

Re-examining Gender Balance Education in Agricultural Science, Technology and Mathematics in Nigeria: An Overview

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Problem of the study

Despite policy formulation on equal and accessible education to both sexes, wide disparity exists between male and female education in Nigeria. Science education involves giving knowledge of scientific skills by teachers to learners through effective teaching learning process. Women in Nigeria have been found wanting in participating on different areas of science. Gender imbalance in Nigerian schools leads to inability of girls to study scientific and technical subjects thereby limiting the females' educational career and employment choices. This deprives the country at large of human capital that is highly valuable. (Odebode, 2001). This paper also examines how gender imbalance leads to absence of sexuality education, whereby young boys and girls are not empowered to develop a positive sense of their own sexuality to acquire factual information to cope with life.

Objectives and significance of the study

This paper examines how culture inhibits the participation of women in Science, Technology and Mathematics and suggests strategies for women participation in Science. It also prescribes a policy of affirmative action to ensure that gender fairness and balance exist in all our actions.

Problems of gender-balanced instruction in school

One prominent problem of a gender balanced instruction in Science, Technology and Mathematics (STM) is the issue of sex stereotyping which is reflected in schools in textbooks, and lesson notes. The references involving the males in STM are discouraging.

Culture and education of any country determine the development of such a country and affect women participation in social, physical and psychologically oriented functions.

Culture also impedes gender-balance in schools, depresses the competence of some women when considering the sex-stereotyped roles at home, occupation pattern and the socialization pattern of a community.

In Nigeria, a father prefers to invest on boys' education

than the girls. Girls are not motivated to aspire for Science, Technology and Mathematics-oriented discipline. Girls' education is perceived to lead to moral decadence in the northern part of Nigeria. They are therefore encouraged to marry early thereby preventing the opportunity for education. The birth of a female child is seen as a disappointment. They are second-rated in the Society.

Educated women are not regarded as good wives and they find it difficult to marry at the right time. This causes increase in the poverty and illiteracy levels in some occupations in Nigeria. In some cases, males refuse to marry females who involve themselves in some careers that are culturally termed "masculine." This however depresses the intellectual development, undermines the confidence and dampens the aspirations of the females. All these affect the attitude of the females or the girl child towards Science, Technology and Mathematics.

In some families, boys are counselled to be involved in some professions that will earn them more money and girls are counselled to offer courses that will make them to be good housekeepers. This negative attitude towards gender fairness should be discouraged and proper encouragement of gender balance education should be promoted. Girls should be allowed to be actively involved in the Science, Technology and Mathematics laboratories, workshops, seminars and classes to enhance their performances in schools.

The way forward

A major recommendation in this paper, is that Science, Technology and Mathematics education should be promoted in all schools (primary, secondary and tertiary) Agricultural science especially, should be given a high priority among other science subjects. Science Technology and Mathematics education should be accorded proper rights of organization, management and control by the school authority.

Enlightenment campaigns, reverse discriminatory policies, role modeling and activities encouraging girl-child or female participation in STM should be enhanced.

Non-governmental organizations, Ministry of educa-

tion and subject associations should organize programmes on gender fairness issues to promote female participation in Science, Technology and Mathematics education. Women's association of Science, Technology and Mathematics should function actively in meeting its objectives on a very regular basis.

Incentives should be given to females in form of awards, scholarship in school to encourage female participation in Science, Technology and Mathematics education (Nsofor, 2001).

Moreover there must be programmes to popularize Science, Technology and Mathematics among girls from the nursery school level to the tertiary level.

Girls and women should strive to increase their scientific knowledge by reading periodicals, journals and relevant literature. Publishers and curriculum developers should discourage gender-biases in textbooks and curriculum materials.

Research institutions should develop programmes and projects to enhance women advancement and participation in Science, Technology and Mathematics education. Moreover, the men folk should learn to appreciate and respect the dignity and worth of women scientists and by willing to co-operate with, rather than discriminate against them at places of work.

Conclusion

This paper has attempted to re-examine gender-imbalance in Science, Technology and Mathematics education in Nigeria and reviewed the rights of women by considering gender balance in Science, Technology and Mathematics education.

Women must therefore be encouraged to respond positively to Science, Technology and Mathematics instructions and select careers in science-related disciplines to check imbalances. A favourable learning environment will be help to eliminate some problems militating against women in engaging in Science, Technology and Mathematics Education.

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