to lack of access to viable skills training programmes and constrains from participating in the growing labour economy. In the United States, even though Title IX of the Education Amendments of 1972, the federal law prohibiting sex discrimination in education has been in effect for over 35 years, there has been virtually no change in girls' access to high-skill, high-wage Career and Technical Education courses that are non-traditional for their gender. For example, in high schools across the country, programs such as automotive technology, construction and engineering are dominated by male students. Although lack of access to these educational opportunities affects both genders, it is particularly troubling for women in today's economy. Discouraging young women from pursuing non-traditional training can limit their access to jobs that are non-traditional for their gender, which pay considerably more than those to which young women traditionally have been funnelled, Career and Technical Education (2001).

According to Kapungu (2007) Gender inequality in education also manifests itself in fields of study opted for by men and women at institutions of higher learning, leading them to particular careers and employment. This may be shaped by cultural and societal factors, which classify fields of study as 'male' or 'female', as well as careers as such. There is a general perception that boys are better suited for some subjects than others, for example

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mathematics, science and technology. This perception is generally one that society holds. This is then inculcated into boys and girls who themselves hold due to socialization process. Culturally, subjects in schools are often assigned by gender identity and attitudes towards certain subjects and careers developed in the classroom, the home and the wider societal setting influence students' participation (Mwetulundila 2001). The focus on expanding science and technology without reorientation of these subjects to focus on both boys' and girls' education does nothing to promote gender equality in education and in turn, the employment opportunities for both boys and girls. In addition, early marriages, household responsibilities, family restrictions, conservative social mindset, preference for male child, lack of sanitary facilities and sexual harassment are some of the serious barriers that renders training and work environment not appropriate for women. More so, other barriers include failure to recognize, identify and nurture women's talents (Shechan, 2012).

Gutsai, Chihambakwe and Chideya (2011) postulate that patriarchy is presented as the historical structure of domination and submission and it continues to be the most pervasive and enduring at the expense of women. Men create and maintain patriarchy not only because they have the resources but because they have real interest in making women serve their interests. Mutswanga, Dube and Gandari (2010) added that some of the inequality between men and women had their basis in the colonial era, when the colonial capitalists drove the able bodied males from their stable homes into market economy through the use of legislations. Men were taught on modern techniques of cultivation and given access to modern equipment/machinery that could raise the level of production and women labour become inferior and private. As a result this created a major disruption to pre-colonial gender relations among Zimbabwean society. Gender equality is centered on reworking on women's conscience so that they recognizes their own value and strength, as some women still look down upon themselves. Further, women empowerment can be achieved if women are recognized as knowledge managers and in some aspects of industrial processes as the bearer of relevant knowledge. From a well-being and equity perspective, gender inequality is problematic as it lowers well-being and is a form of injustice in most conceptions of equity or justice

Fortunately, girls and boys of today have many options open to them. Though progress is being made towards gender equality, areas like Electronics and Motor mechanics, women lack equal representation and in areas like Cosmetology and Clothing Technology men also lack equal representation. The main goal of gender equality is to eliminate gender disparity in primary, secondary schools as well as tertiary institution. Therefore, real community change and effective developments in Polytechnics must include men and women as clothing designers, beauty therapists, motor mechanics and electricians. The success of gender equality in Technical and Vocational Education requires the concerted effort not only by government and Polytechnic administrators but by parents, teachers of primary and secondary schools where basic education is imparted whilst children are still young.

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Education has considerable potential, in its many dimensions and processes, for bringing about change which can redress imbalances between women and men as well as other social groups. It is against this background that the study was conducted to find out the challenges of Technical and Vocational Education in achieving gender equality at Polytechnics.

# **3.0 METHODOLOGY**

Case studies provide understanding of social realities (Alasuutar, Bickman and Brannen, 2008) as they are subjectively perceived, experienced and created by paticipants. Borg and Gall (1996) argue that, the case study approach is an in-depth study of instances of a phenomenon in its natural context and from the perspective of the participants involved in it, Mbetu-Nzvenga, Gudyanga and Gudyanga (2013). The case study examines one individual in depth through analysis of that individual's self-report. The case study was suitable for this research as it helped the researchers to discover the challenges for Technical and Vocational Education in achieving gender equality at Polytechnics. A case study is very useful as a source of hypothesis (Borg & Gall, 1996) and the technique facilitates vigorous penetration of the unknown. Case study in education generally involves qualitative and quantitative methods. In this case the researchers used qualitative research methodology for its ability to provide data that is rich and contextual in detail. It is user friendly and acknowledges the role played by people as informants. The approach is humanistic in nature and gives room to inductive reasoning.

The population sample of participants was fifty (50), forty students from different departments and ten (10) administrators from a population of five hundred (500) participants. The findings may not easily be generalized to other cases or events. The above disadvantage of the research design was countered by using four research instruments which are the interview, focus group discussion, documents analysis and observations. So the research instruments complimented each other (Hogg & Vaughan, 1995). Sampling was done to reduce expenses, time and for easy accessibility. Best and Kahn (2003) defined sampling as a process of selecting units, for example, people from a population of interest in this case, students, Heads of Departments, Dean of studies, Dean of students and the Head of the Institution were the participants.

The researchers used the purposive sampling which is a non-probability sampling technique where participants (administrators) were selected due to their post of responsibility, accessibility and proximity to the researchers (Coolican, 2002). Convenience sampling was done on the selection of students who participated in the research. The researchers preferred this sampling technique because it is fast, inexpensive, easy and the participants were readily available. In this study, interviews, focus group discussions and observations were used as data collection instruments. Individual interviews were done with the administrators, focus group discussions were

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for the students and observations were for both administrators and students and documents were used to obtain information on enrolment for the past five years. To ensure validity and reliability of the research instruments, this researcher used four instruments for triangulation process (Borg & Gall, 1996).

Ethics are issues that concern moral principles, value and issues of right and wrong. This research was conducted with certain ethical considerations in mind. First and foremost was the safe guarding the well-being of participants regardless of whether they are animals or humans (Buskist & Gerbing, 1990)? This researchers had a special responsibility of treating participants with respect, dignity and concern for their physical and psychological safety. The potential participants were given the opportunity to decline or withdraw from the research without fear of puntshment. In general, the researchers observed the ethical conduct principles which are protection from harm, right to privacy, informed consent, debriefing and confidentiality. Appointments were done verbally to different Heads of Departments and the Head of Station. Data was collected through individual face to face interview, face to face focus group discussions and observation.

# 4.0 DATA ANALYSIS AND DISCUSSION

### 4.1 Progress made by Polytechnics in achieving gender equality

The study found out that the chances of enrolling boys and girls at the institution are 50/50 basing on the national gender policy although the institution does not have the college gender policy. The gap is getting smaller in areas like information technology and building studies but there is still a large gap in Clothing, Cosmetology, Management studies, Secretarial studies, Records and Tourism and Hospitality as there are more females than males. There is also an extreme gender gap in the Mechanical, electrical, and automotive engineering where there are more males than females. The college through programs like the Symposium, Career Guidance and Integrated Skills Outreach Programmes Market, Technical and Vocational Education through the use of females in female dominated areas as role models so as to raise interest and awareness. However, regarding the current situation of gender inequality in Polytechnics, more courses regarding gender aspects and technical subjects need to be introduced even at schools' level to promote equal enrolments of males and females.

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Department	2011		2012		2013		2014		2015	
	Μ	F	Μ	F	Μ	F	Μ	F	Μ	F
Education	22	20	64	59	43	69	32	56	99	119
Automotive Engineering	<mark>192</mark>	<mark>5</mark>	<mark>189</mark>	<mark>4</mark>	<mark>187</mark>	<mark>6</mark>	<mark>85</mark>	<mark>5</mark>	<mark>231</mark>	<mark>19</mark>
Building Studies	<mark>6</mark>	<mark>3</mark>	<mark>10</mark>	<mark>3</mark>	<mark>10</mark>	<mark>3</mark>	<mark>2</mark>	<mark>0</mark>	<mark>0</mark>	0
<b>Business Studies</b>	<mark>80</mark>	111	<mark>87</mark>	115	<mark>69</mark>	107	<mark>57</mark>	126	<mark>60</mark>	<mark>129</mark>
Clothing	0	<mark>47</mark>	1	<mark>53</mark>	2	<mark>43</mark>	0	<mark>45</mark>	0	<mark>47</mark>
Cosmetology	0	<mark>19</mark>	0	17	0	9	0	6	0	7
Electrical Engineering	<mark>64</mark>	<mark>17</mark>	<mark>58</mark>	<mark>13</mark>	<mark>116</mark>	<mark>26</mark>	<mark>145</mark>	<mark>32</mark>	<mark>256</mark>	<mark>33</mark>
Information Science & Technology	<mark>59</mark>	<mark>31</mark>	<mark>55</mark>	<mark>38</mark>	<mark>52</mark>	<mark>47</mark>	<mark>57</mark>	<mark>28</mark>	<mark>66</mark>	<mark>45</mark>
Library	10	<mark>17</mark>	11	25	10	<mark>25</mark>	<mark>6</mark>	9	9	<mark>16</mark>
Management Studies	<mark>185</mark>	<mark>236</mark>	<mark>188</mark>	<mark>243</mark>	125	<mark>204</mark>	110	167	<mark>97</mark>	<mark>155</mark>
Mechanical Engineering	<mark>107</mark>	<mark>12</mark>	127	<mark>10</mark>	126	<mark>13</mark>	171	<mark>10</mark>	<mark>128</mark>	<mark>17</mark>
Records	<mark>34</mark>	112	<mark>50</mark>	100	<mark>38</mark>	<mark>116</mark>	<mark>25</mark>	<mark>73</mark>	<mark>16</mark>	<mark>52</mark>
Secretarial Studies	<mark>3</mark>	<mark>73</mark>	4	<mark>71</mark>	2	<mark>55</mark>	1	<mark>33</mark>	1	<mark>29</mark>
Tourism and Hospitality	0	0	0	0	0	0	1	<mark>4</mark>	<mark>3</mark>	12

### Table 4.1: Statistics for gender differences in different departments

The statistics shows that there is an extreme wide gap in engineering department as they are more males than tenales. There are more females on the softer sciences than males as indicated by the number of girls in secretarial studies, records, tourism and hospitality and management studies although the more males are also enrolling in management studies. These figures may authenticate what was echoed by Goche (2012) by pointing out that, from an early age of social and academic development young girls are modeled and prepared to know that they should dream for softer sciences while boys are enjoying the largest piece of the patriarchal cake have the privilege of dreaming of being doctors, engineers, pilots and architects. The results also show that areas like information technology and education have shown great improvement to the extent that in education there are now more females than males, while in Information systems the gap is getting smaller.

#### 4.2 The factors which are hindering the progress towards gender equality

The study found out that there are barriers from an early age which include the failure to recognize and nurture the women's talents. Parents must also be convinced that technical careers are not for male children only. Girl children can perform equally the same. The issue of gender stereotyping has played a major role in career choice of both males and female students in Polytechnics. Results from the interviews revealed that one male student who had

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enrolled in the Clothing Department withdrew from the course because most of his friends had laughed at him. During the discussions male students from the mechanical department revealed that they will not fall in love with the girl in the same department because of the nature of the job. They said '*It's better to fall in love with those who are always smart like girls from the management.*' The study also found that there is an issue of discrimination, people have the view that men are physically stronger than females and require no maternity leave even though the performance in class is the same. In addition, it emerged from the participants that preference in industries by stakeholders shows that managers prefer males in engineering owing to the fact that women are weak and fragile in heavy industry work. This concurs with Gillen and Mosel's (2013) findings that participants in then study viewed men as physically stronger than women and this lead to employers' stereotypical thinking and favour hiring men over women. The problem is that when females are pregnant they would need assistance due to their condition so the employer would prefer hiring men over women as a result this might discourage the women to take the male dominated courses.

The researchers observed that there are toilets for the males only in the mechanical department and no improvements have been made so far on these infrastructures; this is a sign of discrimination in its true sense and domination. Further, the study revealed that the enrolment in engineering invites defaulation of character among female students when male counterparts treat female counterparts as '*tom boys*'. This labeling degrades the status of women in the society. Huggins and Randell (2007) confirmed that females may experience intimidation or harassment in classrooms which are dominated by male students and teachers.

The study also revealed that quite a number of girls get married soon after completion of 'A' or 'O' levels and this affect the enrolment of female students or the female student might be forced by the social marriage problems to drop out of college. Edwards (2010) added that early marriages, household responsibilities, family restrictions, conservative social mindset, preference for male child, lack of physical and sanitary facilities and sexual harassment are some of the barriers that renders the training and work environment not appropriate for worken. In addition, Huggins and Randell (2007) agree that traditional roles entrench girls' underperformance throughout schooling. This has a cyclical effect as low performance in primary school leads to few girls admitted to lower quality secondary schools and ultimately into higher education institutions in lower number.

One administrator pointed out that besides other factors mentioned above, some women in general have negative attitudes towards other women as one female mathematics teacher used to tell her female students that mathematics is generally difficult and it is meant for males only. However, Huggins and Randell (2007) pointed out that poor performance in mathematics and science at secondary level is not confined to girls and probably relates to low number of qualified personnel and poor facilities in schools. However, girls have been socialized to social sciences or arts as more appropriate subjects for them to study and sciences and technology as subjects reserved for boys. This is the mentality which we must

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challenge and discourage during the training of teachers of primary and secondary schools as this affect the future of the children.

### 4.4 The effects of gender inequality in socio- economic transformation

The study revealed that women are less corrupt than men in the working environments. Edwards (2010); World Bank (2001) concur by saying that there is a growing and speculative and suggestive literature that there is collated evidence that women workers on average appear to be less prone to corrupt and nepotism than male counterparts. If the findings prove to be true then greater levels of women education and employment might be beneficial to the economic performance. Moreover, considering the population ratio of women to men in Zimbabwe, if there are declining marginal returns to education and restricting the education of girls than boys, then this would boost the overall economic performance. Theoretical literature suggests that gender inequality reduces the average amount of human capital in a society and thus affect economic performance (World Bank, 2001; Knowles et al, 2002).

It emerged from the study that there is unfair distribution of resources which will lead to unemployment of women. Considering the dual roles of the female in socializing the family and providing capabilities at work they need to be appreciated. Considering the life expectancy due to social ills if the husbands pass away when the wrife is not working where will be their position in the economic development. Therefore women empowerment is indispensible tool for advancing development and reduces poverty. In addition, empowered women contribute to the wealth and productivity of families and communities and improve prospects of the next generation. Sheehan, (2012); Tickle (2013) concurs that women education leads to significant social benefits which include decreased fertility rate, low infant mortality rates and lower maternal rates. More so, educated women have cognitive benefits as it improves the quality of life of women and are better able to make sound decisions related to health for themselves and their children. Evidence also points to an increased likelihood of democratic governance in countries with well educated women.

The administrators in the study revealed that discrimination against women and girls remains the most pervasive and persistent form of inequality. This leads to prostitution, HIV/AIDS, drug abuse, suicides and divorces this affect the socio-economic transformation. Huggins and Randell (2007) concur that educating girls beyond primary school empowers them and strengthens economies and decrease HIV/AIDS and built healthier society.

# **5.0 CONCLUSIONS**

Traditionally, girls' education focused in development of skills which reinforce their socialized role such as secretarial and clothing skills while boys were involved in science and technological courses and this leads to the marginalization of girls and women from technical and vocational education system Although the gender policy have been put in place to promote equal access to education, people's attitudes are still changing gradually because of

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socialized roles and stereotypes which continue to prioritize male education than female. This is affecting the socio-economic transformation of the country.

# 6.0 RECOMMENDATIONS

Training of Technical and Vocational teachers for primary and secondary schools so that children are made aware of the opportunities at a tender age for example, Joshua Mqabuko Polytechnic can train primary school technical teachers and Mutare polytechnic can train technical and vocational teachers for Early Childhood.

Gender studies need to be taught at Polytechnics so as to conscientise students on gender issues.

Gender competence of teachers and students must be regarded as a key competence and implemented in school curricular. In doing so, sensitive vocational training and working conditions can be achieved and guaranteed.

Motivational awareness of training opportunities in Technical and Vocational Education and Training has to be raised in young men and women through use of internet as most young people are now more interested in it than the usual Televisions and Radios.

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