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Education for All: Problems and Prospects of Science Education in Nigerian School

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Abstract

The most effective way of spreading science education for all in Nigeria is by knowing the problems and prospects of science education. This paper tried to identify and examined the problems and the prospects of science education and how they can be handled, some prospects of science education in Nigerian schools. Recommendations were proffered and conclusion drawn.

Science education is the mother of all sciences. It comprises of chemistry, physics, mathematics, biology, physical and health, and computer science. The issue of how best to help the learners acquire knowledge and skills in science education; some certain problems are encountered by the learners. By proper handling of these problems the prospects of science education will be more pronounced. Some of the problems are: poor laboratory facilities, lack of candidates' interest, and lack of trained and effective teachers, insufficient science teachers, and insufficient classrooms.

Poor Laboratory Facilities

The laboratory is where science students engaged in hands-on-activities (Tamire, 2003). Such as observations and experiment. Renner (2003) asserted that

practical work in science assumes an important role in the development of the psychomotor domain of the taxonomy of educational objectives. The availability of science laboratory makes science lessons concrete and stimulating which helps to enhance the achievement of students in secondary schools (Farrant, 2002). In the absence of these facilities to make the laboratory up to a standard especially in most of the rural schools for the students to benefits from it bring about some challenges.

Lack of Candidates' Interest

Most of the students in secondary schools do not show enough interest in secondary school especially when asked to choose the subjects in SSS class 2, they often do not choose the pure sciences because science is abstract and students prefer art and social science subjects. By so doing they show lack of serious interest for science subjects.

Lack of Trained/Effective Teachers

Science education goals in Nigeria are to cultivate inquiry, knowing and rational mind for the conduct of a good life and democracy and producing scientist for rational development (FRN, 2004). The quality of education in any nation depends largely on the quality of her teachers and the status of any people depends on the quality of their education (Ofo, 1999). William (2007) also pointed out that education begins with the teacher not because he is the most important person but because he is able to control his own behaviour and the teaching environment. Some of secondary schools especially privately owned in rural area lack of both trained and effective teachers to carry out teaching of science education effectively therefore science students are lacking behind the counterpart in both public and private schools in urban area.

Insufficient Science Teachers

Most of our secondary school today especially in rural area do not have enough science teachers to handle the science subjects properly. The ratio is always 1:150. This unavailable makes practicals very or impossible to conduct. In a particular school of two hundred science students one may realize that science teachers are not up to three because most of the teachers lobbying for urban schools hence science education can not achieve its goals.

Inadequate Classrooms

Accommodation problem which includes inadequate classrooms still exist till today especially in public secondary schools in urban area. A class that may contain fifty students may end up contain about hundred and twenty students. The class will be very tight in such a way that the teacher can not go round during teaching. This creates a lot of problems for the teaching of science in schools.

Prospects of Science Education

Despite the threats on science education, its has its own advantages and opportunities. A good understanding of the available opportunities ahead of time before the problems will be instrumentally to maximizing such opportunities. Some of the prospects are listed below:

1. Well equipped science laboratory for teaching of science education ill bridge the gap in the country's technological development and advancement.
2. Encourage positive innovations in the area of science education
3. Enhance the production of better science school leavers who are better informed and could be of age to be employed in the labour market as stipulated in the National Policy on Education.
4. Reduce the rate of unemployment in the country by making the school leavers and graduates to be self-employed using skills learnt in science education.
5. Training and re-training of science teachers and other benefits as and at when due promotes efficiency and commitment in staff.
6. Recruitment of sufficient teachers and provision of classrooms for science students will bring about creative thinking on the part of

Conclusion

This paper has looked at the aim, problems and prospects of science education in our schools. It is believed that science education when properly taken care of could be benefitable. It will be vital for the policy-makers, developersplanners and the teachers to take into cognizance the problems enumerated above with a view to putting in place measures that will reduce their effects so that science education will be for all.

Recommendations

It is recommended that:

1. Teachers should be adequately and effectively improved in teaching science education.
2. Training and re-training of the teachers should be an integral part of the science teaching.
3. Government should assist most secondary schools especially in rural area of posting and provision of enough science teachers and granting enough funds to help in science teaching.
4. Government should recruit more science teachers to meet up with the number of students in schools.

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