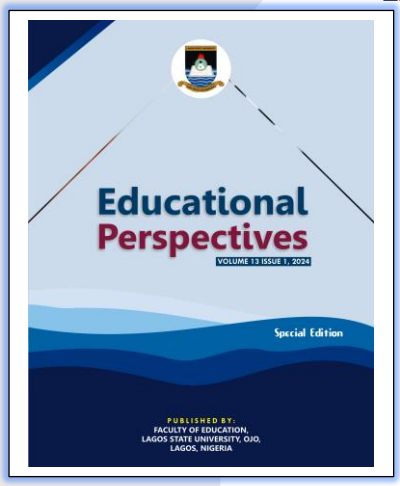

Global Future of Education and Eradication of Learning Poverty in Developing Countries

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ABSTRACT

Education is the basis of high levels of human capital of a peaceful and sustainable environment, with a strong positive relationship with other aspects of political, social, and economic development. Education has been known for learning crisis, as of 2018, it was estimated that almost 258 million children and youths were reported out of primary and secondary schools across the world. In the same vein, a joint report from UNESCO and Worl bank (2021) affirmed that in developing countries there were 53% 10 years old children experiencing learning poverty, they can neither read nor understand a simple text and numerical. COVID-19 between 2020 and 2021, created a mounting crisis causing an unprecedented disruption to education globally. This paper aims to explain that children are not being provided with the required education needed in the rapidly changing world. While using descriptive education research method and assessing some literature reviews on educational models that describe a way of thinking about the purpose of education as well as reflecting on the three key drivers of global changes and how education can be shaped to annex the opportunities in the global challenges. The final section will elucidate the counselling implication and recommend a design of educational change management for future development.

HOW TO CITE

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Introduction

There is a global consensus that education development is the driver and key to attaining the sustainable change as well as sustainable development goal by 2030. The planning of a new sustainable development goal (SDG-2030) by United Nation in 2015 comprising of 17 goals and 169 associated targets saw the end of the Millenium Development Goals (MDGs) without being achieved. This study focuses on the essentials of education and eradication of learning poverty through transformation and delivery of quality education in all levels as well as environment such as rural, urban, and cross border and remote learning with embedded digital technology driven by internet across the globe.

The drive of this paper is to attempt to provide an overview of the current state of the evidence on education's influence on other key aspects of development such as economic development, comprehensive social development, political and governance as well as peaceful environment in the world we live. Dominant literatures have affirmed that education being the basis of high level of human capital have direct or indirect correlation with other essential sectors of global developments and the environment we live. According to UNESCO (2023), education provides avenues to societal involvement, an institution that form foundation for support for social cohesion and on a global level also perceives as the most important mechanism for emancipation that improve the social -political and economic development of a nation as well as the entire world we live (UNESCO, 2023).

Although, the 21st century era has witnessed rapid educational development and innovation which have reduced level of inequality of wealth among nations and foster increased of skilled human capital among the developing and emerging economy nations with the prevalent of digital technology and information communication technology driven by the broadband internet, education development has been historically enmeshed in learning crisis. UNESCO and World bank (2021) jointly affirmed that as of 2018, an estimated 258 million children and youths were out of primary and secondary schools worldwide, there are also children in their 10 years of age in developing countries with estimate of 53% experiencing learning poverty because they do not understand how to read or lack numerical ability due to varying challenges that borders on poor education quality, poor learning environment, cultural orientation due to disruptive nature of change that education will cause et cetera. (UNESCO, 2021). The prevalent of COVID-19 created an escalating crisis and challenges causing a unique disruption to education globally. Within the years 2020 and 2021 alone, an estimated 1.6 billion students were affected with learning crisis and inequalities in education were deepened and increasing the already alarming learning crisis (UNESCO, 2021). The aftermath of the pandemic has massively disrupted the society as there are enormous child labour, the boys who were out of school have refused to return to school as they have taken various jobs and the girls after they got pregnant also stopped going to school and get involved in early marriage.

If the current situation persists and extra effort is not made mostly in the developing countries, one of the SDG-2030 targets that may not be met is the achievement of universal basic education such as primary and secondary school. This paper aims to explain that children are not being provided with the desire education that is required to live in the rapidly changing world and economy and to suggest transformation models that seek to foster quality education to everyone across the globe. Descriptive education research method was adopted and assessing some literature reviews on educational models that describe the purpose of

education as well as reflecting on the environmental, demographic, and technological changes which are the three key drivers of global changes. In this way, the change management process of education, when it is allow to take care of all the global challenges, the stakeholders particularly the children who must be allow to exercise their human right and the policy makers and executives as well partners across the globe who are to ensure that quality education strategy and implementation is adequately managed with the right budget and monitoring; " People can break from cycle of poverty when they are able to get quality education(Unite Nation, 2023). In the final section, the assessment of Nigeria Integration of SDG into National development and education transformation as well as the role of Counselling education in education transformation will provide us information about the current outlook and what we are doing to transit and transform our education to sustainable level that can also meet the United Nation SDG-2030 goal.

Statement of problem

This paper works on the assumption that education such as basic skills in literacy and numeracy are essentials goals of education for people in the 21st century. The emphasis will be on children who deserves to have primary and secondary school education with a broad range to define education quality. The framework for change management in education that foster doing the right things as well as doing things right. The relationship between education and poverty in the context of political social and economic stability and development of a nation is examined with aim to determine the necessity and urgency of education transformation and poverty eradication.

While evaluating the reviews of some qualitative research to determine the lesson learn leading to a discussion on strategies for educational transformation, the aspect of the counselling implication in the improvement of education of the developing countries will be addressed to ensure sustainability. There is need to provide an overview of educational framework that forms the basis of education performance measurement on global criteria as a starting point for transformation and universal education standards.

Objectives

a. To examine the education crisis across the globe and its relationship with social-political and economic constraints.

b. To access the educational models and their applications to educational change management in 21st century towards attaining SDG-2030 goal

c. To deduce the readiness of Nigeria (developing country) to transit from the current to the future transformation of education and poverty eradication.

d. To proffer change management framework for education transformation and learning poverty eradication

e. To determine the implication of counselling education in the education transformation

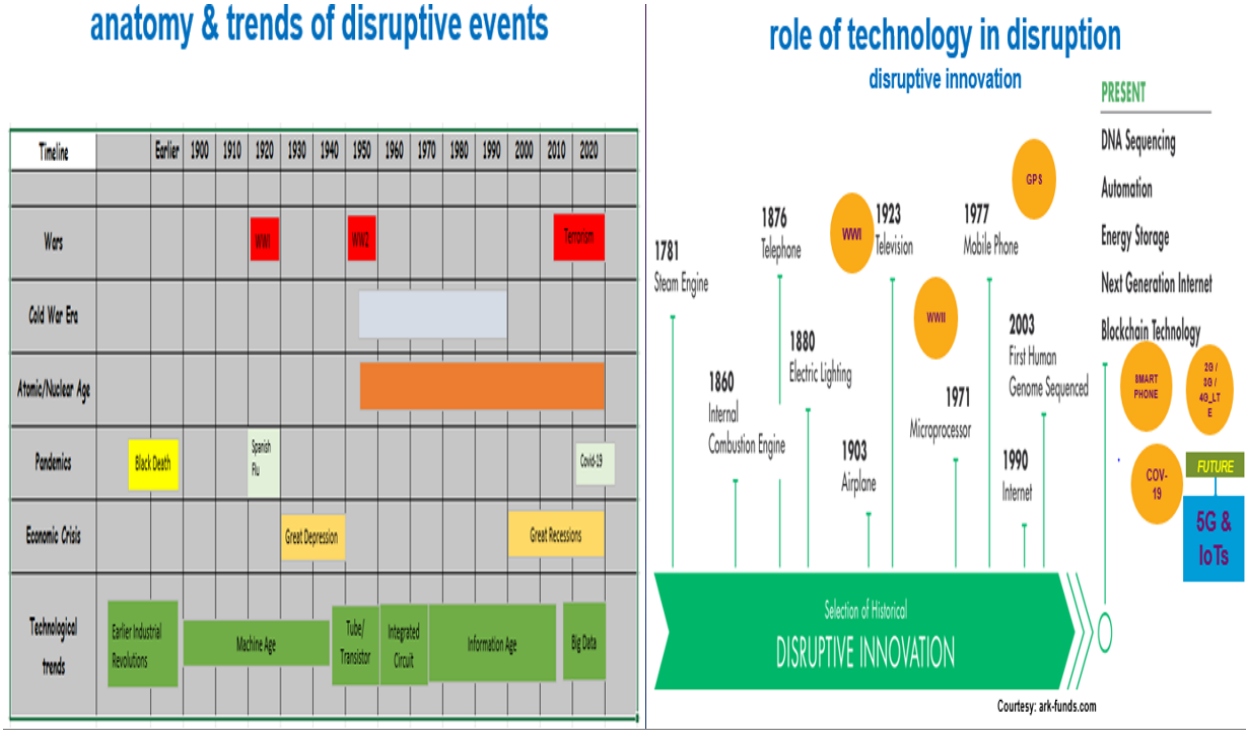
Education Transformation

Education is a learning process that is aim at replacing an empty mind with a new one, it extends to be a far more process of replacement and transformation of the current ideas to creating and generating new and proficient mind as well as implementing the ideas to make it happen. Expectedly, everyone has much hope from education such as the mindset that after graduating from the college or university there is applicable job offerings that can afford a fulfilling life. Unfortunately, many of such hope have been proved abortive because of lack of relevant practical knowledge which will foster competitiveness among others around the world and this have been the travail of the developing countries where there are prevalent of theoretical knowledge and iota of practical awareness within the institutions which are far below the industry and office requirement.

There is need for an imaginary change for both emotional and physical aspects of people towards the future. This is different from being illusive in term of what the future holds, everything in life begins with imagination of what is expected to happen when someone take action to do something. The idea of education transformation is inspired from the fact that everyone considered education as the driver to other aspect of human development and sustainability. Education transformation achievement will foster globalization as well as creating solutions to everyday challenges such as unemployment, human capacity deficiency in various technological and innovation disciplines, inequalities, poverty, and climate change.

The global world has evolved in all aspects of human endeavour including business, varying discovery in science and technology and today we are in the era of digitization such as of advanced technology, artificial intelligence, blockchain, cybersecurity and robotics, embedded software solutions, internet of things and all other related digital economy and their use cases. These transformations are engineered due to disruptive effects of certain events such as epidemy, war, climate change and demographic as well as technological evolution as shown in the figure 1 below. Every generation developed its own way of creating solution for sustainability, the discoveries and innovation of the generation from 18th to 20th centuries afforded us with industrial revolution, fast moving trains and automobiles, health machines and legacy education systems. Therefore, transformation has the potential to establish, replace and innovate as well as suggest a new method of taking education into the future of people who is required to occupy a certain position in the future with the require skills and knowledge suitable for portfolio.

Figure 1: Disruptive Events and Technological Evolution



Source: ark-funds.com, 2022

The Models for Education

Children and youth education is immemorial for as long as parents and societies have desired to impact skills and principles among their offspring to ensure survival and improve environment (Lancy et al., 2010: cited: www.researchgate.net). Since the middle of 19th century, education has evolved to formal education also known as public education or western structured and have risen in prominence over the last century with focus on human capacity

development, protection of human rights and economic growth of individual and society (Robeyns, 2006). The goals of education have been described by different authors with respect to varying aspects of models they are looking at and what works in education as well as what may be the changing paradigms in the future. Among the several theories that could be used to investigate education systems and consider purposes of education are the three models of education which are selected in this writing because their applications are common in numerous contemporary policy documents and speeches. The three theories include the human capital model, the rights-base model, and the capability model.

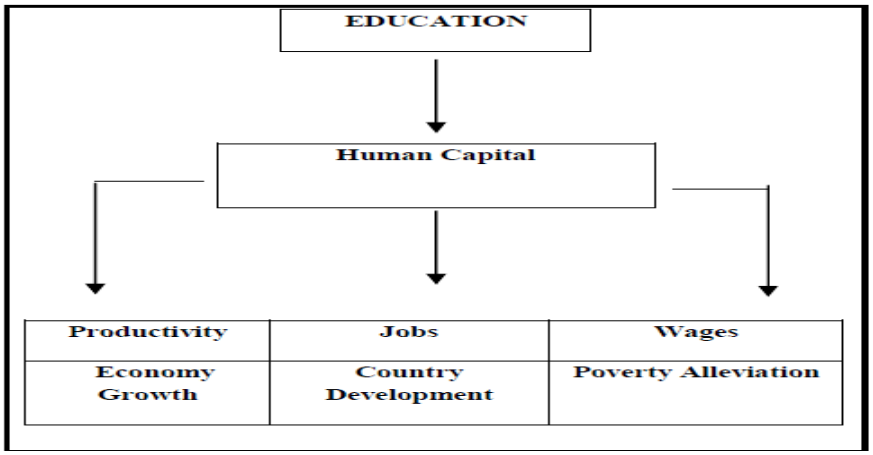
The implications and limitation of the models

The Human Capital Model

This theory postulate that human labour is an essential commodity that foster economic growth of a society. A high skilled human labour is perceived as an investment that contributes to both an individual and society economic development (Becker, 1964; Spence, 1973; Jin Xiao, 2001). This outlook suggests a direct correlation between human capital and country economic development in which an increased educational expenditure leads to improved economic growth. The model has been widely adopted and promoted by various nations and key global partners such as World bank in the last fifty years as the basis for educational strategic plan, policy formulation and evaluation.

However, Klees (2016) observed some fundamental weaknesses and suggested that human capital theory put extremely little consideration to structural problems such as inequality and social values (Foresight and STI Governance,2019). Therefore, the assumption that education promote economic development and individual prosperity is being impaired. Infact, some recent analysis and report indicated that economic development enable more investment in education (Cobham and Klees, 2016).

Figure 2: Human Capital theoretical and conceptual framework



Source: papers.ssrn.com, 2010

The figure 2 above shows the theoretical framework of the study as education was found to have a connection with human capital. Therefore, as people have access to education in a society with proper facilities, resources, and materials are provided for teaching and learning, the outcome will be that the country will be blessed with abundant human capital and economic growth.

The Rights-base model

This model is profoundly rooted in centuries of thoughtful discourse since the inception of public

education in the mid-19th century. Education is seen and promoted as a fundamental human right, an instrument for raising human capital and a means of human capacity (McCowan, 2011; Robeyns, 2006; Sen, 1997). United nations (1948) in its Huaman Rights declaration enshrined the right of society to adjust to the global environment and to change in general as well as potential for economic development and improving individual standard of living within a society (Nexford University, 2023).

The Three Drivers of Change that affects the purpose of education.

The sustainable development goal (SDG-2030) on education emphasizes inclusiveness, equitable as well as promoting lifelong learning opportunities as part of the requirement for future sustainability. It is therefore important to prepare the next generation to respond to changes affecting the global world. The three major drivers of changes which influence the dynamics of education are the environmental, demographic, and technological change. Reflecting on the key drivers of global changes and how education can be shaped to annex the opportunities in the global challenges will create more insights to the development of an efficient and adaptable education change management process that foster transformation to the future and poverty eradication.

Environmental Change

As greenhouse gas emissions blanket the earth, they trap the sun's heat. This leads to global warming and climate change. Fossil fuels such as coal, oil and gas accounts for over 75% of global greenhouse gas emissions and approximately 90% of all carbon dioxide emissions. The world is now warming faster than at any point in recorded history. Warmer temperatures over time are changing weather patterns and disrupting the usual balance of nature. This poses many risks to human beings and all other forms of life on Earth. Changes in the climate and increases in extreme weather events are among the reasons behind a global rise in hunger and poor nutrition. Climate change increases the factors that put and keep people in poverty. Floods may sweep away urban slums, destroying homes and livelihoods. Heat can make it difficult to work in outdoor jobs. Water scarcity may affect crops. Over the past decade (2010–2019), weather-related events displaced an estimated 23.1 million people on average each year, leaving many more vulnerable to poverty. Most refugees come from countries that are most vulnerable and least ready to adapt to the impacts of climate change.

This phenomenon has remained the defining issue of this generation, the main reason sustainability is now fundamental part of every society, and it is mandatory this is exhibited in accordance with the United Nation SDG-2030 goal. There must be deliberate improvement on reducing as aspect of operational environmental path such as consumption of energy, waste generation, water stewardship and landfilling. Cleaner air, less waste, and a brighter future for everybody with a commitment to ensure environmental sustainability, particularly with respect to climate, water, and waste. The first definition of sustainability reflects a market-driven perspective. If you take this perspective as a way forward, decisions will need to be made to create industries which solve environmental dilemmas; for example, producing electric cars and renewable energy. These, in turn, create jobs. We consider, if this is the world we live in, what kind of education does the next generation need?

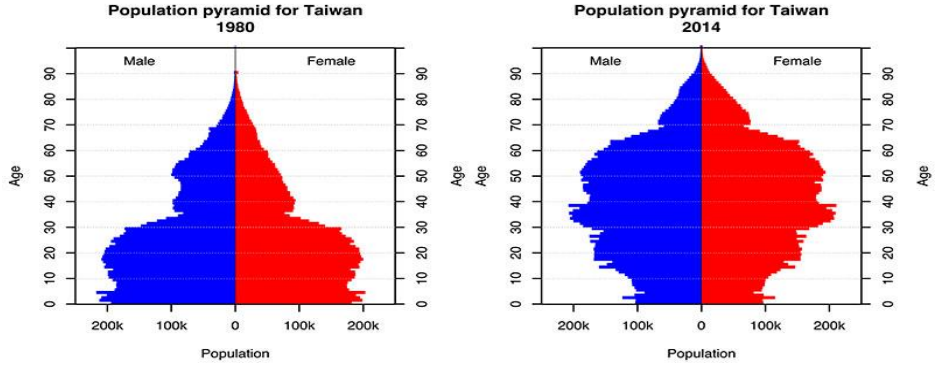
Education would need to produce workers with the skills necessary for new forms of employment in the future, flexible enough to transition from one kind of employment to another.

Demographic Change

Demographic change can be caused by the increasing mobility of people internationally; for example, war and famine as drivers of mass movement from and within Syria, Iraq, Sudan etc., or economic migration as people move to find more stable and better paid employment to support their

families, often leaving behind a skill shortage. It can also be caused by changes as birth rates rise or fall, either as a result of policy, standards of living change or conflict. Similarly, changes in lifespan can rise or fall due to improvements in wealth and healthcare or destabilisation of governments and associated conflict and infrastructure decline. In recent times, the world has also been affected by constraints in travel as the COVID-19 pandemic affected different countries at different times and with different national responses. This is likely to change, in ways yet unknown, patterns of immigration and emigration. Whatever the reasons, some nations' populations are growing while others are decreasing. This is associated with changes to the spread of age groups in a country at any one time and the proportion of dependents to those of employable age. Population pyramids represent demographic spread and can be used to show how these dynamics can change over just a few decades, as in the case of Taiwan, shown in figure 3 below.

Figure 3: The population pyramids of Taiwan in 1980 and 2014



Source: Openlearn, 2023

While there used to be concerns about uncontrollable population growth there are now warnings that, globally, fertility rates are falling (Gallagher, 2020). This has been linked to higher rates of education in women and is leading to unpredictable social change. Similar considerations apply for a rising middle class and average education level. The middle class is increasing at a global scale and unprecedented speed and over the next few years, the middle class is expected to reach 4 billion people, making it for the first time in history most of the world population. And most of this growth is driven by emerging economies including China having 65% (over 700 million people).

Technological change

A further challenge to education systems is that of technological change. It may not be just those leaving school with few qualifications that are affected – skilled and unskilled workers alike are likely to be affected by technology's impact in the workplace. As the Sustainable Development Goals stated, education must include lifelong learning so that workers can be flexible and take alternative employment (United Nations, 2015). The changing education paradigms implies that having academic qualifications will help, but they are already no longer a guarantee. Those who leave school with no or very few qualifications in industrialised societies may face being pushed out of the workforce altogether.

Video conferencing from home also quickly became a 'new normal' expectation for those

working (and learning) in schools and businesses as a result of the COVID-19 lockdown. At the same time, social media is allowing us to connect across the world in ways unheard of just a few years ago and are affecting work as well as personal aspects of our lives. Ideas can be discussed despite huge distances separating the participants. Big data and 'the internet of things' allow innovations to be accelerated because the technology is connected and available. The 'internet of things' is a term used to describe the growing interaction between physical objects that contain software-controlled electronics, sensors and/or actuators. The internet of things may include such objects as home heating, ovens and toasters that can be controlled from a mobile phone. The figure 4 below show varying used cases of Internet of things that have changed the world we live into digitization.

Fig 4: Internet of Things and Used Cases.

Source: IBM Developer, 2020

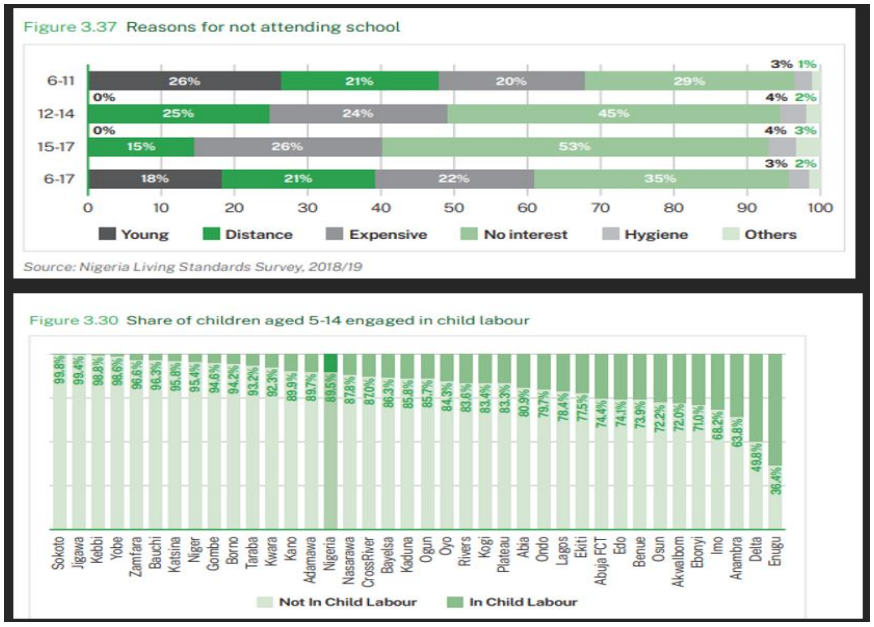
Education is being changed by such developments as artificial intelligence and machine learning, which offer learning beyond conventional education environments and change the need for fact-based education. More people can participate in educational activities and have the freedom to develop their own interests and capabilities. Society also needs innovators, computer scientists, software, and hardware engineers to develop these systems as well as members of society (perhaps ethicists and politicians) to consider the implications of these new applications.

STEM is an interdisciplinary method of learning that is practical oriented and problem-based learning. It is an acronym for Science, Technology, Engineering, and Mathematic learning. STEM literate students are mostly innovative, creative, and critical thinkers with capacity to apply what have been learnt in real world problems to improve the people wellbeing and the environment. High school graduates who are educated in STEM, seamlessly transit into higher education in those fields and they ultimately secured high earning employment and start up entrepreneurship in the increasingly knowledge- based economy locally and globally. (Georgetown University CEW, 2012).

China and India now lead the world in STEM graduate output. According to some estimates, 40% of China's and 32% of India's annual graduates are from the STEM learning areas — and both countries have overtaken Western Europe and the US. The top six of the general STEM fields studied are agricultural sciences, biological sciences,

computer sciences, engineering, mathematics and statistics, and physical sciences. Specialisations include space exploration, drones, GPS systems and aeronautics.

Figure 5: Children reasons for being out of school and share of children engaged in child labour.



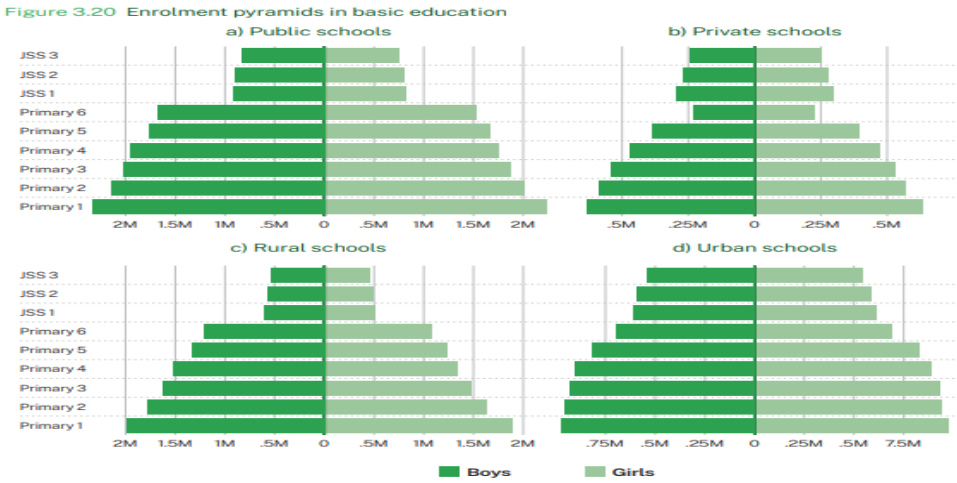
Source: IIEP-UNESCO Dakar, 2021

According to the International Labour Organization (ILO, 2015) child labour lowers primary enrolment ratios, with children who manage to both work and attend school having to make a compromise in terms of their performance in class.

Enrolment pyramids in primary and junior secondary

Figure 6 illustrate the volume of children enrolled in primary and junior secondary schools, and how this number decreases as you move up the grades.

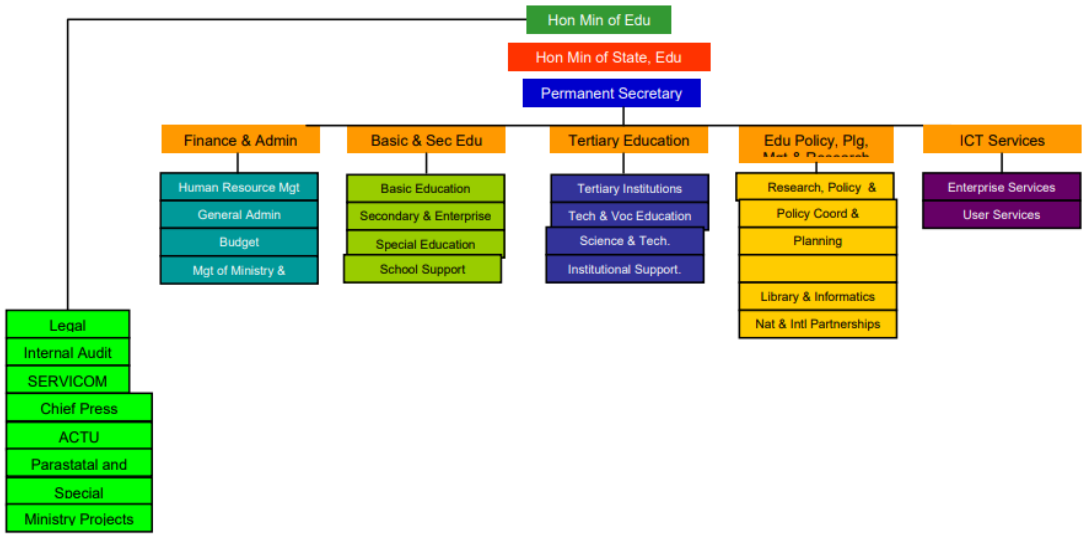
Figure 6: Children enrolment pyramids and decrease numbers along the grades.



Source: IIEP-UNESCO Dakar, 2021

The newly consolidated parastatals from the FME organogram as shown in the figure 8 below suggested that there was no emphasis on STEM, technology, and vocational studies at basic and secondary levels. The current global challenges will require inclusiveness of innovative and emerging educational system at strategic level.

Figure 7: Federal Ministry of Education Organization Structure



Source: Federal Ministry of Education, 2019

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