

EDUCATION FOR SOCIO-ECONOMIC AND POLITICAL RECONSTRUCTION IN THE 21ST CENTURY NIGERIA

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Concept of Education

The field of education has been extensively spoken about in various quarters by different educators, Philosophers and Psychologists in their perspectives. Education is a dynamic concept. Its meaning changes from time to time. It is interpreted by different persons from their backgrounds and ideas. Philosophers and thinkers from Yajnavalkya (about 600BC) to Mahatma Gandhi (1869 – 1948 AD) in the East and Socrates (469-399 BC) to Dewey (1859-1952) in the West have defined education by their philosophy of life.

There are four important reasons for different interpretations of education (Biswas, 2018)

- Complex nature of human personality
- Complex nature of the environment
- Different philosophies of life
- Different educational theories and practices.

It must be admitted that education is largely concerned with transmitting social and cultural heritage to the new generations; in this sense, it is a conservative agency. Education greatly affects social structure, mode of living, thought and behaviour patterns and personality structure of individuals. For human reforms, we have to rethink the system of education. Education forms the backbone for various societal developments. As it is often said, education is the spine from which a society can be developed and no nation can rise above its standard and level of education. This calls to mind the need for every nation to invest in and develop its educational system. Structures that are viable and relevant to the needs and aspirations of the society must be built, monitored and evaluated for any meaningful change and development to be seen in any sector of the nation. Rebuilding Nigerian education should be part of the reconstruction process. Nigeria has faced numerous challenges over the years, leading to the deterioration of the education system. Some of these problems are:

Collapsed Foundation: Nigeria has faced numerous challenges over the years, and one of the major issues is the collapsed foundation of the system. The foundation of the Nigerian education system can be traced back to the pre-colonial era when traditional education was the norm. However, with the advent of colonialism, the British introduced Western education, which was later adopted as the formal education system in Nigeria. However, there is a need for a concrete and solid foundation that can sustain the Nigerian educational system.

Inadequate Training of Teachers: Many teachers were not adequately trained, and as a result, they lack the skills and knowledge required to impact quality education to their students. This has led to improper teaching of the students, leading to poor preparation for higher education or the job market.

Inadequate funding: Another major problem with the Nigerian education system is the lack of adequate funding resulting in the poor quality of infrastructure, inadequate teaching materials, and low morale among teachers Investments in education from primary, through secondary to tertiary levels are very necessary and important if Nigeria as a country is ever willing and would be able to move forward. Increasing funding for education will enable the government to invest in infrastructure, teacher training, and the development of educational materials. These will require the provision of all that is needed to be in place for quality education. Gathering pupils to learn under very deplorable conditions with despicable government attention to the essentials for quality learning is seen as detrimental to the concrete reconstruction of the Nigerian education system (Bandele, 2023).

Curricula Failures: The Nigerian education system appears to have failed in some instances to evolve with the changing world about formulating a sustainable curriculum at every level of education that can meet the peculiar needs of a Nigerian nation. They have in some areas been outdated and do not adequately prepare students for the modern world. Efforts, such as reviewing landmark documents such as the National Policy on Education and the Curriculum, as well as advocating the formation of education sector plans at the national and state levels, do not appear to have had the intended cumulative good effect. When the idea of reform was floated in late 2006, and the education sector was chosen as one of five to lead a national reform process, everyone assumed that the ultimate answer was already in the works. However, it required another time of transition, new leadership, and a large public pronouncement that Nigeria's education sector was in crisis to finally usher in a reform process that appeared to have caught many people off guard. (Obanya, 2007, Bandele, 2023).

Educational Policies and Implementation

Over time, the dichotomy between educational policies and implementation in Nigeria has been wide and this has become wider over the years. This has also been reflected in the poor performance of students as well as the quality of graduates that are produced in the Universities. The Nigerian education system is still in shambles. It's so awful that some astute Nigerians prefer to send their children to Europe, America, or even small African countries like Ghana. The onus is on educational organizations, stakeholders and the government to come up with joint holistic plans towards revitalizing education. (Ziberi, et. al., 2022). Many would opine that many conversations have gone on in different circles about the way forward, especially in the Nigerian educational clime and this has resulted in little or no change in terms of productivity and effectiveness, many questions could be asked as to what exactly needs to be done to mitigate the dwindling fall in the educational systems and sector. The best approach would still result in a paradigm shift in the quality and structure of education that is offered in Nigeria.

Research needs to be carried out to provide a diagnostic solution towards finding solutions to specific educational problems. These researches would assist in various ways some of which will include:

- i. finding the missing link in the educational structure of the country;
- ii. need assessment of areas where resources and facilities are demanded towards educational improvement;
- iii. finding answers to unanswered educational questions;

- iv. providing solutions to the unsatisfactory state of educational affairs in the country across all levels; and
- v. providing avenues to bridging the educational gaps in the country.

These will assist in building and developing a better society where relevance will be of utmost importance as well as the focus of educational outcomes across all levels.

Socio-economic and Political Reconstruction

That the Nigerian society is in dire need of reconstruction is what is seen and accepted across every clime and even in other countries of the world. That Nigerian desire to be at par with advancements and structural development with other nations of the world currently seems to be a dream that is at best chasing its shadows. Education needs to break free from the shackles of political structures and the desires of individuals and move to structural adjustments that fit into the reconstruction that is needed in our present-day society (Grant, 2017).

Socio-economic and political structures are areas that are most affected by events and occurrences in society. These aspects in no small measure dictate what goes on in the society as well as the lives of the citizens and occupants of the society. The ability of a country to recognize the importance of education as a catalyst for development results in explosive socioeconomic growth in a limited time. Socio-economic reconstruction is establishing and reviving micro, small, and medium enterprises to allow the economically vulnerable to generate a decent income. While social-economic factors include issues such as occupation, income, education, wealth, employment, community safety and social support. On political reconstruction, education has an impact on the participation of people in politics, the higher the education, the greater the 'good' values of the variable. The educated citizen is attentive, knowledgeable and participatory, and the uneducated citizen is not. Political participation by educated persons is probably because education enhances participation by developing skills that are relevant to politics – the ability to speak and write, and the knowledge of how to cope in an organizational setting.

There is no doubt that our country is in a state of comatose and we are in dire need of help in our social, economic and political structures (Woodhall, 2006). On the **social aspect**, the rise in the number of cyber frauds, devaluation of moral standards and principles, and different cases of corruption permeating all sectors attest to the fact that help is needed, on the **economic** front, the increased rate of inflation, the fallen standard of Naira against other currencies, the ease and logistics involved in doing businesses beg for help in the Nigeria society. Nothing better can be said about the **political structures** and experiences in the country. There is no need to further explain that help is needed and the educational sector is the strongest and most reliable help that can be gotten, hence, the need to get a solution.

Importance of Education to National Development

The fact that education provides the necessary workforce for national development is one of the most important factors to take into account here. This claim is supported by Afolabi and Loto (2012), who claim that a developed or educated political system is one in which there is an adequate labour force and everyone fills their proper roles in society. To bolster this, Ajayi and Afolabi (2009) also observed that education is widely regarded in Nigeria as an essential tool that will not only help the country achieve its



social, political, moral, cultural, and economic aspirations but will also instill in individuals the knowledge, skills, dexterity, character, and desirable values that will promote national development and self-actualization.

Through the discovery of one's creative potential and application of that potential to the improvement of one's current skill and technique for performing specific tasks, education also encourages the culture of productivity (Obasanjo 2012). People are taught or trained to be beneficial to themselves and the society in which they live through education. To do this, people must be productive, identify their creative talents, and apply them to finish particular activities that will lead to self-actualization. Through this, they can effectively contribute in all spheres, build confidence and strength in their abilities, and seek support as well as areas where they need to build or develop themselves accordingly.

It is evident from the foregoing that education plays a crucial role in national development. In the Nigerian context, however, education has not played its entire role. This is a consequence of the Nigerian education system's inherent flaws. The relationship between education and the processes of nation-building and development is undeniable. The lack of adequate funding for education in Nigeria has led to the development of inadequate infrastructure in tertiary institutions, secondary schools, and primary schools. This inadequate infrastructure creates a very antagonistic environment. Nigeria currently allocates only a small percentage of its annual budget to education which is insufficient to adequately support the education system.

The unpredictable political climate is a further factor to consider. Since Nigeria's independence, there have been numerous administrations. The successive military or civilian political leaders frequently suspend the existing educational policies and replace them with new ones that reflect their political agenda. However, constant changes in educational policies also hurt national development. A policy requires sufficient time to mature through the phases of planning, implementation, and review. For example, a policy affecting the secondary level of the Nigerian educational system would require twelve years to complete two cycles, namely Junior Secondary School (JSS) and Senior Secondary School (SSS). After the completion of this cycle, it is expected that evaluation is done to assess progress or otherwise before making adjustments or decisions on the success or otherwise of the curriculum. This is the opposite in the Nigerian context, where it is customary for policymakers, who are political leaders in authority, to jettison, drastically modify, or abandon such policies for obvious reasons (Afolabi and Loto, 2012). Typical examples are seen in the change from the 6-3-3-4 system of education to the 9-3-4 system. It is unsure of the effectiveness of this change, and the understanding of how this system should work is still unclear among different stakeholders ranging from schools, teachers, textbook publishers, and school administrators among others.

It is agreeable that government has a huge part to play in assisting the development and impact of education in promoting national development but much more can be done in terms of push that can be given to improve the impact of education on National development. We must bring this push by insistence on researches that will produce findings that will contribute to national development. This research should focus on the core issues that affect us as a society in the 21st century so that it becomes easier to seek improvement. The onus lies on us as teachers and academics to begin to seek support and



look for ways whereby our contributions will begin to make meaning in society as well as help in teaching, research and community services which are the three cardinals of our contributions to national development.

Philosophy and Goals of Education Towards Socio-economic and Political Reconstruction

Typically, a nation's educational philosophy and objectives are mostly an offshoot of the people's goals, which can be viewed as the identified societal values to be attained or maintained through education. It should be noted that the philosophy and goals of Nigerian education have undergone a metamorphosis to their current state, having passed through several stages with distinguishable landmarks. As a nation, Nigeria aspires to establish a free and democratic society, a just and egalitarian society, a unified, strong, and self-reliant nation, a great and dynamic economy, and a land of abundant opportunities for all its citizens (FGN,2004). Based on these national goals, the philosophy of Nigerian education must be geared towards self-realization, improved human relationships, individual and national efficiency, effective citizenship, national consciousness, and national unity, as well as social, cultural, economic, political, and scientific and technological advancement.

The philosophy is connected to the following educational goals and objectives:

- i. the inculcation of national consciousness and national unity,
- ii. the inculcation of the correct values and attitudes for individual and societal survival,
- iii. the training of the mind to comprehend the world, and
- iv. the acquisition of appropriate mental and physical skills, abilities, and competencies as equipment for the individual to exist in and contribute to the growth of his society. (FGN 2004).

The stated philosophy and goals of education are quite commendable and necessary. To accomplish these goals, however, a teacher who teaches the values and everything necessary for individual and societal survival in all its manifestations must be fully equipped for effective instruction. The question arises as to how to equip a teacher to be effective as it relates to instruction. This is best done by acquiring knowledge, skills and attitudes necessary for educational improvement. Nwafor (2014) highlights some lapses in the effectiveness of the Nigerian Philosophy of education towards the effectiveness of the imprint of the philosophy of education in improving national development. It was assumed that when some of these lapses like integration of all aspects of education, re-organization of the entire education system, and the concept of life-long education are taken into consideration, and the programmes and policies religiously implemented, Nigeria will experience accelerated national development.

The Utilization of Education for Socio-Political and Economic Reconstruction

Education plays a crucial role in socio-economic change by empowering individuals, fostering economic development, and promoting social progress. Here are several important reasons why education is crucial for socioeconomic change:

Human Capital Development: Education equips individuals with essential knowledge, abilities, and skills for their personal and professional success. It improves their capacity to effectively participate in the labour market, contributes to economic productivity, and advances their socioeconomic standing. Individuals with a higher level of education are more likely to obtain higher-paying jobs, gain access to superior healthcare, and make informed decisions about their lives and communities. Education can equip

individuals with the skills and knowledge necessary for economic autonomy. This includes vocational training, education in entrepreneurship, financial literacy, and employability skills. This type of practical education can increase employability, generate economic opportunities, and contribute to the reduction of poverty, economic growth, and sustainable development. It can also promote economic reconstruction in communities that have experienced economic difficulties due to war, displacement, or other disturbances.

Poverty Alleviation: Education is a potent tool for breaking the cycle of poverty, which contributes to poverty alleviation. It equips individuals with the skills and knowledge necessary to escape poverty by allowing them to pursue higher-paying employment, engage in entrepreneurial endeavours, and make informed financial decisions. In addition, educated individuals are more likely to invest in their children's education, resulting in a positive intergenerational impact and a reduction in poverty levels over time.

Economic Growth and Innovation: Education is a major contributor to economic development and innovation. A well-educated labour force is essential for economic competitiveness because it enables nations to adapt to changing economic conditions, adopt new technologies, and foster innovation. Individuals with greater education are more likely to engage in research and development, create and implement new technologies, and contribute to economic growth and productivity.

Inclusiveness: Education promotes social progress by fostering inclusiveness and decreasing inequality. It provides equal opportunities for people from diverse backgrounds, regardless of socio-economic status, gender, ethnicity, or other demographic factors. Education helps combat discriminatory practices, fosters social cohesion, and creates a more inclusive and equitable society in which all individuals have access to growth and development opportunities. In post-conflict or divided societies, inclusive education promotes social cohesion, reduces discrimination, and builds bridges between diverse communities, which can contribute to healing and reconciliation. It can also combat economic disparities by ensuring equal access to education and skill development.

Social Engagement and Democratic Participation: Education is crucial to promoting civic engagement and democratic participation. Educated individuals are more likely to be informed citizens, participate in civic activities, and engage in democratic processes, such as voting, advocating for their rights, and holding leaders accountable. Education equips individuals with critical thinking skills, promotes independent thought, and fosters active citizenship, all of which are necessary for the functioning of a democratic society. Civic values, critical thinking skills, and knowledge of democratic processes, human rights, and social justice can be instilled through education. This enables individuals to participate actively in the political process, make informed decisions, and advocate for their rights and interests. Civic education can promote a culture of active citizenship and democratic governance, which are essential for socio-political reconstruction.

Improves Critical Thinking and Problem Solving: Education can promote critical thinking, analytical skills, and problem-solving skills. This enables individuals to analyze complex socio-political and economic issues, evaluate various perspectives, and propose original solutions. Critical thinking enables people to challenge oppressive systems, pursue social change, and contribute to socio-political and economic reconstruction efforts.

Health and Well-being: Education has an immediate effect on health and well-being. Individuals with a higher level of education are more likely to implement healthy behaviours, make informed decisions about their health, and utilize healthcare services. Education also increases awareness of public health issues, hygiene, and disease prevention, resulting in improved health outcomes for individuals and communities.

Promoting Interdisciplinary and Multicultural Education: Interdisciplinary and multicultural education can foster a comprehensive understanding of complex socio-political and economic issues. It promotes diverse viewpoints, critical engagement with various cultures, and the integration of knowledge from multiple disciplines. This can foster creativity, innovation, and a comprehensive approach to socio-political and economic reconstruction, thereby addressing the complex challenges that may arise during the process. Education is, in conclusion, a fundamental pillar of socio-economic transformation. Investing in education is not only a moral necessity, but also a strategic investment for the socio-economic growth and prosperity of individuals, communities, and nations. Societies can work towards a more just, equitable, and sustainable future by utilizing education as a tool for socio-political and economic reconstruction.

Procedures/ Steps Towards Utilizing Education for Socio-Economic and Political Reconstruction

Education as a tool for change will not just happen in isolation, inputs and processes would be required with adequate steps meticulously taken towards improvement. The following suggestions are encouraged as steps that can be taken towards this improvement.

- 1. Increasing Access to Quality Education: Sustainable Development Goal 4 suggests equal and accessible education to all. Learners must be guaranteed access to quality education, regardless of their socio-economic background, gender, ethnicity, religion, or handicap, and this must be done in a manner that does not discriminate. This includes providing fair access to educational opportunities, removing barriers to enrollment and retention, and making certain that schools and other educational institutions are well-equipped with skilled teachers, adequate resources, and secure learning environments.
- 2. Improved Teacher Quality: It is important to invest in teachers since they play such an important part in the overall quality of education. It is possible to improve teachers' efficiency and motivation to provide high-quality education if they are given opportunities for continued professional development, pay that is competitive in the market, and supportive working conditions. It is essential if one wishes to observe the beneficial impacts of education, to make investments in the recruitment, training, and maintenance of professional and motivated educators.
- 3. Development of Educational Programmes: Government and stakeholders can develop or assist in developing programmes that are both relevant and inclusive. It is important to foster an educational programme that is both relevant and inclusive, and that is also connected with the requirements of both the students and the society. It should encourage analytical thinking, the ability to solve problems, creative problem-solving, and a knowledge of other cultures. To

implant principles that encourage beneficial socio-political and economic reforms, it should also address social justice, human rights, and sustainable development.

- 4. Encourage Partnerships and Participation: The formation of partnerships among various stakeholders, such as governments, civil society organizations, communities, and parents, as well as different tiers of education, can help to increase the efficiency of educational programmes. Increasing the involvement of parents and communities in the educational process, fostering participatory decision-making, and incorporating local knowledge and culture are all ways to improve the educational projects' relevance and sustainability.
- 5. Ensure that Education is Inclusive and Promotes Equity and Equality: It is of the utmost importance to ensure that education is inclusive and promotes gender equality. This involves tackling prejudice based on gender, ensuring equal opportunity for girls and boys, and encouraging the education of marginalized and disadvantaged groups, such as those with disabilities, refugees, or those from communities of minority ethnicity or religion. Education that is accessible to all students fosters social cohesiveness and lays the groundwork for the rehabilitation of economic and political systems.
- 6. Encourage Continuous Learning: Education should be viewed as a process that continues throughout one's entire life and extends beyond what is taught in traditional schools. In a society that is always evolving, encouraging people to continue their education throughout their lives through means such as non-formal and informal education can help boost skill development, innovation, and adaptability. Learning throughout one's lifetime can be beneficial to one's ongoing personal, sociopolitical, and economic development as well as the development of their community.
- 7. Improved monitoring and evaluation: It is essential to both monitor and evaluate the impact that educational policies and programmes have to guarantee accountability and enhance the efficiency of these efforts. In education interventions, identifying gaps, difficulties, and successes can assist and inspire evidence-based policies and practices. Decision-making that is data-driven, rigorous monitoring, and assessment systems can all help with these tasks.

Advancement and Improvement in the Use of Technological Tools towards Improvement

With technology and artificial intelligence widely being acclaimed and accepted as leverage towards development in the 21st century, the use of these tools must become widely accepted towards improving education. The use of digital technology has reached every nook and cranny of the educational system. Numerous instructional strategies and content were delivered to students over the internet, and computerization brought to the interconnection of computers through global network infrastructures among other uses. There have been several technological advancements made in the realm of education that have either served to supplant or supplement the traditional desktop computer. We can build upon this.

The quantity of data produced by digital tools as well as the computational power of digital tools has significantly increased and the connectivity of digital tools. Utilizing technologies such as computers, mobile phones, television, still and motion pictures, mobile applications, and so on are all a part of today's educational landscape. According to Brush, Glazewski, and Hew (2008), students use the tools provided by technology to discover new learning topics, find answers to difficulties, and propose solutions to



problems that arise throughout the process of learning. It makes the acquisition of knowledge easier to access, and it ensures that students understand the concepts in the many learning areas while simultaneously engaging them in the application of various technological tools. Learning that is student-centred and student-directed can also be supported by the tools provided by technology. Despite the many benefits of incorporating technology into classroom and academic settings that have been frequently touted, activities, some barriers prohibit instructors and students from using technology in their classrooms (Beak, Jung, & Kim, 2008; Ogunleye, 2007; Ndudi and Chinedu, 2016). These barriers inhibit teachers and students from adopting technology in their classrooms.

Even though many new technological tools are currently accessible for teachers to employ in their classrooms, training needs to be provided and should be promoted on an ongoing basis for successful deployment. Teachers need to be aware that the time they invest in learning how to use technology tools, such as interactive software like artificial intelligence, will likely pay off for their students in the long run if they take advantage of the opportunities presented by these technologies. Teachers should be able to successfully integrate technology into their classrooms with a little bit of practice and some additional time spent planning, and they should see the benefits, such as increased student test scores, motivation, and engagement, quite quickly. If we take these measures, we will be able to begin to witness the effects that education has on fostering socio-political and economic rebuilding. Education has the potential to give people more agency, cultivate critical thinking, advance social justice, and contribute to sustainable development, all of which can result in good changes not just in individuals but also in communities and societies as a whole.

Expectations towards Enlightening the Society on the Need to Strengthen Education for Socio-Economic and Political Reconstruction

For Nigerian youth and the country as a whole to advance educationally, economically, and politically, its students must acquire pertinent skills during their school years that are relevant to 21st-century society. This will assist in resolving Nigeria's socio-economic and political problems. Consequently, the introduction of relevant subjects and courses like STEAM into the Nigerian Educational curriculum, from primary to university levels, by local, state, and federal authorities will catalyze these improvements. There are several anticipated changes that the nation hopes will occur as a result of the current shift in Federal power. There is, of course, the issue of education reform within the context of the political objectives of evolving communities, health, and economy, which we believe could help society to a large extent. Nigeria's educational system desperately requires reconstruction. This issue should be a top priority for the government and its citizens.

The educational system of Nigeria's young men and women is crucial to the nation's future. This will give education its proper place in creating an enabling environment for growth and development. If we continue to carry out research that would help in identifying the missing link between where we are and where we ought to be, research that reveals the current state of affairs of education. sooner or later, we will begin to reap the fruits and dividends of our input towards the advancement of education.



References

- Afolabi, F.O., & Loto, A.B. (2012). Socio-political Vicissitudes and Bureaucratic Constraints on Educational Formulation and Implementation in Nigeria. In Edo, V.O. and Salami, E.F.K. (eds), Issues and Trends in Nigeria's Development: A Festschrift for Rev. (Fr.) Abiodun, F.A. Ibadan: John Achers, P. 330 and 339.
- Ajayi, A.I., & Afolabi, F.O. (2009) The Role of Tertiary Education in National Development: The Nigerian Scenario; *Journal of Teacher Education*, 10(1), 34-46.
- Bandele, S.O. (2023). The Imperativeness of Holistic Rebranding of the Nigerian Educational System. A Keynote Address,5th Annual Conference, Institute of Education, Obafemi Awolowo University, Ile-Ife.
- Baek, Y., Jung, J., & Kim, B. (2008). What Makes Teachers Use Technology in the Classroom? Exploring the Factors Affecting Facilitation of Technology with a Korean Sample. *Computers & Education*, 50, 224-234. <u>https://doi.org/10.1016/j.compedu.2006.05.002</u>;
- Biswas, S. (2018). Education and Social Reconstruction. International Journal of Creative Research Thoughts (IJCRT) 6(1).
- Brush, T., Glazewski, K. D., & Hew, K. F., 2008. Development of an instrument to measure preservice teachers' technology skills, technology beliefs, and technology barriers. *Computers in the Schools*, 25, 112-125.
- Federal Republic of Nigeria (2004). National Policy on Education. Lagos: NERDC Press
- Grant, C. 2017. The Contribution of Education to Economic Growth. Brighton: Institute of Development Studies.
- Ndudi, O. C., & Chinedu, E. U. (2016). Effect of Information and Communication Technology (ICT) on students' Interest in basic electricity. *Scientific Research*, *1*(4).
- Nwafor, A. & Naboth, H. A. (2014). Philosophy of Education and National Development: A Philosophical Approach. *Information and Knowledge Management*, 4(6), 92-97
- Obasanjo., O. (2012). Education and National Development, A Lecture Presented at the 2012 Graduation Ceremony of University of Nigeria, Nsukka, January 26
- Obanya, P. (2007). Thinking and Talking Education. Ibadan. Evans Brothers Nigerian Publishers
- Ogunleye, B. O. & Afolabi, B. T. (2007). A survey of computer facilities, teachers" computer literacy, attitude and utilisation in chemistry teaching in Ogun West Senatorial District, Ogun State, Nigeria. *Nigeria Journal of Computer Literacy*, 8 (1), 133-155

- Woodhall, M. (2006). Financing Higher Education: The Contribution of Economic Thinking to Debate and Policy Development on Reform of Higher Education Funding. *Dijon: IREDU*, 21–23.
- Ziberi, B., DonatRexha, X., & Besnik Avdiaj. (2022). Empirical Analysis of the Impact of Education on Economic Growth. *Economies 10*: 89. https://doi.org/10.3390/economies10040089