

GENDER REPRESENTATION IN SCHOOL SUBJECTS AND NATIONAL DEVELOPMENT: IMPEDIMENTS AND STRATEGIES FOR IMPROVEMENT

By

Muhammad Garba Mahuta, Ph.D

Abstract

The main thrust of this paper is to examine the imperatives of gender representation in various school subjects. The paper believes that the various school subjects contain different intellectual information and teaches different skills and knowledge. The paper discusses issues on gender representation in school subjects bringing out the impediments on female representation in school subjects. The paper opines that the low level representation of females has far reaching consequences for national development. Recommendations made in the paper include the reorientation and sensitization of teachers, lecturers and the nation as a whole to a wide variety of gender issues so as to increase female representation and roles in various school subjects for national development. In addition, the paper suggests the introduction of effective guidance and counselling programmes and a complete rethink of the conceptualization of gender awareness/sensitivity for equitable male and female representation in the various school subjects so as to pave way for sustainable national development.

Keywords: Gender, Gender Stereotypes, Gender Segregation, National Development.

Gender – The gender of a person is socially and culturally constructed or determined. The concept should not be confused with the concept of sex. The concept of sex refers to the biological division of people into male and female.

Gender Stereotypes – This refers to one-sided and exaggerated images of men and women which are developed repeatedly in everyday life. Sociologist and sociologists of education often see stereotyping as part of the process by which children are socialised into sex roles and by which adults and children are denied opportunities for more individually varied development.

Gender Segregation – This concept refers to the unequal distribution of men and women in the occupational structure. Sometimes this is called occupational segregation by sex.

National Development – The concept of national development refers to the ability of a country or countries to improve the social welfare of the people, such as providing social amenities like good education, good drinking water, good roads, and health facilities and so on.

Introduction

Education is everyone's right. This is a view held by many nations of the world. Education is a social institution through which the society provides its younger generation with employable skills, knowledge, and desirable attitudes. In the process of education, the younger generation is socialized and helped to imbibe the cultural values

558

and norms of the society. Farant (2004) noted that educating people in the conventional way is through formal schooling. This involves formal instruction under the direction of specially trained teachers. Education, properly conceptualized, is not for gender placement, nor is it gender insensitive; but it is for both sexes. The value of education lies in its socialization processes, cultural innovations, social integration, social placement and social control; but educating people in society via schooling deals with subjects and the compartmentalization of knowledge into subjects. The division of the subjects led to the issue of selection. Perceptions of the differential abilities of the learners in particular are usually based on gender factors which, in the long run, determine subject selection in the formal schooling system.

Gender is a culturally constructed and labelled concept used by various cultural groups to determine sex roles. It is a socio-cultural ability to differentiate between the roles of males and females. The consequences of this kind of differentiation are the negative effects it has on the female gender and their self worth in life (Aggarwal, 2006). In this context, it means that gender roles are culturally defined or determined. In other words, it is the culture of the society or community that determines gender roles in the society.

The grouping of these subjects results in such categories as Sciences, Arts Social Sciences and Vocational and Technical programmes in schools. This grouping is for the selection and placement of individuals based on general cognitive abilities and biological differences (Macionis, 2006). According to Hurn (1985), this kind of distribution and categorization promotes inequality in subject representation because values and moral contents of the subjects tend to be compartmentalized into fragments, with distinctive selective pedagogies based on gender connotations. The people who often suffer the disadvantages are female students, the poor and rural students in schools. Among the important factors to be noted with respect to the development of the child are the rights accorded each child, including the right against discrimination on the basis of sex. As a result of this therefore, every nation protects its children by signing into law the rights that will protect them (UNESCO, 1999).

In the view of Ukeje (1980), the first responsibility of any nation towards its people is the care for its growing generations. The child, therefore, is the focus of attention. To Maynard (1989), the child is a miniature adult. The United Nations Convention and the African Union Charter on the rights of the child stated that a child means every human being below the age of 18 years. In view of this therefore, it is obvious that the rights of the child should form the basis of gender equality in the society. By implication, this means that there should be no exceptions, the provision should apply equally to boys or girls or the physically challenged. According to the International Labour Organisation (2000), gender-learned roles and differences are determined by the socio-cultural factors of a particular society. The problems associated with the differential treatment of the sexes are being manifested presently in the area of gender representation in the various school subjects. This apart, it appears that much of the education given to the females is of poorer quality than the one given to the males. This is likely to pose challenges to the society and more especially in the present era of information and communication technology and or globalisation.

Issues in Gender Representation in School Subjects

The factors and differences in the representation of the sexes in school subjects in relation to subject preferences can be explained using certain theories. There exist different theoretical perspectives, some of which are expressed from the biological and psychological viewpoints (Macionis, 2004). However, other perspectives which explain

gender in terms of nurture fall under cultural and sociological viewpoints. It is in view of this that Okezue (2001, p.31) posits that:

The biological viewpoint explains gender differences in terms of the natural endowments of males and females which determine their expectations, behaviours and roles. For instance, because of the anatomical structure and associated hormones women are endowed with, such as; they can conceive, give birth and care for babies.

The general argument of this perception is that women's roles are biologically defined or determined and this causes them to be soft, loving and caring, unlike their male counterparts who are perceived to be hard and tough. The effect of this biological nature of women was believed by Aggarwal (2006) to have been the driving factors of women engaging in lighter school subjects that are labelled or defined feminine. Some of these subjects include Nursing, Teaching, Home Economics, Literature, Economics and other Arts and Social Science subjects. Another important factor to note is the culture of a people as an important variable in the educational life chances of girls and women in the society. Macionis (2006) endorsed that, culture describes the gender roles of a particular sex; such roles are determined by the moral values, customs, traditions, occupations, language and behavioural patterns of life in the society.

Cultural viewpoints explain gender actions and representation in terms of social roles based on socially and culturally prescribed roles for males and females. It should however, be noted that culture is dynamic, and can change due to exogenous and economic factors as well as political development in the society. The dynamism of culture shows that various cultures of the world have different roles for men and women and to a large extent determine the future activities of children at school. This may lead to gender under representation or overrepresentation in school subjects.

However, Jha (2008, p. 15) identified the following issues as resulting from socio-cultural influences in relation to the roles of males and females in the society:

- Males believe they will be the main bread winners and therefore, see girls as "weaker" and in need of protection.
- Girls are less stereotypical in aspirations about career choices; at times inconsistent with their subject choices, this is a factor promoting underrepresentation in school subjects.
- Even when girls speak of being independent they believe in being protected.
- Parents reinforce gender stereotypes by exhibiting tendencies for gender differences in parental support of their children or wards in school.
- Boys who are interested in academics are seen as feminine by their peers.
- Boys show interest in technical subjects to a greater extent.
- The visibility of women is very low as compared to men's appearance in text books. Women and men are identified with stereotypical attributes, namely, bravery; heroism, honesty and strength (gallantry) are portrayed as male attributes while females are often portrayed as caring, self-satisfying, loving and kind.

In the view of Macionis (2006), sociological theories on gender differences are related to aspects of cultural socialization of people, and the influence of this is on male or female

560

as they are growing up in the society. The various agents of socialization in the society differentiate male and female roles right from the home, at school, in religious institutions and so on. These channels or agents of socialization reinforce gender stereotypes and often put females at a disadvantage. Consequently, girls acquire sexist

beliefs about certain school subjects. These factors lead to the problem of low female representation in various subjects in school.

According to UNESCO (1999), the percentage of females in education in Nigeria is 39.9 per cent. The access of females to university education has, however, increased from a ratio of 1 to 40 in 1950s to 1 to 4 in 2001. There is still a wide disparity in traditionally male-dominated disciplines such as technology and engineering. There are more female students than male ones in Education, the Humanities and Social Sciences. On the other hand, there are considerably fewer women in sciences than men. The illiteracy rate varies according to regions and environmental settings. The overall female illiteracy rate in Nigeria is 44 per cent while the overall adult illiteracy rate is 36 per cent.

According to Haralambos, Holborn and Heald (2008), among the various factors that affect performances in science is a sexual difference. "Sexism", as the word suggests, means separation, which invariably limits the representation and choices of women in education. Sexual differentiation segregates the roles of men from that of women as prescribed by a particular cultural milieu.

There has been a steady increase in the representation of girls in some school subjects or fields of study in Nigerian schools over the years. Related to this, is the problem of girls not being able to complete their educational pursuit as well being absent due to certain roles imposed on them culturally. In addition, the rate of participation of girls in education in Nigeria varies from one region to another. The figures are lower in the Northern region of the country (UNESCO, 1999). Gender under-representation in the various school subjects resulted from common cultural and religious beliefs, in addition to the economic factors which impede girls' chances of equal representation and participation in school subjects.

Female under-representation in education is multifaceted. Okezue (2001), argued that, at the primary and secondary levels of education, the problem of inequality abounds. In the Northern states, for instance, the state governments offer scholarships to encourage children to go to school. The situation is not the same in the South, where exorbitant fees and levies are charged by schools. Thus, while in the Northern part of Nigeria there is low female representation in schools and in the various subjects, there are higher female enrolments in similar institutions in the Southern part of the country.

Generally, females are underrepresented in various sectors of the society. Williams (2001) argued that, the percentage by which females are underrepresented is equally applicable in schools and school subjects. Jha (2008) posited that there is less female representation in subject choices and classroom processes as follows:

- Girls and boys sit separately almost everywhere. This infuses the sensitivity of the existing differences, and gender segregation and inequality.
- In places like Pakistan, Northern Nigeria and Niger Republic, boys and girls rarely interact at school. The level of interaction differs significantly in other places such as the Southern part of Nigeria, the United Kingdom and America.

561

- Language reinforces gender stereotypes in most places.
- The choice of sports is gender-based almost everywhere in the world; quite a number of sports are generally seen as male activity.
- Boys receive harsher reprimands than girls, even for minor offences in most parts of the world.

These gender issues cut across the entire schooling process and the effect is the continuous gender distinctions that are militating against adequate female representation in education.

Impediments to Gender Representation in School Subjects

A lot of factors militate against females taking part in some subjects at school. In some cases, the under-representation is more severe in sciences and technology (technical subjects). At times the opposite is the case. The factors responsible for these trends are:

- Sex role stereotyping.
- Limited access to education.
- Gender differences and preferences in education.
- Masculine image of some school subjects.

Sex Role Stereotyping

Culture plays a predominant role in the determination of sex roles in the society. The same applies to the school which itself is a miniature society. Under the influence of their home socialization, boys and girls are made to conform respectively to male and female subject roles at school. The society and the students hold the erroneous belief that difficult or science subjects are masculine, while the arts and social sciences are feminine. To Hurn (1985), the perception is that some school subjects like the sciences and technologies are difficult and that females are not expected to perform difficult tasks. This belief results in females being generally underrepresented in those subjects and thereby losing interest in pursuing knowledge and skills in these subject areas. Other related factors are that females who study "difficult" science and technical courses like Engineering, Medicine and Veterinary Medicine and so on are not likely to be good wives as they will be engaging in more masculine activities. This is common belief in some cultures and traditions.

Limited Access to Education

Females' access to education, when compared to that of males can be said to be limited. Generally, for a long time, males have had a greater access to education than females. This factor is worse in the developing nations and or in poor and rural homes (UNESCO, 1999).

Gender Differences and Preferences in Education

Both boys and girls are meant for the same content of education in the same classes (Macionis, 2006). But commenting against this statement, Hurn (1985) argued that there exist differences and preferences of male students over females in terms of association and treatment. This is also true of children from rural and poor home background. These categories of children experience clear segregation and differential treatment. In the case of girls, it influences their choice of subjects and the level of their representation. In the classroom, boys are asked questions more often than girls (Eshun 2004 & Shakeshaft, 1995). Boys usually lead in classroom discussion and in laboratory experiments. In view of this, females are discouraged from participating during general classroom teaching and learning.

562

Masculine Images of Some School Subjects

Right from the beginning, difficult subjects in school like Mathematics, Sciences and other Technical subjects have been ascribed masculine status, while others like English,

Literature, and Social Sciences are viewed as feminine. These factors discourage females from studying Science subjects at school.

The above arguments and perceptions are strongly associated with the lack of proper guidance and counselling in schools, the home and the community. The female child has not been properly oriented to change her perception toward the appropriate selection of school subjects. Gender orientation and considerations still influence their selection, which results in their low representation in some school subjects. This eventually leads to low level representation of women in certain subject areas.

Strategies for Improving Gender Representation in the Various School Subjects

The Department for International Development (2008, p.9), contends that, the approaches for gender equality and representation in school subjects should address the following factors:

- **Gender Stereotypes.** This refers to challenging the prevailing stereotype views that suggest that girls are unable to benefit from Secondary Education or are less able to succeed in mathematics and science-based courses or programmes.
- **Sexual Violence, Abuse and Harassment.** This calls for raising the level of awareness of girls on issues related to sexual harassment and abuse and using teachers to serve as vanguards of creating awareness among learners and preventing such abuses in schools and colleges.
- **Changing the Philosophy of the Curriculum.** Curriculum choices should be expanded to encourage girls to take Mathematics, Sciences and Technical subjects. For example, this could be achieved by gender roles re-orientation and sensitization in the society.
- **Teaching Styles.** This calls for providing equal attention to boys and girls in the process of teaching. This will enable females to feel they are being equally treated and give a sense of belonging to both sexes.
- **The Organization of Extra-Mural Activities.** This can be achieved by providing sporting opportunities for girls as well as for boys.
- **School Organization and Discipline.** This involves creating a good school climate so as to make the school conducive for learning. It should also take the form of making schools more girls-friendly.

Other strategies to be considered towards improving female representation in school subjects include the following:

- Communities, schools and teachers should engage in sensitization and mobilization activities to provide gender-roles awareness so as to improve gender representation in school subjects. This can be done by passing sensitive information on gender equality and providing fair learning environments that will improve gender responses during lessons. Teachers of various school subjects and disciplines should be gender sensitive and encourage equal participation of boys and girls in class activities so as to ensure equitable representation of the sexes in school subjects.

- School teachers' sensitization can be achieved by informing, rethinking and reworking strategies by the teachers so as to infuse in them the principle of gender-fair schooling environments through workshops and conferences.
- Good and active guidance and counselling services should be provided for girl's right from the early stage of schooling up to the post-primary and tertiary levels of education. This can equally be achieved through the provision of information and community-sensitization activities.
- The contents of textbooks should be gender sensitive. Teachers should cite gender-neutral examples and also create productive classroom environments. This is to ensure the creation of girl-friendly learning environments that will eventually result in an increased female participation in class activities.
- Women's groups and organizations should work hand in hand with the government and school administrators to provide role models and improve the awareness of females in school, by encouraging their active participation in various school subjects.
- Female children should be introduced to all subjects in school, regardless of status and the perceived difficulty of the subjects. If this is implemented, the gap of gender representation will be minimized right from the primary school. This, in turn, is likely to provide good representation of both boys and girls in school subjects.

Conclusion

Gender issues are topical in the various sectors, including educational institutions in Nigeria. Girls are the more disadvantaged in the gender factors, which determine school attendance and representation in various school subjects. The major effect of under-representation of girls in selection of school subjects is the exclusion of women in the selection and choice of certain careers, which may be very important to national development. The absence and low representation of girls in some school subjects are not an indication of their deficiency in the skills and knowledge associated with those subjects. The issue this paper raises derives from the need to close up the gaps between the knowledge and skills received by males and females at all levels of our educational system.

504

NJDR

References

- Aggarwal, J.C (2006) *Teacher and education in a developing society*. (4th ed). New Delhi: VIKAS publishing House PVT. LTD.
- Department for International Development (2008) *Globalizing the school curriculum: gender, efa and global citizenship education*. <http://recoup.educ.cam.ac.uk/publicationswp/on 12-06-09>.
- Eshun, V. (2004) *Gender stereotyping and the participation of girls in science: a case study of selected schools in Winmaba*. An unpublished Masters Thesis. Department of Science Education. University of Cape Coast, Ghana.
- Farant J.S, (2004). *Principles and practice of education*. Edinburgh: Longman Group limited.
- Haralambos, M. Holborn, M. and Heald, R. (2008). *Sociology: themes and perspectives* (6th ed). Hammer Smith: Harper Collins Limited.
- Hurn, C.J. (1985). *The limits and possibilities of schooling: an introduction to the sociology of education*. (2nd ed) Newton, Massachusetts: Allyn and Bacon, Inc.
- International Labour Organization (2000). *Gender and jobs: sex segregation of occupations in the world*. Geneva: International labour Office press.
- Jha. J. (2008). *Gender equality in education: the role of school. Nottingham; common wealth secretariat*. http://www.nott.ac.uk/shared-uccer/unesco-pdfs/Gender_Equality_in_Edu_on_10-06-09.
- Macionis J.J. (2006). *Sociology*. (10th ed.). New Delhi: Dorhing Kindierey Publishers.
- Maynard, N.J. (1989). *Child study: some practical techniques for teacher*. Ibadan: Oxford University Press.
- Okezue. F. A. (2001). *School enrolment and gender: trends and implications*. In, C.V Nnaka and M.C. Anekwe (eds). *Towards Gender Equality in Naira in the 21 century*. Enugu: Podiks printing and publishing company.
- Prasad. J. and Kaushik, V.K (2007). *Women education and development. a new perspective*. New Delhi: Kanishka Publishers Distributors.
- Shakeshaft, C. (1995). *Reforming science education to include girls*. *Theory into practice* 34 (1), pp. 74 - 79.
- Sharma, S. P. (2007). *Basic principles of education*. New Delhi: Kanishka Publications, Distributors.
- Ukeje, B.O. (1980). *Education for social reconstruction*. New York: Macmillan Ltd.
- UNESCO. (1999). *Women, science and technology. Towards a New Development*. Paris: UNESCO.
- Williams G.A. (2001). *The contribution of women to national development: education*. In: A, Jadesola. J.Oluremi. O. Clara and F.D.Oyekanmi (eds). *The contribution of women to national development in Nigeria*. Lagos: The Nigeria Association of University Women. Sponsored by Ford Foundation.