

Smart Green Schools Initiative: A Panacea to Secondary School Curriculum Implementation in a Depressed Economy

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DOI: <https://doi.org/10.5281/zenodo.13736488>

Abstract: Education for ages has remained the strong key that unlocks the gate that liberates man from disease, Ignorance, and underdevelopment. Nigeria alongside other developed and underdeveloped nations of the world seem to share this sentiment by adopting education as an instrument per excellence in influencing social and economic development in the country. The different economic variables such as the rising cost of living and rapid decline of the country's monetary value have caused ripple effects on the activities of parents, teachers, and the school management in the shared implementation of the school curriculum. Data for the study was collected using secondary sources and was analysed using content analysis. The findings show the need to revitalize education through the adoption of the novel Smart Green Initiative in the implementation of the secondary school curriculum in Enugu State, its challenges, prospects, and the way forward.

Keywords: Education, curriculum implementation, smart green initiative

Introduction

Education forms one of the most critical elements of change throughout the world. It is a sure way for an individual to attain his/her full potential and social contentment. Ako and James (2018) sees education as the process of facilitating learning or the acquisition of knowledge, skills values beliefs, and habits by individuals in a given society, through storytelling, discussion, teaching training, and directed research under the guidance of a professional known as the teacher. The education to be acquired could either be through informal or formal settings the latter being the focus of this study.

In the context of this, education is seen as a means of providing the necessary knowledge, skills, attitudes, and beliefs for guiding and assisting human beings to be functional to themselves and the society at large. Therefore, it is in the realization of this perhaps that nations, governments, parents, and other stakeholders in education make huge budgets or investments in the education sector and up to the basic education level. In Nigeria, it is comprised of 6 years of primary education, 3 years of junior secondary school, and 3 years of senior levels (Federal Republic of Nigeria (FRN) 2014).

The secondary education forms one of the levels of Nigeria educational system. It is the education children receive after primary education and before tertiary stage (FRN, 2014). The secondary schools are variously owned either by the federal or state government, or non-governmental organizations like the religious, institutions or privately owned by individuals in society and approved by government and regulated by the governmental agencies for

uniform-standard and internationally recognized practices and standards e.g curriculum, calendar and supervision (FRN, 2014).

However, the deterioration in the standard of education and near lack of political leadership commitment towards revitalizing the education sector for national human growth has become a thing of major concern to well-meaning/citizenry. There is a clear indication to the fact that the Nigerian economy is at the verge of collapse going by the prevailing near-breakdown, and lack of moral and social values among Nigerians. This no doubt has contributed to the declining quality of education in Nigeria state, and the negative impact on the socio-economic sustainability (Abbah & Rifkatu, 2019). Education, a presupposed key that could unlock depressed economy as no nation of the world talks of any form of development be it economic, social or political development without having serious recourse to her educational system since the later forms a major bed-rock of development, the reverse is the case in Nigeria, but where education (curriculum) implementation is only paid a-lip-service. This is because successive governments see education could not clearly as an instrument/par-excellence for social transformation as was contained in the National Policy on Education (NPE) document. This is even contrary to what is obtained in many advanced countries of the world. There, it is a means for transferring virtues, values, knowledge, and skills that could make for proper molding and adjustment of an individual to his/her dynamic physical and social environment. This can only be realized through the instrumentality of a functional curriculum implementation for high quality education delivery.

Unfortunately, the state of Nigerian educational system has continued crumbling despite rich resources at the nation's disposal. According to Gbenu (2013) school structures are dilapidating, infrastructural decay and collapse, poor quality methods of teaching, quality assurance, declining teacher quality etc. Again, Ugwu (2019) noted that in the past, Nigerian graduates were highly sorted due to their excellent performance. It is necessary to say that nations are to equip their citizens educationally so as to provide the needed foundation for genuine sustainable development. This could be done by equipping the recipients through effective curriculum implementation in schools. The knowledge and skills so acquired by the recipients would enable them create jobs for themselves, others and at the end grow the national economy. This means that the heart of education is dependent up the level of the curriculum implementation as nation's quality of education determines the quality of manpower, in that it reduces unemployment rate which impact positively on individual quality of life and moral rectitude of society. (Akin, Ogunde & Ibididiana, 2022).

However, Nigerian education system has in the past decades been confronted with inadequate funding from federal government, despite the United Nations Education Scientific Organization (UNESCO's) recommendations of allocation of 26% of nation's national income to education sector. According to Ogunde and Madu (2021) Nigeria has not exceeded seven percent (7%) of her national budget education sector, since 2011 to 2022. The problem is not only at the national budget same is true of other levels of government like state and local government area, authorities. A cursory look at various state and local government owned secondary and primary respectively will show clear evidence of apparent neglect on the part of respective governments. It is still not uncommon to still see school children sitting on blocks or even bare/floor while taking lessons. These political leaders seemed not to have realized the important and while essence of education, some if not most of these leaders mismanaged the resources under their watch. According to some scholars Nigeria is under siege and is driven by mass poverty endemic corruption, economic stagnation, weak institution, political instability and social conflict (Ako and James, 2018).

Again, the high rate of restiveness, social conflict the sit-at-home in South East every Monday, high rate of kidnapping and higher inflation rate have placed the nation as a depressed economy. The World Bank Report of (2019) equally painted a gloomy future for Nigerian economy. It claimed that the economic growth of Nigerian economy had remained almost at stand still since 2015. In the same vain the agricultural sector which in some decades ago was the economic mainstay of Nigerian economics is no longer a force to reckon with because of herdsmen/farman clashes which has adversely affected curriculum implementation. The students and teachers alike cannot freely go to schools for fear of being abducted by kidnappers as has happens in many parts of Nigeria especially in the North-East geo-political zone where Boko Haramists and other bandicts are having their field day. The teachers who are the implementers of curriculum at the classroom level and the students who are the direct beneficiaries of the curriculum being implemented in the schools are highly afraid of going to schools. Therefore, the two indices are so indispensable in that either cannot function at all without the other in teaching-learning process and without which the planned curriculum cannot be implemented at all (Ogele, Ishiwu & Samuel, 2023).

Education no doubt is one of the social services which is not purely out to make profits. As a sub-sector of the economy, government do make policies that may affect the sectors either positively or negatively. One such policies ever taken in recent time by the government is the subsidy removal of subsidies on petroleum products. This was announced by president Ahmed Bola Tinubu in his inugrual speech on 29th May 2023. A subsidy is a decrease in market price of a given product or services by the government so that people with limited purchasing power can bring such goods and services. It is a deliberate policy adopted by government to reduce prices of goods for an individual by paying part of the production cost. Again Ogunode and Ogochenemi (2023) noted that subsidy is an official payment on goods for an individual or a firm usually in the form of a cash payment from the government to reduce the prices of such goods. In Nigeria, the issue of subsidy removal especially on the petroleum product has been very contentious one in that what affects it will have a multiplies effects on other sub sectors of the economy such as transportation, energy/power supply, health, agriculture education inclusive, among others.

Then, the subsidy removal has to do with an official elimination of subsidy on product which was formally subsidized. A case in point is that of recent federal governments removal of subsidy on premium motor spirit (PMS) also known as Petrol and its allied products. It is in reaction to this that the Nigerian National petroleum Company Limited (NNPCL) immediately approved an unpowered review in the pump price of petroleum. The price has catapulted from an average of N189.00 to N750.00 or more depending on one's location in the country (Okonkwo, 2023).

However, the long unending debate had been whether to remove or allow the oil subsidy to continue. It should be noted that one of the remarkable landmark achievement of Buhari led federal government was the signing into law the energy industry and the petroleum industry Act (PIA) in 2021. The removal of the fuel subsidy regime is due to inherent massive corruption, revenue leakages, smuggling of petroleum products outside the country, improper allocation of subsidy, over bloated subsidy claims, huge debt burden and weak infrastructure (Ogunode, 2021). There are bound to be other likely socio-economic gains that may arise from this policy which may include though not limited to these there are certainly going to have job creation for graduates of all cadets with its attendant impacts. According to Akpan (2017) if all policy is properly implemented the local refineries will be fixed and production commenced, the refined products could be sold to other African markets thereby enhancing

our foreign reserve for increase investment and importation of raw materials for implementing curriculum at various levels especially in secondary school education level.

Nevertheless, curriculum implementation as a concept may have different connotations to different people/authors. According to Ishiwu, Ogele and Eze (2023) curriculum implementation is the execution of the contents of the curriculum development. Curriculum implementation is the task of translating the curriculum document into the operating curriculum through the combined efforts of the implementers, teachers, learners and others concerned. Curriculum forms the vehicle that conveys the contents and tenets of education to the people under the auspices of the school (Ogele et al. 2022). Then, from the above, curriculum implementation can be said to be that crucial stage of interplay of both human and material resources to ensure that what has been planned on paper is brought into practical realities. Therefore, it is only when the given curriculum is appropriately implemented that the required needs, aspirations and goals of the people are realized. But it is when the government or other critical stakeholders deploy adequate resources that the hopes and dreams can come to fruition and make the desired change in behaviour.

Sustainable Practices for a Smart Green School

The secondary schools are expected to implement the curriculum of smart green school as shown below:

1. Implementing sustainable practices in secondary school initiatives can have a significant positive impact on the environment and promote environmental stewardship among students. Here are some sustainable practices that allow schools to implement energy efficiency. This is done through installing energy-efficient lighting systems such as LED bulbs and using natural lighting whenever possible to reduce greenhouse gas emissions.
2. Implement energy-saving practices like turning-off lights and equipment when not in use.
Renewable energy: The government could as well install solar panels or wind turbines to generate renewable energy on school grounds, instead of using fuel that emit gas that depletes the ozone layer.
 - Educate students about renewable energy sources and their importance in reducing greenhouse gas emissions which influence the climatic change and its harmful consequences.
 - The school shall educate students about renewable energy sources and their importance in reducing greenhouse gas emissions as contained in the curriculum of studies/schools.
3. Waste reduction and recycling
4. The schools shall implement a comprehensive recycling programme for paper, plastics glass and other recyclable materials.
5. School authority has to encourage student's staff to reduce waste by using reusable water bottles lunch-containers, and shopping bags.
6. Again the compost organic waste from the cafeteria and school compound/grounds could be useful in the school farms and the products used in feeding students.
7. Water conservation: The government could invest on this project through then the school authorities would educate water-saving fixtures such as low-flow toilets and faucets.
8. Educate students about the importance of water conservation and encourage practices like fixing leaks and turning off taps when not in use.
9. Sustainable transportation: Promote alternative transportation options such as walking, biking or carpooling to reduce emissions from vehicle transportation.
10. Provide bike racks and designated parking spaces for carpool or electric vehicles.

11. Educate students about the environmental and health benefits of sustainable transportation choices.
12. Green spaces and biodiversity: The School could create and maintain green spaces on campus such as gardens or outdoor classrooms to promote diversity and connect students with nature.

Rationale for Adopting the Smart Green Schools Initiative in Secondary Schools

A causal visit to most secondary schools in both urban and rural will clearly show a deplorable state of infrastructure. The situation could easily ameliorate if the initiative is given the necessary support from various stakeholders in education.

1. Environmental awareness: it instills a sense of responsibility towards the environment among students teaching them about sustainability and eco-friendly practices.
2. Cost savings: Implementing energy-efficient measures can lead to reduced utility bills, freeing up resources for other educational needs.
3. Healthier learning environment green initiatives often involve improving indoor air quality, which can lead to better concentration and productivity among students and staff.
4. Hands-on learning opportunities students can achieve participate in eco-friendly projects such as setting up recycling programs or maintaining school garden, enhancing their practical skills and knowledge.
5. Community engagement green initiatives can foster partnerships with local organizations and businesses., creating opportunities for collaboration and community involvement.
6. Long-term impact: By promoting sustainable practices early enough on schools can help reshape students into environmentally conscious citizens who contribute positively to society in the future on environmental cleanliness in classrooms hostels and toilet ends of schools.

Perceived Challenges of Implementing Smart Green School Initiatives

1. **Initial cost:** Investing in eco-friendly infrastructure and technology may require a significant upfront investment which can be a barrier for cash-strapped schools. Nigeria as a growing economy is not exempted from this challenges peculiar with growing economy and nations (Arumose, M.S. & Chukwu C. E. 2620).
2. **Resistance to change:** Some stakeholders, including administrators, teachers and even students, may resist changes to traditional practices or curriculum reforms to accommodate smart green initiatives in secondary school in Enugu state Nigeria.
3. **Inadequate awareness or education:** There might be inadequate of understanding about the importance of sustainability or how to implement green practices efficiently among school staff, students and the community.
4. **Maintenance and management:** green technologies and facilities require ongoing **maintenance** and management which can strain already limited resources and personal Nigeria is known for inadequate maintenance culture.
5. Regulatory and policy constraints regulatory hurdles or lack of supportive policies at the local regional or national level can hinder the adoption and implementation of green initiative in schools.
6. **Limited resources:** many schools especially schools with limited financial resources or access to external funding may find it challenging to prioritize smart green initiatives over other pressing needs.
7. **Integration with curriculum:** integrating sustainability principles and practices into the curriculum in a meaningful and effective ways can be challenging, especially those without adequate training or support for teachers before the programme kick-starts.

Way Forward

The way forward to the implementation of smart green school initiative in secondary schools requires a comprehensive approach. Here are some key steps to take.

The Enugu state government that is taking the lead in this innovation should allocate adequate fund to education sub-sectors to:

1. **Stakeholders engagement:** This involve all stakeholders including administrators, teachers, students, parents, and the local community in the planning and decision-making process to ensure buy-in and support for smart green school initiatives for secondary schools in Enugu state.
2. **Assessment and planning:** conduct a thorough assessment of school's current practices, infrastructure and resources related to sustainability. Develop a strategic plan outlining specific goals, time times, and action steps for implementing green initiatives.
3. **Capacity building:** Provide training and professional development opportunities for teachers. The actual implementers. The teachers and students should be made to undergo workshops, seminars so as to key-in into the project/programme.
4. **The part of money r ealized from the fuel subsidy removal** should be ploughed into the key sectors of the economy such as education, health, agriculture etc.
5. **Government** should ensure that the world benchmark of 26% of the annual budget be allocated to education sub sector.

Conclusion

There are innumerable benefits that the Enugu State government would derive from the initiative which include:

1. **Environmental Benefits:** reduced energy consumption, waste conservation, and waste reduction contribute to environmental sustainability, helping to mitigate climate change and preserve natural resources.
2. **Cost savings:** the energy-efficient practices lead to reduced utility bills for schools and taxpayers. Additionally, waste disposal costs.
3. **Healthier learning environment:** Green schools often have better indoor air quality and natural lighting, which can enhance students' health, well-being, and academic performance.
4. **Educational opportunities:** incorporating sustainability into the curriculum provides students with valuable real-world learning experiences and fosters environmental literacy, preparing them for future green jobs and citizenship.
5. **Community engagement:** green school initiatives can foster partnerships with local businesses, non-profits, and community members promoting collaboration and civic pride.
6. **Government leadership:** Implementing green initiatives demonstrates government leadership in sustainability and sets an example for other institutions and sectors to follow.
7. **Long-term savings:** investing in energy-efficient infrastructure and sustainable practices yields long-term savings for governments and taxpayers by reducing operating costs and extending the life span of facilities.
8. **Resilience and adaptation:** green schools are often more resilient to environmental hazards and climate change impacts, providing safer and more secure learning environments for students and staff.

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