

EMERGING ISSUES IN POLYTECHNIC EDUCATION IN THE 21ST CENTURY: A FOCUS ON NIGERIA

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Abstract

The 21st century has brought about new challenges to the Polytechnic sector in Nigeria. This paper therefore, discusses these issues emerging in polytechnic education which pose a challenge to the attainment of Nigeria's educational objectives. Also, suggestions on how to address those issues were discussed.

Introduction

The 21st century Nigeria is envisaged to bring about resuscitation of closed down industries and establishment of new ones. This will no doubt require a lot of trained technicians and technologies to be produced in the Polytechnics. The Polytechnics according to Yakubu (2002), is a non-university tertiary institution offering a variety of technicians, technological and business programmes at the National Diploma (ND) and Higher National Diploma (HND) levels. The goals of Polytechnic Education in Nigeria are:

1. Provide full-time or part-time courses of instruction and training in Engineering and other technologies, applied science, business and management, leading to the production of trained manpower.
2. Provide the technical knowledge and skills necessary for agricultural, industrial commercial and economic development of Nigeria.
3. Give training and impart the necessary skills for the production of technicians, technologists and other skilled personnel who shall be enterprising and self-reliant.
4. Train people who can apply scientific knowledge to solve environmental problems for the convenience of man and
5. Given exposure on professional studies in technologies.

In pursuance of these objectives, government believed that there shall be equal educational opportunities to every Nigeria child irrespective of any real or imagined disabilities, each according to his/her ability. Consequently, the challenges of the 21st century to the Polytechnic sector in Nigeria leave much to be desired. The paper therefore, examines issues arising from the efforts of the government and private sector in persuading the attainment of the goals of Polytechnic Education.

Polytechnic Education in Nigeria Yesterday and Today

The first tertiary level institution established in Nigeria for the purpose of training technicians and technologist was the Yaba College of Technology. It was established in 1948. As at today, there are 17 Federal Polytechnics, 33 State owned and 5 privately owned Polytechnics in Nigeria. Also, the number of programmes rose from mere four namely Civil, Electrical, Mechanical and Architecture (Inwong, 2000) to 52 programmes as at 2002 (Yakubu, 2007).

The enrolment of students (males and Females) has increased tremendously as shown in Tables 1 and 2 Below

Table 1
Enrolment of Students into Polytechnics from 2001 to 2005

	2001	%	2002	%	2003	%	2004	%	2005	%
M	146,996	60.5	X	X	X	X	X	X	115,717	66.9
F	95,953	39.5	X	X	X	X	X	X	56,603	33.1

The available data in table 1 show that the male enrolment is on the high side; it rose from 60.5% in 2001 to 66.9% in 2005. while female enrolment is on the low side, it declined from 39.5% to 33.1%. on the whole, both male and female enrolment is on the increase.

Table 2
Enrolment of Students into Science and Technology Programmes

Year	Male	%	Female	%
1999/2000	16,919	79.5	4,351	20.5
2000/2001	17,919	81.9	3,930	18.1
2004/2005	39,777	80.5	9,632	19.5

The available data in Table 2, show that (he male enrolment is on the high side; it was 83.5 : in 1997 and by 2004/2005. It had rose to 80.5% while female enrolment is on the low side. It rcrt from 16.5% in l 1997/98 to 19.5% in 2004/2005. On the whole (he female enrolment is lower than tha of male.

The scenario established as presented above has left so many questions unanswered.

Emerging Issues

Some of the emerging issues in Polytechnic education in the 21st century Nigeria are:

1. The gap in enrolment between males and females is on the high side and has been widening despite all the intervention strategies adopted over (he years. For instance. It declined from 39.5% in 2001 to 23.1 % in 2005 (See Table 1).
2. The completion rate for females who have enrolled in the Polytechnics is 33.1% as against 39.5% in 2001. this suggests that 6.4% of females could not finish their programs in the Polytechnics for unknown reasons.
3. Science and technology programmes in the Polytechnic are male dominated while vocational course like catering tourism and fashion design are female dominated.
4. The philosophy of equal educational opportunities is elusive because upward academic mobility for holders of Higher national Diploma (HND) is still a problem despite the introduction of Post-HND (Bukar, 2004).
5. Enrolment of students into Polytechnic education is still lower than university enrolment. Yakubu (2006), noted that over a million candidates apply for university placement while less than 200,000 candidates apply for Polytechnic placement.
6. There is still the issue of segregation in employment for holders of HND as most companies have job provision for university Degree holders.
7. The issue of unemployment and underemployment among Polytechnic graduates due to inadequate practical and entrepreneurial skills.

The issues raised above may cast much doubt on the effectiveness of some of the strategies adopted over the years. This is a serious issue of concern when you consider (he demands posed by the millennium Development Goals (MDGs).

The Way Forward

While we acknowledge that some of the strategies adopted over the years have yielded some results^ we strongly feel that a lot need to be done in order to reposition Polytechnic education for better service delivery in the 21st century. The following are suggested for implementation.

- 1) There is an urgent need for the government to set up female Polytechnics or convert some of the existing ones in order to increase female enrolment.
- 2) Government should retrain teachers in Polytechnics with a view to improving their skills of attracting students' into technical education programmes.
- 3) Monetary incentives such as free school fees, scholarship should be given to females in order to encourage them.
- 4) There is an urgent need to allow the Polytechnics to run masters and Ph.Ds in technical Education in order to enhance upward academic mobility for those who wish to continue beyond the HND level.
- 5) The existing curriculum of entrepreneurship education should be reviewed with a view to enriching it and successful entrepreneurs should be invited to share their experiences with students.
- 6) Publicity campaigns should be strengthened and targeted at youths and parents in order to improve their attitude toward Polytechnic Education.

Conclusion

Polytechnic education is the master key to development of Nigeria in the 21st century. The bunch of issues emerging tends to undermine this objective. The government should therefore as a matter of emergency strengthen existing strategies and implement the suggested strategies in order to make polytechnic education more functional and relevant.

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