



## **Educational Challenges Of The 21<sup>st</sup> Century In A Developing Economy: Contemporary Possible Solutions**

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### **ABSTRACT**

In a developing economy, the quality of education plays important roles, as it enhances the training of quality workforce that will utilize the resources available for optimal maximization in the attainment of expected goals. Therefore, elimination and avoidance of challenges in education should be paramount in educational system in the 21<sup>st</sup> century. This is a position paper that examined educational challenges of the 21<sup>st</sup> century in a developing economy. Concept of education, challenges, education in the 21<sup>st</sup> century, education in a developing economy, challenges of the 21<sup>st</sup> century education and effects of challenges of 21<sup>st</sup> century education in a developing economy were reviewed. Possible solutions to educational challenges of the 21<sup>st</sup> century in a developing economy were also considered. The paper concluded that copious educational challenges of the 21<sup>st</sup> century abound in a developing economy impeding the educational systems and affecting the developing economies adversely. Suggestions like there should be reforms in the educational system at all levels by the government as to eliminate challenges of education in the 21<sup>st</sup> century, the nations with intent of achieving quality education should encourage the training of teachers to produce qualified and quality teachers that could face the challenges of education in the 21<sup>st</sup> century and others were made.

**Keywords:** Education, Challenges, 21<sup>st</sup> Century, Developing, Economy

### **INTRODUCTION**

The development of many countries largely depends on their level of education. It is popularly asserted that education is the panacea for economic development. In developing countries with developing economies, there are educational challenges of the 21<sup>st</sup> century which have nexus to certain variables. These include literacy rate through education, energy for development, urbanization, migration, digital divide, ageing population, keeping pace with technological advancement, energy-food-stress, food security, natural hazards, poverty, air pollution, globalization and geo-politics, gender equality in education, economic growth, biodiversity, plastic pollution in oceans, over fishing, deforestation, disappearance of endangered species, low carbon energy, climate change, security challenges and leadership.

Nwagwu and Nwankwoala (2020) stated that the achievement of a developing economy in the midst of these challenges will continue to be a mirage without pragmatic and functional educational system. It is a truism that no country grows or develops above its educational level as managerial abilities require for the control and distribution of resources for appropriate use in the developing economy is a function of educational process. Suffice to say that education is the process of human growth by which an individual gains greater understanding and control over himself and the world, a process and activity characterized by continuous development and changes, the end product of which is learning. It is a total aggregate of all the processes by which an individual develops abilities, attitudes and other

forms of behaviours which are of positive value to the society (Illueme & Kpokpo, 2015). An investment in education pays the best interest. The importance of education to a developing economy cannot be overemphasized, in most parts of the world, education is regarded as a fundamental human right. Education is one of the basic criteria to measure the growth and development of the nation.

Sadly, the level, quality and standard of education in countries with developing economy have witnessed a geometric drop in the past two decades and such unfortunate trend has made citizens of these countries to migrate to other developed nations with developed economy in search of quality education. In a developing economy which is an economy that is not as advanced as the rest of the world. Birth rates, death rates, life expectancy, education, and a country's level of industry are all factors. A developing economy is one where people have lower standard of living and less developed industries than the other countries. However, it is all relative to the country's educational challenges especially in the 21<sup>st</sup> century. In recent time, developing economy is determined in part by the way it makes money which depends solely on its natural resources that necessitate the level of education system, hence challenges of 21<sup>st</sup> century education affect the economy negatively.

A developing economy also called less developed economy or underdeveloped country is a nation with underdeveloped industrial base, and a low Human Development Index (HDI) relative to other countries (Undie, 2008). Due to challenges of 21<sup>st</sup> century, developing economies once referred to as Lesser Developed Countries (LDCs), are characterized by a poor infrastructure, inferior growth rate, an imbalanced economy, and extremely low personal incomes. These economies lack necessary skills and resources to escape a heavy reliance on production from agriculture or mineral resources. The imbalance is a legacy of both external aggression and domination, but also of internal factors, poor natural endowments, inadequate human resources, political instability, and social inequality. Developing economies tend to be concentrated in Africa, Latin America, and the Middle East, and also in some states and clients of the former Soviet Union. In the 1990s, a new classification of emerging economies was coined to describe post-communist countries that face an arduous transition to a market economy.

Russia, Belarus, and Ukraine share endemic developmental obstacles with traditional developing economies since 1980, numerous nations such as India, Brazil, Estonia, South Korea, and Turkey dramatically improved their Gross Domestic Product (GDP) and became known as Newly Industrialized Countries (NICs). However, these NICs also feature imbalanced economies and are globally competitive only in selective sectors. Clusters of poverty within NICs and emerging economies in the former Soviet Union resemble poverty in developing economies. Information Communication and Technology (ICT) systems in a developing economy vis-à-vis the 21<sup>st</sup> century educational challenges would apply to clusters in all the developing economies as technological dualism is necessary in their education system. Conversely, within developing economies, cases of advanced ICTs resemble more prosperous nations (Agabi, 2002). In consideration of the above, the paper examines the educational challenges of 21<sup>st</sup> century in a developing economy.

### **Education**

The word "Education" is derived from the Latin words "educare" and "educere". Educare refers "to bring up" or "to nourish" whereas the word "educere" means "to bring forth" or "to draw out". Others believe that the word has been derived from another Latin word "educantum" which has two components. "E" implies a movement from inward to outward and "duco" refers to developing or progressing (Kalagbor, 2017). An analysis of these words reveals that education aims at providing a learner or a child a nourishing environment to bring out and develop the latent potentiality hidden inside him. Therefore, education is the process of facilitating learning, or the acquisition of knowledge, skills, values, morals, beliefs, and habits. Educational methods include teaching, training, storytelling, discussion and directed research (Chimombo, 2005). Education frequently takes place under the guidance of educators, however, learners can also educate themselves. Education can take place in formal or informal settings and any experience that has a formative effect on the way one thinks, feels, or acts may be considered educational. The methodology of teaching is called pedagogy. Nwagwu (2020) stated that education in the 21<sup>st</sup> century has outgrown its twentieth-century meaning. It is time to move beyond measures of disparity by race, ethnicity, and gender to education beyond borders.

**Concept of Challenges**

A challenge literally means an invitation or a call to action. Challenges vary in scope and complexity. When you ask students to complete academic assignments or tasks, you are presenting them with classroom challenges, which can range from simple to complex (Ronald, 2018). When you invite students to engage with larger problems facing them, their school, the community, or beyond in ways that require them to push their learning beyond the walls of the classroom, you are presenting them with beyond-classroom challenges, which are invariably complex. Although, classroom and beyond-classroom challenges differ in several key ways, they share the same basic structure. Understanding the structure will enable people to identify the kind of challenges they are already use to, and prepare themselves to design ways and actions to implement in order to overcome the increasingly complex challenges.

There are four basic features that all challenges share, regardless of whether they are simple or complex. These include:

PROBLEM	PROCESS	PRODUCT	CRITERIA
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Figure 1.1. The Basic Structure of a Challenge

Source: Adapted from “Building Structures’ Problem-Solving Skills Through Complex Challenges”. As cited in Ronald, (2018). *Harvard Business Review*, 8(5), 156-177.

The **problem** is the task question, or issue students will address or solve.

The **process** is the approach, method or procedure students will use to solve the problem or complete the task.

The **product** is the solution, outcome, or demonstration of solving the problem.

The **criteria** are the guidelines, rules, and standards for evaluating success.

**Education in the 21<sup>st</sup> Century**

The 21<sup>st</sup> century education is about giving students the skills they need to succeed in the new world, and helping them to grow the confidence to practice those skills with so much information readily available to them. The 21<sup>st</sup> century skills focus more on making sense of that information, sharing and using it in smart ways. The coalition P21 (Partnership for 21<sup>st</sup> Century Learning) has identified four skills:

- Creativity
- Critical thinking
- Communication
- Collaboration

These four themes are not to be understood as units or even subjects, but as themes that should be overlaid across all curriculum mapping and strategic planning. They should be part of every lesson in the same way as literacy and numeracy. Nwagwu (2020) asserted that creativity is about thinking through information in new ways, making new connections and coming up with innovative solutions to problems. Critical thinking is about analysing information and critiquing claims. Communication is all about understanding things well enough to share them clearly with other people. Collaboration is about teamwork and the collective genius of a group that is more than the sum of its parts. There are other skills that are important, which fall within these four areas.

Entrepreneurship can be considered a skill of its own. Inquiry and problem solving are key. Emotional intelligence is one of the most important keys to successful work and relationships. A 21<sup>st</sup> century education needs to be all about empowering students with transferable skills that will hold to a rapidly changing world, not prescribed content that has been chosen for its past relevance (Nwagwu, 2020). While digital integration is also fundamental to a thorough 21<sup>st</sup> century education, it is not enough to simply add technology to existing teaching methods. Technology must be used strategically to benefit students. Students are increasingly advanced users of technology even as they enter school for the first time, so this can often mean being open to the possibilities presented rather than attempting to teach and prescribe the use of certain programs. Many a time, classroom technology class has baffled children by attempting to teach them about programs, websites and hardware that are no longer relevant or that they understand far better than the teacher does (Frederick, 2003). The 21<sup>st</sup> century teachers need to serve as a guide or mentor for their students, not as the all-knowing sage providing them with all the information. With so much access to resources of all kinds, children are invariably

going to know more than teachers on different topics, and be a step ahead of the technology in use. Teachers need to be empowered as facilitators and motivators for learning, so that they can empower their students in turn (Nwankwoala, 2013).

### **Education in a Developing Economy**

The principal institutional mechanism for developing human skills and knowledge is the formal educational system. Most Third World nations have been led to believe or have wanted to believe that the rapid quantitative expansion of educational opportunities is the key to national development. The more education, the more rapid the development. All countries have committed themselves therefore, to the goal of universal education in the shortest possible time. The quest has become a politically sensitive, but often economically costly, sacred cow, until recently, few politician statemen, economists, or educational planners inside or outside of the Third World would have dared publicly to challenge the cult of formal education (Jere & Nancy, 2008).

The educational systems of Third World nations strongly influence and are influenced by the whole nature, magnitude, and character of their development process. The role of formal education is not limited to imparting the knowledge and skills that enable individuals to function as economic change agents in their societies. Theodore (2006) stated that formal education also imparts values, ideas, attitudes, and aspirations, which may or may not be in the nation's best developmental interest. Education absorbs the greatest share of Less Developed Countries (LDCs) recurrent government expenditure, occupies the time and activities of the greatest numbers of adults and children, and development aspirations.

### **Challenges of 21<sup>st</sup> Century Education**

Few would argue that the state of education system has plenty of room for improvement. However, developing a plan to take education in the right direction is easier said than done. The first challenge lies in identifying underlying problems keeping students from learning today. The challenge, in part is due to the fact that the problems may change considerably depending on who is labelling them, whether it is students, parents, educators or lawmakers (Brown, 2008). Consider the list of challenges currently facing education in developing economy in the 21<sup>st</sup> century based on the perspective of education today which include the following:

#### **Classroom Size**

Many areas of the country are facing classrooms that are literally busting out at the seams. It is obvious that when money gets tight classroom numbers are often impacted. Yet, most teachers agree that they cannot effectively teach every student in a classroom, if the class size exceeds about 30.

#### **Poverty**

Indeed, most children live at or below poverty level, students living at or below poverty level tend to have the highest dropout rates. Studies show that students who do not get enough food or sleep are less likely to perform at their full academic potential. Schools know these truths first-hand, and despite efforts to provide students with basic essentials, teachers, administrators and lawmakers know there is simply not enough to go around (Nwankwoala, 2013).

#### **Technology**

In recent time, some students are more technologically advanced than many teachers, putting instructors at a decided disadvantage in the classroom. However, a student's love of technology also tends to distract him from his schoolwork, today, when teachers don't have the techno-savvy to compete with those devices, by bring education and technology together, it can be difficult to keep students interest and attention to properly teach new concepts. Technology needs to come into the classroom to keep with the learning demands of the 21<sup>st</sup> century. Schools that are already cash-strapped may find an unsurmountable challenge in coming up with the funding to bring computers and other forms of technology into their classes.

#### **Bullying**

Bullying is not a new problem but it is a challenge that has a profound impact on the learning aptitude of many students today. Technology has given bullies even more avenues to torment their victims through social networking, texting and other virtual interactions. Cyber bullying has become a major issue for schools as evidenced by the number of suicides that can be directly traced to bullying events.

The fact that laws are still fuzzy regarding cyber bullying add to the challenge since parents, teachers and administrators are unsure of how to legally handle such issues (Nwagwu, 2018).

### **Student Attitudes and Behaviours**

Many teachers also cite student's attitudes, such as apathy and disrespect for teachers, as a major challenge facing school in the 21<sup>st</sup> century. A poll from National Centre for Education Statistics cited that problems like apathy, tardiness, disrespect and absenteeism posed significant challenges for teachers. These issues were seen more frequently at the secondary school level, rather than the primary level.

### **No Child Left Behind**

Many students, parents and teachers see no child left behind as a detriment to the public education environment today. The focus in education on both the national and state level continues to be on the testing process. Student test scores are now being used by a number of states as a way to evaluate teacher performance, putting even more pressure on faculty in schools to teach to the tests. Amadi (2013) reviewed that many teachers believe they are forced to teach to the annual standardized tests, and activities like recess and lunch have been cut way down to make more time for academics in light of the new testing procedures.

### **Parent Involvement**

Often teachers find there is no happy medium when it comes to parental involvement, according to National Education Authority (NEA) some parents won't be seen for the entire school year, no matter what sort of issues might arise. Others never seem to go away, hovering over the child and teacher and interfering with the education process. There are ways parents can become involved and support their child's education at the same time, but teachers don't always get that level from parents (Okere, 2019).

### **Funding**

Budget cuts have created huge problems for education in recent years. Less funding means smaller staff, fewer resources and a lower number of services for students. While some argue that throwing more money at the education problems won't make them go away, others assert that lack of funding caused many of the problems in the first place. There are many challenges in education, but identifying those issues is half the battle. With a laundry list of problems to face, now is the time for educators, parents and lawmakers to come together and begin to find solutions for the benefit of everyone (Uwakwe, 2020).

### **Effect of the Challenges of 21<sup>st</sup> Century Education in a Developing Economy**

In many ways, today's system is better than the traditional one. Technology is the biggest change and the greatest advantage at the same time. Various devices, such as computers, projectors, tablets and smartphones, make the process of learning simpler and more fun. The internet gives both students and teachers access to limitless knowledge. However, this is not the perfect educational system as these challenges of 21<sup>st</sup> century have affected education in the following ways:

1. **The Individual Needs of Low-Achievers Are Not Being Addressed:** Personalized learning is the most popular trend in education. The educators are doing their best to identify the learning style of each student and provide training that corresponds to their needs. However, many students are at risk of falling behind especially children who are learning Mathematics and reading.
2. **Teachers Entertain When They Are Expected To Teach:** Today's generation of students love technology, so the teachers started using technology just to keep them engaged. That imposes a serious effect. Education is becoming an entertainment rather than a learning process.
3. **Not Having Enough Time For Volunteering And Internship:** The students are overwhelmed with projects and assignments. There is absolutely no space for internship and volunteering in college (Ololube, 2018).
4. **The Parents Are Too Involved:** Due to the fact that technology became part of the early educational process, it's necessary for the parents to observe the way their children use the internet at home. They have to help the students to complete assignments involving technology. What about those parents who do not have enough time for that? What if they have time, but want to use it in a different way?

5. Teachers Cannot Meet The Standards Of The New Educational System: Most teachers cannot use technology as some of them are near the end of their teaching careers and they have never used tablets in the teaching process before.
6. Graduates Are Not Ready For What Follow: A third of the employers are not happy with the performance of recent graduates. That means the system is not preparing them well for the challenges that follow.

### **Educational Challenges of 21<sup>st</sup> Century in a Developing Economy**

Education has become a space consideration for the modern economy and the backbone for the prosperity of every nation, however, challenges abound in education in 21<sup>st</sup> century especially in a developing economy. There is a huge push on a global scale to improve the quality of education that the state provides to its citizens. The best performing education systems have shown that the quality of teachers and improving the social status of teachers are prerequisites for improving the quality of education received by citizens of a country (Nwagwu, 2018).

Lambert (2015) stated that the teachers' responses reflect the various challenges they faced in their classrooms. These challenges in a developing economy are inevitable as 21<sup>st</sup> century learning requires radical changes in almost every aspect of teaching and learning. Today, one of the most important goals of education is to provide students with the ability to use the knowledge and skills they have acquired at school in their daily lives and apply them in the situations they are unfamiliar with. In this way, the knowledge and skills acquired by the students are transferred from the theoretical context to real life, and it makes it easier for students to internalize these skills.

There has been paradigm shift in the education system, where education is one of the most significant challenges in the whole world. The strength of a nation is based on the quality of its education. Therefore, preparations need to be made to face the future, because in the future there will be intense and competitive competition.

Okere (2019) stated that 21<sup>st</sup> century is marked by the development and improvement of technology, encouraging the creation of quality human resources. Problem-solving, critical thinking, creative thinking, communication collaboration with others, adaptable, and entrepreneurship are skills that students need to work in the 21<sup>st</sup> century in a developing economy.

### **Possible Solutions to Educational Challenges of 21<sup>st</sup> Century in a Developing Economy**

The education industry today is faced with many challenges, in order to improve the education system, the performance and development of the education industry, major improvement must be made in the sector. This article discusses the major components that need to be worked upon to create an effective improvement strategy (Kalagbor, 2017). There are several strategies that educational institutions and industry players can employ to deal with these challenges, which include:

- A. **Better Standards:** The policies and programmes in the education structure should be developed to aim higher achievement standards and goals. Standards are formal documents that establish uniform education criteria, methods, processes, and practices developed through an accredited consensus process. Standards should be developed based on guiding principles of openness, balance, consensus, and due process and should be duly established in order to meet technical, safety, regulatory, societal, and market needs, and should also be catalyst for technological innovation and global market competition. The adoption of standards will benefit both students and their faculty mentors as they face various challenges and will help the students understand and assess what they are aiming at and where they are heading (Jere & Nancy, 2008). Education as a sector has a diverse range of potential standard requirements inclusive, and some areas where development of standards will be helpful are, managing student records, managing research proposals and outputs using classroom interaction technology, supporting distance and flexible learning online, providing authentication and authorization services for managing access to digital resources, detecting plagiarism and using digital assessments.
- B. **More Accountability:** The institutions, the educators, the managements are the people who provide instructions, curriculum and demonstration to the students and thus pave way for results. There should be an accountability strategy under which the institutions showing remarkable results should be rewarded and those with poorer results should be penalized. In

short, creating accountability in public or private education is extraordinarily complex. No single policy maker or provider is responsible for failing students; rather, a complex web of policy makers and providers is responsible. Some potential ways to strengthen accountability are to strengthen the client's voice, improve management, provide better information to clients, clarify roles and responsibilities, and increase incentives and consequences (Maduewesi, 2001).

- C. **Adapt to New Technologies:** Education institutions must adapt to new technologies if they want to remain competitive. Technology has become an integral part of most students' learning experiences and educational institutions must offer the newest technologies. Some benefits of using information technology in education are; it induces scientific, economic, technological, information and multicultural literacy and global awareness, promotes inventive thinking, develops effective communication, induces personal, social, and civic responsibility, and eventually leads to high productivity. It also gives students a sense of using real-world tools with effective, relevant and high quality results. Students will be drawn to those companies or institutions that can keep up with changes in technology. The use of updated technology and equipment will improve the learning experience and will also increase productivity (Wosowei, 2014).
- D. **Curriculum Revision:** There is a need to continuously revise the curriculum for instructional programme in an effort to meet society's demands for changing the 21<sup>st</sup> century workforce. Determining what those needs are, how to address them, and how to revise the established curriculum is a challenging and critical task. This demand for change to meet the needs of the 21<sup>st</sup> century educational programmes is challenging even for the best educational leaders because society's values and needs change over time (Branch, 2018). The world has turned into a global village where new ideas and information are pouring in a constant stream. It is, therefore, imperative to update our curricula by introducing the recent developments in the relevant field of knowledge. However, the curriculum should be revised on regular basis to keep the students updated with the current affairs. Sticking to the conventional curriculum will not provide hybrid results.
- E. **Periodic Assessment:** Periodic Assessment Record of students in academics and non-academics should be maintained and periodic reports should be communicated to the parents. This will help the students, teachers, parents, and the public have access to real information. This will create transparency in the working system and will produce better results.
- F. **Develop Personalized Learning:** Educational institutions can develop personalized learning to overcome the challenges presented by standardized learning. Technology has made available a huge number of educational opportunities and it has become feasible to develop training courses customized individual needs and for individuals of any age. Online courses provide students to have more options for choosing an educational service provider that meets their needs, abilities, finances, and personal preferences. Agabi (2002) asserted that educational institutions that want to remain competitive must accommodate the need for flexibility by offering programmes that focus more on certification and skill attainment. Education institutions and governments can work together to promote personalized learning by making it a priority for both students and teachers. Educators can gather data to help them support learning that is flexible and meets the needs of the individuals. Teachers must be provided with the tools they need to help all students succeed.

## CONCLUSION

The numerous challenges of the 21st century education have serious adverse effect in a developing economy as education is the bedrock of development in every nation, hence the ability and skills the human resources need are functions of the education system. It there means that quality education devoid of challenges is paramount to make the workforce readily available in a developing economy. Therefore, the paper concludes that challenges abound in the 21st century education having negative effect in a developing economy like that of Nigeria.

## SUGGESTIONS

### The paper suggests the following:

1. There should be reforms in the education system at all levels by the government as to eliminate challenges of education in the 21st century.
2. The nations with intent of achieving quality education should encourage the training of teachers to produce qualified and quality teachers that could face the challenges of education in the 21st century.
3. Government should ensure the provision of significant, adequate, and sufficient fund to take care of the education system based on global standard.
4. Education should be prioritized in developing economy as the supports for education should not be left in the hands of government alone.
5. Government and private individuals should consider the welfare of those that engage in education sacrosanct, hence an investment in knowledge pays the best interest.
6. Accountability in education is relevant and should be considered seriously to curb corruption which is one of the major challenges of education in the 21st century in developing economy.
7. Efforts should be made by both governments and organizations to encourage those in education system to adapt to new technologies that could make teaching and learning catchy as to eschew certain challenges.
8. Education is a business, therefore, private and public partnership should be encouraged to achieve expected goals.

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