

Topic: THE FUTURE OF EDUCATION IN AFRICA

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By:

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DR. MUYIWA BAMGBOSE (Lead Author)

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Africa is where it is because
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to change, education must
change"

"Education is not going to school! It might involve going to school".

"The future is technology and the vehicle is technology"

Dr. Muyiwa Bamgbose started his career in education when he attended Training for Trainers in Montreal in 1984. He holds a B.Sc. in Biochemistry, University of Ibadan (UI), MBA (UI), and Ph.D. Christian Leadership (Plymouth USA). He is the Chief Strategic Officer of Educational Advancement Centre (EAC) lectures on Entrepreneurship in the University of Ibadan Centre for Innovation and Entrepreneurship. Muyiwa is an alumnus of the Haggai Institute, U.S.A, a Faculty member on Christian Leadership and currently the Chairman of Oyo State Alumni Association. He is a pioneer of Mobile Learning in Africa and got the award of Number 9 in E-Learning in the world in 2012. In 2013, he set up School-on-Air TV, broadcasting free lessons to the African

continent via Intelsat-20 Satellite. He brought international standard vocational training into Nigeria by partnering with Orion Edutech Pvt. Ltd. of India to birth Orion Edutech Africa.

He was National President, Nigeria Junior Chamber International in 1988, Training Coordinator for Africa and Middle East in 1989 and a JCI Senator. In 2016, he served on a State Government Committee for reformation of education in Oyo State and is the Promoter of Proposed Ace University in Nigeria.

He is a Trustee Pastor in Vine Branch Ministries, President of Christian Theological Seminary, which is affiliated to Olabisi Onabanjo University, Chairman of Cedarhaus Realtors Ltd and Business as Missions Nigeria.

Paper Presentation

(The Future of Education in Africa)

I will like to start by saluting the infectious commitment of the Convener of OAI, Tim Akano. It is not a common feat to see a problem situation, talk about it and do something about it! I pray God to grant the wherewithal to take this vision to the desired destination; even beyond it.

I will also like to salute the Pioneer Presenter, Dr. Ike Neliaku for a "frightening opening salvo". What you put together is enough to create a Plan of Action for a decade! God bless you sir. Like I said in my response to your presentation, we should never take our eyes off the Lynch theory in our efforts to emancipate and reposition Africa!

Friends and co-travelers on this reconnaissance journey, I will try to take us through some thoughts on "The Future of Education in Africa". Whether we like it or not, education is the bedrock of life: Today is a product of the yesterday's education and tomorrow will be a product of today's education. In other words, Africa is where it is because of its education, and for Africa to change, education must change.

Before I delve further, permit me to highlight some attitudinal changes that are essential for us as a people to be the Change Agents. In the book of Genesis, Noah and his family had just survived the flood that wiped out the whole world, and he decided to relax with wine. He got drunk and stripped himself naked.

Genesis 9:20-25

20. And Noah began to be a farmer, and he planted a vineyard. 21. And he drank of the wine and was drunk, and became uncovered in his tent. 22. And Ham, the father of Canan, saw the nakedness of his father, and told his two brothers outside. 23. But Shem and Japheth took a garment, laid it on both shoulders, and went backward and covered the nakedness of their father. Their faces were turned away, and they did not see their father's nakedness.

24. So Noah awoke from his wine, and knew what his younger son had done to him. 25. Then he said:

"Cursed be Canan; A servant of servants he shall be to his brethren."

Many Christians who were involved in the Slave Trade referred to this curse as a curse on the black race, the Hamitic race. Of course, they were wrong, since we have been redeemed from every curse by the death of Christ, but every now and then, we see a repetition of the attitude of Ham in the

black race evidenced in the blame game, and refusal to own problems. The difference between Ham and his brothers was that while he was blaming and shaming their father for his irresponsible behavior, Shem and Japheth did something about it. It is good to have an attitude of not blaming others if we are to get Africa out of the rut. About a year ago, I visited my children in the UK and their son was playing football for a boys' club, so I went with them. As the match progressed, there was an easy goal missed by a striker and everyone chorused "unlucky". Not too long after, there was a mild back pass to the goal keeper and he missed it and it went into the net.

Again, they shouted "unlucky"! I had to ask my son, because I expected everyone to blame the keeper and he told me that the kids are taught not to blame each other! Wow! It struck me like a bolt! In Africa, we would have insulted the players for making "us to lose the match" and done nothing about it beyond blaming the defaulter or coach.

The redemption of Africa will not happen from a blame game! Let us own the problem, if necessary, blame ourselves and get up to do something about it.

I will therefore like to step back to review a major part of our assertions during the first presentation, where we saw leadership as our problem. I wish to state that Leadership is not the only thing; Followership is also very important. Followership is important, not just because leadership progresses from followership but because followership has a lot to contribute to solutions to problems facing the system and education is what equips them all!

I will like to take some excerpts from a recent article in Aumedia.info titled "What Nigeria needs to be rich and industrialized like USA and China".

"Many believe that our continued underdevelopment is a leadership issue, while others say when the followership is ready, a true leader will emerge. In other words, our leadership is a reflection of our wider society, the quality of followers and their collective intelligence to understand our real collective aspirations.

The greatest impediment to our economic and political freedom and development has been externally inspired moralist propaganda. Even when we have an exceptional leader, his followers are easily disoriented with corruption propaganda since they are not educated to know their cultural identity and aspirations in concrete terms."

"It's not enough for the leader to know and try to do what it is right. He must ensure an epistemic democracy, the wisdom of the multitude, or the people will be turned against him. The politicians might not be able to convey the messages without raising undue suspicions of playing politics. Instead, the cultural elite must create think-tanks to influence public discourse, opinions and policy. The masses must know the road map from the origin to destination and if sufficiently agitated will know which leader to back and rise in defence of their collective aspirations.....

.....otherwise the best laid logical development plans will be sabotaged by the ignorant."

We can easily call the ignorant, the uneducated, who should be the focus of education in Africa

No wonder Mandela said, "Education is the most powerful weapon with which you can change the world!"

In the earlier presentation, we called for redesigning our own educational content, rejecting some of the existing curricular, bringing in education for character, strength and development. A new educational policy that is pro-Africa, designed to address our needs.

Andy talked of an urgent need to develop "African education system that aims to train, educate, reorient and enlighten African on their heritage, value system in line with our background".

Allwell Okpi talked of using the media to "inspire pan-Africanism and validity of our African identity" in our Primary and Secondary schools.

So, what is Education? In defining Education, we should start from what it is not!

Education is not going to school! It might involve going to school

Education is not reading and writing! That is literacy

Education is not acquiring certificates! This is a problem of our society!

Education is not passing examinations! If it were, Africa would not be like this!

Education is not teaching or instruction! They are parts of the process.

So, what is education?

The word education comes from "educe" (related to the Greek notion of educere), to bring out or develop potential.

It is defined as the process of receiving or giving systematic instruction, especially at a school or university.

It could also be described as the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits.

Educational methods include teaching, training, storytelling, discussion and directed research.

John Dewey (1916) describes Education as a 'a process of living and not a preparation for future living'.

From all the foregoing, we can see that education is:

- Deliberate and hopeful. It is learning we set out to make happen in the belief that people can 'be more' that they are;
- Informed, respectful and wise. A process of inviting truth and possibility. Respect, as R. S. Dillon (2014) has reminded us, is derived from the Latin respicere, meaning 'to look back at' or 'to look again' at something.
- Grounded in a desire that at all may flourish and share in life. It is a cooperative and inclusive activity that looks to help people to live their lives as well as they can.

THE WAY FORWARD FOR AFRICA

The United Nations Organizations (UNESCO, UNICEF, UNCHR, UNIDO, ILO) have always kept an eye on the considered necessities for countries, in different spheres of life and distilled them into Sustainable Development Goals (SDGs). Education is the SDG 4: To Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. The SDG is broken into targets:

- **TARGET 4.1:** By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
- **TARGET 4.2:** By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education
- **TARGET 4.3:** By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
- **TARGET 4.4**: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
- **TARGET 4.5**: By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations
- **TARGET 4.6:** By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy
- **TARGET 4.7:** By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and nonviolence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

EDUCATION FOR DEVELOPMENT

Below is the BLOOM's Taxonomy of Learning. Past and present education in Africa have concentrated the lowest levels of learning which are recall and understand!

Education that will deliver cannot be focused only on the local in a globalized world. It is said that your competitor is not necessarily next door but could be across the Ocean!

Tewogbade Olalekan Oke believes that "Education must be the driver of social change in Africa" by which young Africans must be taught to think, contemplate and learn not only to be critical, but also to be virtuous with the spirit of nation building.

Cambridge University has a Learner's Attribute list which consist of the expected values that Cambridge schools endeavor to instill in their students!

Confident in working with information and ideas – their own and those of others. Cambridge learners are confident, secure in their knowledge, unwilling to take things for granted and ready to take intellectual risks.

They are keen to explore and evaluate ideas and arguments in a structured, critical and analytical way. They are able to communicate and defend views and opinions as well as respect those of others.

Responsible for themselves, responsive to and respectful of others. Cambridge learners take ownership of their learning, set targets and insist on intellectual integrity. They are collaborative and supportive. They understand that their actions have impacts on others and on the environment. They appreciate the importance of culture, context and community.

Reflective as learners, developing their ability to learn. Cambridge learners understand themselves as learners. They are concerned with the processes as well as the products of their learning and develop the awareness and strategies to be life-long learners

Innovative and equipped for new and future challenges. Cambridge learners welcome new challenges and meet them resourcefully, creatively and imaginatively. They are capable of applying their knowledge and understanding to solve new and unfamiliar problems. They can adapt flexibly to new situations requiring new ways of thinking.

Engaged intellectually and socially, ready to make a difference. Cambridge learners are alive with curiosity, embody a spirit of enquiry and want to dig more deeply. They are keen to learn new skills and are receptive to new ideas. They work well independently but also with others. They are equipped to participate constructively in society and the economy – locally, nationally and globally.

Different countries may have different systems or approaches, but the focus is to produce learners with desired attributes.

The Best Education Systems in The World by 2016 Ranking

East Asian nations continue to outperform others. South Korea tops the rankings, followed by Japan (2nd), Singapore (3rd) and Hong Kong (4th). All these countries' education systems prize effort above inherited 'smartness', have clear learning outcomes and goalposts, and have a strong culture of accountability and engagement among a broad community of stakeholders.

Scandinavian countries, traditionally strong performers, are showing signs of losing their edge. Finland, the 2012 Index leader, has fallen to 5th place; and Sweden is down from 21st to 24th.

Notable improvements include Israel (up 12 places to 17th), Russia (up 7 places to 13th) and Poland (up four places to 10th).

Developing countries (where Africa belongs) populate the lower half of the Index, with Indonesia again ranking last of the 40 nations covered, preceded by Mexico (39th) and Brazil (38th).

South Korea believes in working hard so the Kids spend seven days of the week in school and are educated thoroughly in everything they study.

Japan uses a combination of a hard work ethic and technology to make their educational system what it is. No other country deploys technology in education to the extent that Japan does.

Singapore has one of the best primary education systems in the world and they built it from scratch. They shifted the focus away from the traditional school tasks of rote memorization and repetition to deeper education which incorporates conceptual learning and problem-based education. They want students to solve problems on their own with a teacher there to help, should they get lost in the process.

EDUCATION FOR ALL

Sub Saharan Africa has the highest number of out of school children among the regions of the world, with 97.5 m out of 258.4 m. More than one third. This is a challenge to any development program.

The unexpected COVID-19 is an eye-opener that has created a new world, and a new normal, globally and in Africa. Half-baked Online education and Distance Learning were quickly absorbed by the schools, students, parents and Government without much planning. Technology should be the main driver for the Future of Education in Africa.

To reach the colossal number of the out of school children, there is need for deployment of learning programmes through Satellite and Terrestrial Television stations, radio stations and the internet.

TEACHER QUALITY AND QUANTITY

Majority of teachers in Africa are accidental teachers, who got into the profession for lack of other job opportunities. While using Technology to bridge the gap on the short run, it is necessary to redesign the Teacher Training programme to ensure that, even if we cannot boast of the best going into the profession, we can ensure that they are passionate. The Teaching practice component of Teacher training should be extensive and effective. The other option is to turn Teacher Education into Post graduate with compulsory teaching months.

SKILLS FOR THE FUTURE

Finally, the Future of Education should be directed towards Skills for the Future!

We should not prepare the children for the present world but for the future!

The First Industrial Revolution was in the 1700s and can be symbolized by the Steam Engine.

The Second Industrial Revolution was in the 1800s and can be symbolized by Electricity.

The Third Industrial Revolution was in the 1900s and can be symbolized by Computing.

The Fourth Industrial Revolution is here! It is symbolized by connections! The evolving industries include:

- Artificial Intelligence
- Internet of Things
- Data mining
- Nanotechnology
- Renewable Energy
- Self-driving vehicles
- Quantum computing
- Biotechnology etc.

The future is technology and the vehicle is technology!

PAPER SUMMARY

Friends and co-travelers on this reconnaissance journey, whether we like it or not, education is the bedrock of life: Today is a product of the yesterday's education and tomorrow will be a product of today's education. In other words, Africa is where it is because of its education, and for Africa to change, education must change.

- For us to be Change Agents, we need some essential attitudinal changes which can be referenced from the book of Genesis 9:20-25. In the book according to Genesis, Noah cursed his grandson Canaan, after his father Ham exposed the nakedness of his grandfather to his two brothers, Shem and Japheth to shame him when he found his father drunk and sleeping naked rather than covering him. Many Christians who were involved in the Slave Trade referred to this curse of Noah as a curse African race, the Hamitic race and they were wrong because, we have been redeemed by Christ death.
- The attitude of Ham, the father of Canaan is evidenced in the black race blame game, and refusal to own problems. It is good to have an attitude of not blaming others if we are to get Africa out of the rut.
- From the last paper by Dr. Ike, our assertions shows' or demonstrate that, Leadership is the problem of Africa. I wish to state that Leadership is not the only thing; Followership is also very important. Followership is important, not just because leadership progresses from followership but because followership has a lot to contribute to solutions to problems facing the system and education is what equips them all!
- Many believe that our continued underdevelopment is a leadership issue, while others say when the followership is ready, a true leader will emerge. In other words, our leadership is a reflection of our wider society, the quality of followers and their collective intelligence to understand our real collective aspirations.
- Even when we have an exceptional leader, his followers are easily disoriented with corruption propaganda since they are not educated to know their cultural identity and aspirations in concrete terms." "It's not enough for the leader to know and try to do what it is right. He must ensure an epistemic democracy, the wisdom of the multitude, or the people will be turned against him.
- Mandela said, "Education is the most powerful weapon with which you can change the world!"We can easily call the ignorant, the uneducated, who should be the focus of education in Africa.
- We must redesign our own educational content, rejecting some of the existing curricular, bringing in education for character, strength and development. A new educational policy that is pro-Africa, designed to address our needs as earlier mentioned in the first paper by Dr. Ike.

- African education system must aim to train, educate, reorient and enlighten African on their heritage, value system in line with our background.
- Allwell Okpi talked of using the media to "inspire pan-Africanism and validity of our African identity" in our Primary and Secondary schools.

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Educational methods include:

- Teaching
- Training
- Storytelling
- Discussion and directed research.

From all the foregoing, we can see that education is:

- ✓ Deliberate and hopeful
- ✓ Informed
- ✓ Respectful and wise
- ✓ A process of inviting truth and possibility

John Dewey (1916) describes Education as a 'a process of living and not a preparation for future living'.

Education is grounded in a desire that at all may flourish and share in life. It is a cooperative and inclusive activity that looks to help people to live their lives as well as they can.

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EDUCATION FOR DEVELOPMENT

- ❖ Past and present education in Africa has concentrated the lowest levels of learning which are recall and understand according to the BLOOM's Taxonomy of Learning.
- Education that will deliver cannot be focused only on the local in a globalized world
- According Tewogbade Olalekan Oke, "Education must be the driver of social change in Africa" by which young Africans must be taught to think, contemplate and learn not only to be critical, but also to be virtuous with the spirit of nation building.
- ❖ Africa can adopt Cambridge University Learner's Attributes. These attribute list consists of the expected values that Cambridge schools endeavor to instill in their students!

Cambridge students are:

- ✓ Confident in working with information and ideas of their own and those of others
- ✓ Responsible for themselves, responsive to and respectful of others
- ✓ Reflective as learners, developing their ability to learn
- ✓ Innovative and equipped for new and future challenges
- ✓ Engaged intellectually and socially, ready to make a difference

They are different systems or approaches by different countries but the focus is to produce learners with desired attributes.

The Best Education Systems in the World by 2016 Ranking

- 1. South Korea
- 2. Japa
- 3. Singapore
- 4. Hong Kong
- These countries prize effort above inherited smartness
- ➤ Have clear learning outcomes and goalposts
- ➤ Have a strong culture of accountability and engagement among a broad community of stakeholders
- ➤ Developing countries (where Africa belongs) populate the lower half of the Index, with Indonesia again ranking last of the 40 nations covered, preceded by Mexico (39th) and Brazil (38th).
- > Japan uses a combination of a hard work ethic and technology to make their educational system and have technology in education than any other country in the world

➤ Singapore has one of the best primary education systems in the world built from scratch by shifting focus away from the traditional school tasks of rote memorization and repetition to deeper education which incorporates conceptual learning and problem-based education.

EDUCATION FOR ALL

- ❖ Sub Saharan Africa has the highest number of out of school children among the regions of the world, with 97.5 m out of 258.4 m, more than one third. This is a challenge to any development program.
- ❖ The unexpected COVID-19 is an eye-opener that has created a new world, and a new normal, globally and in Africa. Technology should be the main driver for the Future of Education in Africa.
- ❖ To reach the colossal number of the out of school children, there is need for deployment of learning programmes through Satellite and Terrestrial Television stations, radio stations and the internet.

TEACHER QUALITY AND QUANTITY

- Majority of teachers in Africa are accidental teachers, who got into the profession for lack of other job opportunities
- ❖ While using Technology to bridge the gap on the short run, it is necessary to redesign the Teacher Training programme to ensure that, even if we cannot boast of the best going into the profession, we can ensure that they are passionate.
- ❖ The Teaching practice component of Teacher training should be extensive and effective.
- ❖ Teacher Education should be turned into Post graduate with compulsory teaching months.

SKILLS FOR THE FUTURE

- ✓ Education should be directed towards Skills for the Future by not prepare the children for the present world but for the future!
- ✓ The First Industrial Revolution in 1700s, the second in 1800s, the third in 1900s were symbolized by Steam Engine, Electricity and computing respectively.
- ✓ The Fourth Industrial Revolution is here! It is symbolized by connections!

The evolving industries include:

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PAPER COMMENTARIES AND SUBMISSIONS

Dr. Ahmed Ghah Muhammad

I am impressed with the Team work analysis and way forward for African countries educational change. Skills and skills education is the answers for building future generations with values and ethics in Africa.

I am of the opinion that the issue of value, ethics and other relevant traditions are equally relevant to the concept of Education in Africa.

Technology and artificial intelligence and the likes shouldn't be devoid from the African values and culture so that we shouldn't repeat the mistakes of today's education and its erroneous experience.

Chuks

We should advocate for skill education, values and ethics in building future generation.

Goke Agbakosi

The link to Sustainable Development Goals, Cambridge Learner's Attributes and ranking of education systems across countries and continents of the world ensured justice is done to the paper.

An area I wish to mention for attention is the mode of delivery of education in Africa and by this I mean the language of communication in the learning process.

Education in many parts of Africa is delivered in the official language of countries concerned (usually the language of erstwhile colonial masters) rather than the learners mother tongue.

The result is that such education delivers a lot on what the author clarified education not to be but very little on what it is i.e. to bring or develop potentials.

The authors claim on the quality and quantity of teachers is spot on. What the author refers to as 'accidental teachers' are actually people who grudgingly took to teaching as a last resort or after failing to get what they really wanted. It should therefore not be surprising that they are neither proud nor passionate about what they do. To reverse the trend teacher training and the teaching profession will have to be reprogrammed to attract the best available human resources in the continent.

Lastly, I agree with the authors last line that 'the future is technology and the vehicle is technology' I dare add that the driver and chief enabler is the teacher.

Edward Kings

I perfectly agree that the Quality of teachers in the Africa Educational system is a major contributing factor and our educational systems needs to be skilled oriented

There has to be a holistic re-training program for the teachers, this will go a long way

The educational environment is another factor

Also our school curriculum needs to be research embedded and oriented.

Primara Ma'at

First of all, without purpose and direction on the part of Africa, quality education needed to propel Africa to Shangri-La will remain elusive.

The collective purpose and direction will determine the homegrown, efficient, dynamic, inclusive and well manicured curriculum for our schools and institutions across the continent. Currently, it's a common knowledge that experts/consultants on curriculum in our schools are largely foreigners. African should design appropriate curriculum not foreigners.

quality of teachers as it has been submitted earlier on this platform needs to be given attention.

Again, for education to be relevant in Africa now and into the future, the following concepts must be introduced to the curriculum right from primary school to, if possible, tertiary level with involving objectives but not objectives in abstraction as it's the case in some subjects. These concepts are

- 1. Spiritual Intelligence;
- 2. Artificial intelligence;
- 3. Emotional intelligence, and probably
- , 4. Success intelligence.

Without spiritual intelligence scaling up to meet the need of Artificial intelligence will surely be a chore on a grand scale. This is because religiosity has permeated deeply into the DNA of most Africans even the young ones so much that little space is left for assimilation of scientific knowledge. I'm of the view that spiritual intelligence will help throw more light on the difference between spirituality and religiosity there by creating congenial psychological atmosphere for teaching and learning without the hindrance of dogma, creed and code as it's the case now. The inability of Africa to sieve and sift the difference between spirituality and religiosity is partly responsible for desperation and inordinate consumerism that have tranced and devouring Africa deeply into the future.

Accurate knowledge of science and technology can go along way to pull the break on desperation and consumerism -- we will then be producers and manufacturers with dignity.

I'm of the view, with the additional knowledge gleaned from the works of Walter Rodney and others, our education system has no business in the hands of non-Africans, especially at this time.

Other thing worth attention with regard to education in Africa is the role of the mass media. The activities of the mass media in my country cannot be tied down with a neat knot. The media is doing everything possible to lure both parents and students from their mandated responsibilities towards education. The distracting contents they show regularly laced with explicit sex scenes is unacceptable and making education uninspiring to the younger ones.

To needle the middle of the current education system challenges in Africa into the future, infusion of spiritual intelligence, Artificial intelligence and emotional intelligence is not negotiable. Elements of these can limit corruption and things like that if not revome them completely.

Mowo Oduru

Apart from the fact that most African countries are not investing much in education we are also not focusing attention on certain lucrative disciplines ofthe future, & real hands on experience for oursee teachers & students that can assist in moving Africa forward.

Moreover we are missing out in the technical & vocational skills. Gone are the days when one compete with degree certificates. It is now that of skills including soft skills which we are missing out in Africa.

For instance we have university of agriculture in various countries of Africa yet we have not created enabling environment for mechanized & cooperative farming to thrive.

I have been involved in migration to SAP ERP in large organizations in North America & one thing that keeps on coming to my mind is how Indians have managed to become experts in that field & leading trainers & facilitators all over the world.

The middle level core technical skills is gradually disappearing in Africa & our leaders need to urgently do something about it. Even though we have oil in Africa some of the key technicians & tradesmen required on the oil rigs are still brought from Asia, Europe, & North America.

We are gradually approaching a situation in Africa where there will be scarcity of skilled tradesmen as most technical schools are not well funded & equipped to meet up with that of Europe, North America & Asia.

- Arc. Ola Olaniyan O.M.

An attempt to encapsulate the travails of the educational system in Africa will require a compendium of volumes comprising chapters in the multitude. It is indeed commendable that our esteemed presenter distilled it into a few lucid paragraphs and yet proffered the way forward rather succinctly. This is an epitome of experience and dedication towards solving Africa's education challenges.

It is an uphill task to draw a roadmap for revamping the educational system in Africa because the challenges are multifarious and multifaceted. At this point, we have to understand that Rome was not built in a day. Nonetheless, we must as a matter of urgency put up foundations upon which a Roman citadel can be built progressing forward if we cannot put it up in its entirety. Because, as a matter of fact, Africa is far behind and to catch up, we have to do more than double-up. This is one of the reasons why the OAI becomes incendiary towards improving the future of education in Africa. Therefore, many thanks to the convener – Tim Akano.

2. *Education for Industrialization*

If today is the product of yesterday's education and Africa is currently the way it is, and tomorrow will be a product of today's education, if we do not change today's education, we may end up worse tomorrow than we are today. Therefore, going forward, how do we improve the future of education in Africa? How do we promote education for industrialization?

I will base my treatise solely upon "*education for industrialization*" because this a critically mislaid aspect of our educational system, taking Nigeria as a case study. The educational system in Nigeria is the 6-3-3-4 module, modelled in tandem with western ideals. In the 6-3-3-4 system, the first 6 is primary education, which should be a right for every child. The last 4–tertiary education—is usually achievable by a select few. In Nigeria's case, 3.68% of the population according to the National Population Commission statistics for 2006. But what happens in between the primary and the tertiary is the main pedestal upon which education for industrialization may be premised.

Yes, we need thinkers the university graduates and the gown. But as a matter of fact, we are in no shortage of thinkers, if the lofty policies and programmes that abound in our sphere comes to reckon. What we lack are the doers, the well-trained infantry sergeants not the generals. In any society, there are different strata each not wholly more important than the other, taking a cue from the major civilizations that have managed to rule over their known worlds. The first strata with the fewest are the thinkers. These belong to the privileged category that run through the entire 6-3-3-4 module and manage to feather their nests even beyond. The next strata comprises skilled labour or technicians usually much more than the thinkers. At the bottom rung of the thinking box, we have the unskilled labour who classically are in the majority. Permit me to limit the stratification to these three groups, though it is not as simple and clearly defined as seemingly portrayed.

3. *The Challenge*

These three strata are obvious in the 6 - (unskilled labour) 3 - 3 - (skilled labour) 4 and beyond (thinkers) system we currently practice. To drive industrialization, taking a cue from the industrialized nations, we require the middle strata most importantly to drive an upward trajectory. This perspective can be aptly substantiated with an example of my profession. *What can the Architect with a masterpiece blueprint achieve without adept masons, carpenters, iron mongers and other artisans? Absolutely nothing!* Yet, unskilled labour are in abundance and can be changed without import upon the standard of construction. What this infers is that the architect with her lofty designs, expertise and know-how cannot put up an edifice without competent craftsmen which apparently is currently lacking. Unfortunately, the reality in Africa is a dearth of competent craftsmen due to lopsided technical education. This abounds not only in the construction industry but across all spheres of industry.

From my few interactions with the Chinese firms to whom we have suddenly surrendered our construction sector, I discovered that most of these folks are mere skilled artisans posing with the appellation of an expatriate enjoying armed police/army protection, living like royalties on our continent. So the conundrum is why should a welder or auto-mechanic from China assume the position of a project manager in Africa, while indigent graduates of civil engineering walk the streets jobless? The answer is simple, we have refused to invest in technical education, develop our people and upgrade our human resources and this highlights the significance of secondary/technical education.

An editorial of the Guardian Newspaper 28 Nov 2019 states that "it is befuddling that Nigeria has not successfully integrated technical education into its educational system almost 60 years after independence. Although in Section 7 of the National Policy on Education, provision is made for the introduction into the world of technology and appreciation of technology towards interest arousal and choice of a vocation at the end of Junior Secondary School and professionalism later in life". Similarly, the National Policy on Education (2004) in Section 6 (4) states that one of the objectives of Vocational and Technical Education is "to give training and improving the necessary skills leading to production of craftsmen, technical and other skilled personnel who will be enterprising and self-reliant". It is quite obvious that nothing on the ground gives credence to this lofty declaration.

Some scholars have attributed the low pace of industrialization and technological growth in Africa to the demise of formal technical education and cite it is as perhaps one of the reasons for the continent's underdevelopment. The United Nation Educational Scientific and Cultural Organization (UNESCO) defined Technical Education as "education designed at upper secondary and lower tertiary levels to prepare middle level personnel (technicians, middle management, etc) and at university level, to prepare engineers and technologists for higher management positions" and further professed that revitalizing this sector is among the ways to improve economic opportunities for the youths.

Technical education promotes independence and self-learning and is crucial to human resource development in a country by creating skilled manpower, enhancing industrial productivity and improving the quality of life. In Nigeria, technical education is typically offered in different institutions, from technical high schools to polytechnics with specializations in auto-repairs, masonry, welding, electronics, woodwork and other crafts. Graduates from technical schools are expected to grow into skilled junior and medium levels artisans and those desiring further technical knowledge progress to the polytechnics. However, *technical schools have gone redundant and what is worse, polytechnics set up to conclude the process of completing technical education have curiously resorted to creating and offering courses in the arts and social sciences by successfully relegating technical education to the shadows.*

It is indisputable that education generally has been grossly neglected by Nigeria and perhaps most of Africa. Until governments and the people alike begin to change their attitude towards education and most importantly technical education, Africa may yet remain a technologically backward and dependent continent.

From another perspective, we have given much importance to the arts and humanities to the detriment of science and technology. For instance, in the Obafemi Awolowo University, Ile-Ife at the time of my graduation from the institution in 2008, there were 13 Faculties. Five (5) faculties were in the arts and humanities while eight (8) were in the sciences and technology. However, the number of graduates from these 5 faculties in the arts and humanities comprised 56%, at the postgraduate level it was 74%. This indicated that at the graduate level, the 8 faculties in the sciences and technology only managed 44% while at the post-graduate level only about a quarter. This really needs no asking based on the above statistics, it simply means neither are we threading towards science and technology nor to innovation and mechanization. We are currently not on that path, with the proliferation of privately owned institutions most without the wherewithal to spearhead science and technology courses, the statistics will be even more frightful.

4. Charting the way forward

It cannot be an over-statement to say that technical and vocational education is the engine of economic growth based on documented evidence from industrialized nations. In the same vein, Africa cannot develop without well-equipped technical and vocational institutions. It is a missing link in our development agenda. No society can compete effectively in the emerging global marketplace with poorly educated and unskilled workers. The leading factors of production in the recent past and emerging global economy are technology, knowledge, creativity and innovation.

For progress to manifest, a comprehensive reform and a deliberate investment in science and technical education is critical. This is a panacea to Africa's underdevelopment and industrial cum technological emergence. Technical education has been an integral part of national development strategies in many societies because of its impact on human resource development, productivity and economic development. It holds the key to national industrial and technological development. The SDGs Target 4.3-4.5 on education highlights the significance of technical and vocational education.

As earlier mentioned, Africa does not lack thinkers but doers. The West African Examination Council (2013) Training Manual for Principals, Record Officers and Registrars of Schools highlights the following 34 trade subjects: Machine Woodworking, Animal Husbandry, Auto Body Repair and Spray Painting, Fisheries, Auto Mechanical Work, Catering Craft Practice, Air Conditioning/Refrigeration, Garment Making, Welding and Fabrication, Engineering Craft Practice, Salesmanship, Block making, Bricklaying and Concrete Work, Auto Parts Merchandising, Plumbing and Pipe Fitting, Textile Trade, Carpentry and Joinery, Stenography, Furniture Making, Storekeeping, Upholstery, Bookkeeping, Printing Craft Practice, Marketing, Auto Electrical Work, GSM Phone Maintenance & Repair, Radio, TV and Electrical Work, Data Processing, Mining, Painting and Decorating, Leather Goods Manufacturing and Repair, Dyeing and Bleaching, Photography, Tourism, Electrical Installation and Maintenance Works, Cosmetology. All these are apparently laudable technical/vocational endeavours. But the questions remains:

How many schools teach these subjects?

How many students take these subjects in WAEC examinations?

I did a quick research in Akinyele LGA of Oyo State, Nigeria based on 2019 WAEC Examinations and discovered the answer to the above two questions is none. The answer tells us why we are where we are in terms of industrial development and how well we address it takes us to where we decide to be.

It is true that an "African education system that aims to train, educate, reorient and enlighten African on their heritage, value system in line with our background" is essential, but we also have to place emphasis upon education for industrialization. All the evolving industries in the fourth industrial revolution require skilled manpower and to produce this requires effective technical education. "The future is technology and the vehicle is technology!" We simply must think science, think technology!

If indeed we are to progress, "the cultural elite must create think-tanks to influence public discourse, opinions and policy". This highlights the significance of OAI. I therefore join the presenter to once again salute "the infectious commitment of the Convener of OAI, Tim Akano" for crafting this platform. This means every member of OAI is a cultural elite and we should ensure "the masses must know the road map from the origin to destination and...know which leader to back and rise in defense of their collective aspirations."

Emeka Onyema

I am worry about the state of foundational schooling in Africa. In Nigeria, government has practically abandoned primary education to business men and woman who are 100% profits driven.

The outcome are schools and students managed by unqualified teachers as the school owners pursue maximum monetary returns.

In most of our private schools today, majority of primary teachers are untrained and in some instances possess only secondary school certificates. This speaks to the weak foundation of our youth.

It is equally disheartening that the State and Federal School Boards are no longer active. activating and drafting competent persons to these boards is the way to go. the issue of leadership props up again as this only underscores the fact that our failing education standards cannot be fixed in isolation.

Chux Mogbolu

The paper is intellectually rich & nouri From the sound definitions of Education to the creation of skills for the future.

UN SDG on Education, Teacher Quality & Quantity, Cambridge Education for Devpt out turns & the push for Technology to be relevant in the 4th Industrial Revolution.

Quality & functional Education remain Africa's spring board, bedrock & silver bullet - it is the ticket to participate in the 4th Industrial (Technology) Revolution.

In many Countries across Africa, the annual budget for Education shows we are not preparing to play in the big league.

Africa must begin the journey to turn its Brain into Brain Gain.

Mentoring is becoming a major component of education & learning. It can instill life changing experiences in learners.

our Technical Colleges needed to be revamped & remodeled. There is dearth need of well trained Plumbers, Auto Mechanics, Fitters & Builders across Africa. Africa can create millions of jobs from Tec Colleges. School graduate need to start off on his own with little capital.

Jason Ternenge Gongul

Education starts from home. The African child is groomed to be highly limited in his thinking and many times, not given an opportunity to think for himself. The teachers also lack professional training and because most of them are from same backgrounds from home the cycle continues.

Followership is as critical as leadership. Parents and teachers alike will have to go through a reorientation process, as far as basic education is concerned and this is because the effort put in to bring up a child at that level must be complimentary.

Our curriculum may have been purposeful as at when it was developed but breeding mental laziness now, where a university lecturer, will hold unto same lecture notes with no effort to improve on same in 20 years. What typically is obtainable therefore is that any student that desires to graduate with a 1st class just have to gather past questions and lecture notes from senior friends and memorize ahead of exams at each level and that's it.

Inability to retain best brain within educational system, especially at university level posses a big challenge as teaching are left in the hand of 3rd class and drop outs.

Femi Rotimi

Projecting into the future, presents a rather deem outlook for the next decade, except ofcourse Africa adopts stern paradigm shift in how the young Africans are tutotered during their years of instruction.

The proportion of higher education prospects not absorbed into the regular National curriculum(at primary and secondary levels) is too high. Missing out at this early stage creates enormous socioeconomic problems as these class of the population advance in age.

The overall quality of early education serves to develop strong and balanced foundations for our youth.

Our youth would be better inclined to seek skills in professions and vocations if early instruction emphasizes development of such core skills for contribution to society at a later stage.

Youth empowered without an identity crisis, educated to focus on rigorous application of knowledge to development of solutions would benefit Africa.

The New-African youth can only be developed in Africa, armed with an ethos of achieving best in class of brilliant brains in a global setting.

This goal requires systematic delivery but and a dedicated willingness to make Africa a winner.

Africa being blessed with extensive arable land, enormous mineral deposits, must arm its population to add value thus becoming effective guardians and custodians of our natural resources.

Mowo-mowo

Commented on number 4 point of the point; bring to mind the issue of implementation of policies. I am of the opinion that we have good ideas & policies in Africa but the problems have to do with implementation. stage of educational policies in Africa. No matter how good a policy is nothing will be achieved if not properly implemented.

Our parastatals such as the Army Signal Corps can support technical education and training. This arm is a department in the army that can be of benefit to any country in terms of innovation.

Isa Nuhu

He added to the paper resources, richness and diversities of Africa. Which if well utilised couple with education can make Africa the number continent.

Africa is 60% arable land:

Africa is 90% raw material reserve;

- Africa is 40% gold reserve; - Africa, 33% diamond reserve- Africa is manganese, iron, wood. - Africa is three times the area of China, ten times the area of Europe, four times the area of the United States of

America. - Africa is thirty and a half million km2 (30,415,875 km2); - Africa has 1.3 billion inhabitants (China has 1.4 billion inhabitants over 9.6 million km2). - Africa is cultural diversity (dance, music, architecture,

sculpture, etc.). -Africa is 30,000 medicinal recipes

AFRICA REPRESENTS THE FUTURE OF HUMANITY (By 2050, Africa alone will be able to feed 9 billion people).

Jason. Ternenge Gongul

I must submit that our problem is more of a foundational challenge and the approach must be holistic if we must close the CAPA (Corrective Action, Preventive Action), as called out in this paper. Education starts from home. The African child is groomed to be highly limited in his thinking and many times, not given an opportunity to think for himself. The presenter of the last paper pointed out that the formative age of a child's life is between ages 1 to 7. Unfortunately, this is also the period where an African child is exposed to self-limiting phrases like; "you can't do this, stop that, don't say that, sit down there and shut up your mouth, you can't do it", and the list is endless. When the child eventually starts schooling, the same old approach continues. The teachers lack professional training and because most of them are from the same backgrounds from home the cycle continues.

I quite concur with the submission that followership is as critical as leadership. Parents and teachers alike will have to go through a reorientation process, as far as basic education is concerned and this is because the effort put in to bring up a child at that level must be complimentary.

Our curriculum may have been purposeful as at when it was developed but things have evolved quite a lot and we ought to remain adaptable. What I can see is gross mental laziness, where a university lecturer will hold onto the same lecture notes with no effort to improve on the same in 20 years.

What typically is obtainable therefore is that any student that desires to graduate with a 1st class just has to gather past questions and lecture notes from senior friends and memorize ahead of exams at each level and that's it.

Inability to retain best hands in the sector: Most tertiary institutions make effort to retain best graduating students so as to retain the best brains within the system but this also has been quite challenging to actualise as the banks and other corporate organisations also come for the same with more juicy compensation offerings. At the basic education levels, the schools are left with 3rd class graduates and dropouts, especially within the public schools. "If the foundation is destroyed, what then can the righteous do?"

Femi Rotimi

Africa has failed over time to develop her people and compete globally; emphasis is on what we can benefit from others, to the detriment of developing home-grown expertise and advanced skills to compete on the international stage.

African leaders are not imported resources, they have been bred within Africa and are a clear reflection of the outlook we had in-view a few years ago.

African children should be captured and tutored during their years of instruction. Some children are Missing out on this early stage education which creates enormous socio-economic problems as these classes of the population advance in age.

Our youth would be better inclined to seek skills in professions and vocations if early instruction emphasizes development of such core skills for contribution to society at a later stage.

Youth empowered without an identity crisis and educated to focus on rigorous application of knowledge to development of solutions would benefit Africa.

The New-African youth can only be developed in Africa, armed with an ethos of achieving best in class of brilliant brains in a global setting.

This goal requires systematic delivery but and a dedicated willingness to make Africa a winner.

Africa being blessed with extensive arable land, enormous mineral deposits, must arm its population to add value thus becoming effective guardians and custodians of our natural resources.

Adamu

I must say the Colonial Masters left us just where they wanted us to be and as loyal servants, Africa remained there. Correct me, the structures they placed for education was meant to enable them fulfill their quests for our resources and dominance. Is that not what is still African.

my only addition is that we need to return to the basics and then instead of rebuilding the wheel, otarget the areas of future needs like stated and attack it from the top. We can use the power of IT. This people will get a very difficult history and turn it to cartoons and leave it with the children. Before you know it the children's brains are initiated to reason, think and solve problems. We need to get our experts, start focusing on making IT coding interesting for kids and Minors, and get our schools start returning to the true history of their villages and people.

That foundation is so important because whatever comes after will definitely be laid of a rock of good education learning. While I am not saying Arabic/Islamic Schools for African kids, am of the opinion that we need to lay an African Solid Learning foundation for our children, so like the Indians/Asians/Chinese/Jews et al whatever they learn latter is not in the context of the west but on the Strong Foundation that is Africa.

we must start to de-emphasize the cultic worship of trivialities and raise the banner of rewards for academic and Intellect. When we copied Big Brother Africa, the winners go home with Millions and are celebrities, 90% of our children and teens will tell you the life and stories of footballers, while they do not know the names of 4 or five state Governors in their country.

We need advocacy for our schools and education to be well founded and made meritocratic and the favoured thieves are there just to loot. And ensure our leaders and Government officials are banned from sending their children to private and foreign schools.

James Olu Gbolagoke

Our educational system has been in problem for a very long time. People do not appreciate that education is to bring out of them what they already have like the presenter indicated.

It is interesting to note the conclusion of the presenter that it is technology that the world is moving towards. While there is no doubt about that, technology is application of education.

How can you get into technology when the basic ingredient for effective technology is not there.

So for Africa to make progress, we must first see ourselves as serving the society rather than the other way round. The mind set of both strata of the society must change. The value we place on money and material possession to the detriment of contributions of people must change. We must value our ability to solve problems rather than what we have acquired.

The education must start from me and you by changing our mindset in several issues. Over a long period of time, we may be able to adjust accordingly.

Sani Damian

we must acknowledge the fact that we are a product of learning and society is shaped by the learning it's people receives. We must also agree that there is something fundamentally wrong with the structure of our educational systems. That being said, we will need a kind of learning that will break us out of the flawed stereotype of our educational systems in Africa.

Going by the Cambridge University example, what are the expected outcomes of a revamped educational sector in Africa with a view to global relevance? I am a strong advocate for outcome focussed education beginning from the primary and secondary schools. These expectations should be reinforced in our teacher training programs and deeply imbedded in the schools' curriculum.

While being careful not to trade blame, I will submit here that the onus lies on good leadership to properly educate the people if good intentions of leadership must not be truncated by ignorant followers.

Eng. Dele Olanubi

We now know what to accomplish. This brings about the question of leadership. We need the visionary leader that can "see" this pathway set the goals get the talents and implement to get result.

My second thought is as noted by the presenter we are already far behind. How can we make up the grounds to catch up and zoom pass others. In this regard we are very limited by religion culture, language foreign interest that does not want it to happen and we that have been brainwashed not to want it. The problem of getting to where the presenter has dissected our lack of solid education in Africa is futher compounded by our cultural practices. This education is foreign to Africa and adaptations is questionable. Had we been allowed to educate from within we may be the witch craft genius of artificial intelligence today. We may be the world experts on herbal cure of medicines.

How do we start. Realizing that Education is important therefore making it free mandatory for all African child until the age of eighteen when the child will exit secondary school. Starting a child education after the sixth birthday. Spending six years of primary education. Six years of secondary. One year of community service six year of tertiary and two years of community service with mandatory one year of armed forces or paramilitary education.

The child would have acquired "home training" before starting school and patrotic values along the educational line. By age limit the rush to get degree is universal for all. By service to the community the patrotic values will be embedded. The rush to escape solving the problem within for overseas auroras will dwindled. This thought may be revolutionary but Africa need Revolution in Education not the stereotypes.

We must RETHINK.

African Education must be made to achieve communal sucess rather than individual capitalist achievements.

Prof. Hamid Ozuhu-Sulman

I would like to provide another perspective to this tragic situation, namely, the unofficial policy of dis-empowerment of the population through under-funding of tertiary education. As we speak, the Academic Staff Union of Universities (ASUU) is in the trenches again in a face with the federal government largely on the question of funding and prioritization of university education in Nigeria. As this face-off last, students are made to loose valuable time for learning and research. Though the lock down seems to veil this predicament. I do not intend to border the house with ASUU brouhaha but to draw attention to the fundamental issue of state induced gradual but steady destruction of tertiary education system in Nigeria.

The writer of the foregoing piece made allusion to foreign involvement in content development, it reminds me of World Bank involvement in the under-funding of university education in Nigeria through arguable policy pronouncements. The ultimate aim is to gradually phase out government funding of tertiary education and finally deliver that critical level of man power development to the bloody capitalists who scavenge for the soul of the economy in every investment opportunity. This unofficial policy of dis-empowerment was given a stamp of sacrament by the Washington consensus where the 'sanctity' of neoliberalism as an inescapable world order was declared. The position of ASUU on this organised mutilation of the universal place (university) in Nigeria has been articulated and repeatedly publicized in the media. This position form the basis of ASUU engagement with the government over the years.

"The Future of Education in Africa" as we have above is well articulated, but my argument in policy dialogue has always been that the market place of ideas in developing climes is not far fetched. The challenge lies with the governing elite as presently constituted. There is need for structural rejigging of the leadership corp of Nigeria, first, to introduce the passion and vision that drive the writer of this \Box piece.

Secondly, to evolve a new generation of leadership that is imbued with the discipline and obsession for excellence.

Thirdly, to have in place a leadership that recognise investment in human capital as the desideratum of socioeconomic reconstruction of Africa (nay Nigeria). When we have this leadership in place, the question of how to deal with policy virus in the form of externally induced internal colluding structure can be handled decisively. However, this is a tall order as it will require a 'third force' made up of intellectuals, professional bodies, the labour movement, students and the youth movement, the media, women leaders etc to drive this process of change to its logical conclusion.

Tunde Y. Salihu

My perspective is in the utility of education itself; practical applications to solve societies many challenges. So, in training a Human Resource Manager, I'm looking at producing an individual who can attract and retain highly skilled and suitable employees who will ensure the success and sustainability of the company. Now, I expect such education therefore to have clear defined goals and objectives for the individuals and the immediate community, which must align with the aspirations and developmental targets of the country and/or region.

For example, iran has been under sanctions by western nations for about 40 years, yet the country is able to produce scientist, engineers and technicians that are not only able to work on their nuclear technology, but maintain a lot of industries such as refineries, automobiles and so on, without the support from the west. It would have been completely reckless of the nation to have invested in producing only Islamic clerics. For the records, one of the recent leaders, Ahmadinejad holds a PhD in Mechanical engineering and the country has 7 companies producing cars.

So, in Africa we should be looking at our education from what we lack, what we need and how to mold those that'll be ready to create the change as part of their DNA. For example, we export our raw materials and we remain the focus of all industrial nations because they want to exploit our natural resources to their advantage. We all know that the total value of cocoa business worldwide is less than \$10b but that of chocolate is over \$130b.

We should start looking at the practical applications of our education to solve our problems to create unprecedented economic growth and development in Africa. So, our children should be taught from primary school how to mine and convert minerals to other derivatives. Cut diamond is several times more valuable than raw one. This is not rocket science as some of us may feel. Cassava can be converted to alcohol in a simple process that can be demonstrated to primary school pupils, a more advanced form to get higher purity can be taught in secondary schools and how to work with real machines to produce industry grade alcohol can be taught in the Universities and Polytechnics!

I'm sick and tired of producing 95% engineering graduates who find it difficult to use basic tools like, screw drivers, pliers, spanners, soldering irons and so on, talk less of machines. The argument of Engineers being designers is puerile and unhelpful in our efforts to emancipate Africa from the backwardness we have been languishing in for 5 decades while other regions are progressing.

Why should our banks, governments and businesses import software packages if our children are trained from primary school on how to write programs and molded into real life problem solving professionals at tertiary level?

As an Engineer of 33 years standing running a practical oriented training school, I can tell you for free that it is not ROCKET science and the cost is within our capacity if we choose to do so.

We should focus on application focus education not education for education sake.

Stella Okolo (MBA, M.Sc)

An adage says 'when a man wakes up that's when the morning begins.' Africa as a whole has this unique Covid-19 lockdown opportunity to put on her thinking cap. The fear is, a blind guide can at best stumble with those he is leading. This brings us to the leadership question. I want to encourage Tim and all like minded persons to remain focused. My prayer is that God in his own special way will remove all deaf and blind leaders from Africa.

Ksa: notary public

The future of education in the 4th Industrial revolution is indeed technology.

The treatise has indeed shown that education is beyond certificate and ability to read and write. These have been the burden of education in Nigeria.

I will add that education also encompasses the nuaces of Africa; the African child must be comfortable being an African and build on strength and peculiarities.

As individuals and families, we have a responsibility to give the incoming generation and ourselves the much needed education as our peers in other continent and I believe once the torch is lit, others will catch fire.

In sum, there is need for a paradigm shift and it starts with us and those in our sphere of influence.

In addition, tertiary institution on agriculture must begin to deliver on mechanized farming and the use of technology to till the land so that we can feed ourselves as a continent.

Osibajo Festus

Government should give the sector the attention it needs. All societal ills are attributable to poor education and miseducation. If we are to attain quality education for all by 2030, the government should take full responsibility for basic education up to secondary level. This will drastically reduce poverty and the rate of corruption.

Basic education should be made compulsory up north instead of almajiri propaganda. Three should be a serious sensitization and reorientation on child bearing. People who cannot afford to take care of one child are having five wives with like 20 children. Government should look into this.

Serious educational need assessment should be conducted throughout the federation to expose government to the real need of educational facilities for the populace and be able to project to the future viz a viz population growth (sustainable development). This can simply be done with deployment of Geographic Information System (GIS) tools. I conducted such during my thesis for master in GIS, using somolu Lga, the revelation was shocking; the government is not doing much in terms of provision of educational facilities. Private schools owned about 70% of primary school and about 60% of secondary schools. Government should be sincere in knowing how many schools are really needed in all our Local government areas.

Upward review of age of entry to foundational school. This is taking a toll on parents paying an exorbitant amount on a two year old child to learn A for Apple. This was premised on deceit that quality education should starts from cradle. Government should impose serious restrictions on this and basic education should start around age six. Nonetheless, there should be a clear demarcation between creche, kindergarten, pre school. Recently, Lagos has reviewed the age of entrance to secondary school to twelve years. This is commendable.

The problem we are having is not only curriculum. The system of education is unproductive and can never meet the 21st century societal needs. The current 9-3-4 should be upgraded. After secondary education, there should be a compulsory one year trade, agricultural, entrepreneurship, technical or vocational training for students seeking admission into our tertiary institutions. This will build in students' spirit of independence and entrepreneurship needed for national growth. I can still remember around the early 90s, General Babanguda promoted technical education, my school in a very remote village had about ten industrial wood work machines, majority of my brothers took into woodwork and that is still their vocation till date.

The method of delivery of instruction should be looked at critically and supporting facilities. We are too theoretical and certificate oriented. Emphasis should be laid on skill acquisition and competency to change the narrative of half baked graduates. Government should learn from some privately owned secondary schools and universities. How many public schools have interactive board? How many public schools can boost a student to one computer? Though expensive, they are meeting educational needs of those who can afford it.

Civic Education, religion studies and one indigenous language should form part of our criteria for tertiary school admissions. These are necessary to build virtuous adults with the spirit of national building according to the writer. Our children cannot speak our indigenous language, our values and culture are eroding away, our morals and religious rectitude are compromised. What then are we impacting?

Finally, 1 beg to differ on the issue of leadership. Everything falls on leadership. A leader produces its kind. Leadership is not just to occupy a position it is a deliberate act or process of instlling belief, values and culture of an organisation or institution on the followers. We may have deviants, but should not be up to percent that can affect the whole system. The problem with most Africa leaders is the superficial process that produces them. Your analogy of 'cambridge culture' says it all. It is a planned and deliberate attempt to grow their students into independent and responsible adults.

Lady Zakari Yasmin

Education in the "real sense" of the word is an opportunity to explore the tangible and the intangible.

For so long we have allow ourselves to be victims so much so that many of us get sucked into enjoying "victimhood". Victims doesn't need to take responsibility of their actions, victims doesn't need to account for their lives, victims doesn't need to partake and participate, victims doesn't need to invent, innovate or to get organized. Victims are victims anyhow you look at it. So we continue to lament in self pity, and to recycle blames.

We have a very long way to go but the fact that we come together and started deliberating, that is a beautiful beginning. suggest that, we identify a point of entry, so that we create the tempo, sell our ideas to Africans everywhere in the world.

POINTS OF ENTRY

1. Private sector is a good place to start, because private sectors are more put together and organized in Africa and the fact that private sectors have more to gain by having a prosperous and united Africa that is good for us, atleast we have a common interest to work with.

2. Media outfits.

We need to reach out to the media organizations to help us to continue with positive messages about African Dream. When messages are said repeatedly Psychology said, people begins to believe it.

- 3. It is good we have taken back our power of responsibility. We are looking for solutions from among and within us, the people, the followers.
- 3. African leadership is not very strong but we need to CAREFULLY befriend the leaders, by looking at our common interest. Hence, we dine with the leaders but we must stay away from going into politics, that way, we are able to work with any seating Government. In Diplomacy, we say the ability to negotiate without unsheathing the sword, is a noble and delicate balance.
- 4. We also need to register the initiative as a movement.

- 5. We need to plan out carefully, what are our goals every year, so that we follow the plan roadmap to the end.
- 6. Leadership in the Initiative should be apolitical. People who know they have the capacity, energy and vigour to serve can be nominated and if withing a year they do not serve then they resign honourably. And after every 3 or 4 years, new leaders emerges to carry the torch.
- 7. When money comes, because money will come we have to be careful and cautious, so we are not derailed from the objective.
- 8. When power comes, because it will come. We have to continue to remind ourselves on the vision, so that we dont shortchange the vision for our personal gain.
- 9. Collectively as a group we shouldn't support any political party, so that we dont become a joke because politics can make and destroy easily.
- 10. Individually, when we want to partake in politics, we should categorically make it clear that, it is our personal interest not the interest of the "One Africa Initiative".
- 11. We should focus on Africa and refrain from picking unnecessary enmity with other Nations. Even if a Country attack Africa, we should use Diplomacy to sort it out. Peace is always the best option.
- 12. After Corona, we should start meeting strategic groups and Individuals to sell our vision and solicit their supports.
- 13. We should suggest Ideas, suggestions and strategies to Governments at different levels, so that we can help to strengthen the African system.
- 14. We shouldn't try to coerce any Government at any level to cooperate with us, we just let the Government knows that we are there for them, with so much capacity to support them, whenever they need us. That way, we are not seen as a threat.

Idowu Abiodun

There is little or no funding into educational sector. Take for instance the strike that occurred in LAUTECH that lasted for about 2 years. Our government need to step up in ensuring that more

funds is eject into education and make sure that the money reach the affected areas so as reduce embezzlement of money.

Learning environments must be made conducive enough for to students to be able to absorbed knowledge with no hindrance. Many students find it difficult to grasp the teachings they needed because of the situation they find themselves. For example, you can't expect a student to sit down with his book meditating on it while he is starving of hunger. Reading is mostly enjoyable and done when there is nothing to worry about.

There are some things that students indulge their precious time with like social media, Movies, etc which affect the education system negatively and this thing can be again used in educating our youths.

social media should be re-engineered as to a place for study rather than chatting. By setting some strategies that will capture the interest of student to study online. Maybe creating a platform that allow student to study with less data consumption and publicizing it across social media, especially on Facebook. A platform that join teachers and students together, for questioning and answering.

The industrial movies could be used in teaching our youths by producing a movies that speaks about creativity, initiative, and innovation.

The establishment of an organization that include students, teachers, parents and government authorities and making sure it is run effectively and efficiently. In this regard, any problem arising from any members of the group could be reviewed and solved.

Suleiman Emmanuel Abiodun

I humbly want to submit that we are all guilty of the backwardness in the state and level of Education in Africa.

- (1)Before independence,most of our leaders today have their Education in the Western world, great one !!,but how come do their children,grand children,even some, their great grand children still have to travel out f Africa to attain good quality Education???,this I believe some,if not most of our people on this platform can attest to.Knowing fully well that what it cost to school a child through a University Education lets say in UK is enough to set up a standard neighborhood Nursery and Primary School in any area in Nigeria or any African Country.I stand to be corrected.
- (2)Sound Education requires pasionante and motivated teachers, but how can a dissatisfied teacher train ambitious and ready to go all out pupils or students? In fact, I remember vividly how some of us while growing up use to respond when we were asked what we will want to become in future, you rarely see anyone aspiring to become a teacher.

(3)What a man become is the product of NATURE VS NUTURE. This I believe is so strong a factor that we need to consider in developing our Educational system. Let's take for instance in a school where the headteacher/ headmaster or teachers are operating at analogue level can not produce pupils operating at digital level, so it transcend to higher instition. That's why we have some graduate of Electrical, Electronics, Mechanical etc whatever Engineering who can not loose common bolt or fix cables whereas an artisan with 2 years or more training in an informal setting are out there making a living daily from all these jobs.

Proposed solutions.

- (a)Let's make teaching job lucrative and competitive,let people go into teaching because they wanted to,let's give out official cars,apartments and allowances to outstanding teachers in our society so that our students can be inspired and aspire to become one when they graduate from school.
- (b)Let our well to do in the society invest in education at all level. By building schools, equipping them with facilities as seen in developed country where you had your own education, and run it with educatist in charge with little or no profit in the beginning which you will be compensated for in the nearest future.
- (c) Let our religious bodies establishing schools make it affordable for the masses, because in the real sense of it, Education is expensive, that's why many children are out of school, so if people can gain access to quality Education at little or no cost, in few years than expected, the story will change for Africa in terms of Education.

Let me conclude by saying that TECHNOLOGY IN AFRICA EDUCATION is not as complicated as most of our perceived society is concern as adaptation is one of the greatest gift God have deposited in our genetic make up.

Amb. Gen. Godwin Umo

My experiences as an Educator, have made me to posit the following:

- A. Education policies must be originated from the highest possible level, but in sync with the stakeholders at all levels. Policies must unambiguously state the end state to be attained. However, a beautifully-packaged Education policy would require competent persons to drive the process. Meritocracy is the answer, period.
- B. The Curricula must relate with the environment at every level of education and the students encouraged to apply the knowledge. Such Curricula must be deliberately designed to encourage multidisciplinary skills acquisition. In Primary 4, during my days pupils were made to engage in vocational training. Consequently, every Thursday the class was conducted in a workshop established by government. The workshop offered training on carpentry, welding, metal work and so on. In the event that a primary school graduate was unable to further his or her education, he or she must have acquired a skill or two that can be leveraged.

There was also Domestic Science practical, during which both sexes engaged in food affairs. Today, I could boast of being a good chef.

- C. African education that is not cognizant of the evolving technologies, is doomed to disappointment. Arguments abound on the meager budgetary allocations to the education sector, which I acknowledge does not meet the UNDP/UNESCO benchmark, but we must insist that the little provided is appropriately used. Recent greed in the affairs of man has left no atom of empathy in the administration of education, from the primary to the tertiary levels. This, therefore calls for some reorientation of education administrators in Africa to recognise the harm they are doing to the future of Africa.
- D. Demographics are not in favour of laissez-faires attitude in education in Africa, especially, sub-Sahara Africa. Unbecoming percentage of school-aged children are not in school, adding to the battalion of unemployed and underemployed, Africa's Economic Growth is in trouble. You need educated, skilled and innovative people to drive productivity that can guarantee Economic Growth and stability; and that is why everything possible must be done to get African children enrolled for environment-sensitive and practical education.
- E. Let me end this epistle by advocating that a functional education can only be the one that is relevant to African progress; and the reviews must begin now.

Teee

Our Education system has no business in the hands of non Africans. We will then jettison consumerism and become producers and manufacturers.

Two points I well noted in the presentation. The emphasis on re drawing an education curriculum for Africa can never be over emphasised. What we have now are mostly graduates and students who were/ are inundated with theoretical knowledge as opposed to practical knowledge. A student of Mechanical engineering does not know what the engine of a Mercedes benz looks like or how to fix a bread making machine engine. We go to school to READ BOOKS! Sad.

There is urgent need for a refocus on Education in Africa with a view to rejig it to meet the challenges of today's Africa vis-a-vis current tech challenges and practical need for knowledge in every other sphere that has portential to develop how Africans think and work and live.

Dr. Daniel Kamanga

10-POINT "RESPONSE" TO EDUCATION ARTICLE BY PASTOR MUYIWA BAMGBOSE

1) I like the definition of education that Pastor Muyiwa uses, drawn from "educe" (related to the Greek notion of educere), to bring out or develop potential. Africa's "new education system"

should be correlated to the (latent) potential we wish to unlock or develop. What (potential) might this be?

- 2) Pastor Muyiwa posits that young Africans must be taught to think, contemplate and learn not only to be critical, but also to be virtuous with the spirit of nation building. Think, meditation and contemplation sounds like stuff religious people do. In Africa, the education system is in dance with religion; many schools were started by missionaries. How might we redefine this dance to align with the potential we are trying to unlock in #1?
- 3) Is the idea of learners "taking ownership" of their learning, setting targets and intellectual integrity even possible? COVID-19 has confirmed to us that we have little control of our lives. It seems that randomness plays a bigger role in our lives that what we so carefully plan. How can we incorporate such thinking in the design/redesign of education?
- 4) The inter-connectedness of life has also been well established by the COVID-19 pandemic. Pastor Muyiwa suggest that education should be more collaborative and supportive; how do we REALLY connect this new way of thinking the new education frameworks to culture, context and community?
- 5) The strong culture of accountability that Pastor Muyiwa calls for is, in my view, is nothing other than teaching our children that "your word is your bond." How do we incorporate this? I ask, not because it's necessarily difficult to design it, but because we need designers who are, themselves, people of integrity. The current education system makes promises it can never keep. It's out-of-integrity. Can people who are out-of-integrity create an education system that is inintegrity? Just asking.
- Pastor Muyiwa shares that Japan uses a combination of a hard work ethic and technology to make their educational system what it is. No other country deploys technology in education to the extent that Japan does, he says. He also says that Singapore has one of the best primary education systems in the world and they built it from scratch. In relation to question #1, what do we want Africa's education to achieve? We need to resolve this first, before we begin building something that is obsolete by the time the users start using it.
- With regard to online education, I was fascinated, in the early days, to see Pastors preaching to empty sanctuaries. Really? How foolish can this be. Fortunately, many of them have discovered that it's easier to move the pulpit (literary) to your sitting room, that to speak to an empty room. This parable raises the question: How do we adopt the emerging technologies to achieve an Africaspecific agenda?

- 8) I agree with Pastor Muyiwa that technology should be the main driver for the Future of Education in Africa. It's true that by deploying learning programmes through satellite and terrestrial TV stations, radio stations and the internet, we can reach, probably most of Africa's remotest areas. Question: Given that technology enables us to have huge savings, could we make education including university education free? The future pay offs may be worth it.
- 9) I agree that the future of education should be directed towards skills for the future. What am really not sure is what those skills should be, at least for Africa. I know Pastor Muyiwa has listed some of these skills. Are these skills really correlated to, in dance, with the #1 potential we wish to unlock?
- 10) Finally, I read with some amusement that majority of teachers in Africa are accidental teachers who got into the profession for lack of other job opportunities. This is the same for policemen and those in the military. Is it any wonder that, whenever their "services" are required, the police and the military unleash mayhem to the citizens? As for teachers, they may not unleash mayhem, but the "intellectual genocide" upon our children is evident for all to see. Pray, help me, how do we reverse this?

Here is a bonus for those who have reached this far. I don't know who said this: "You miss all the shots you don't take." All of us - for we are OAI - must know that fear and procastination are too costly! Let's take a shot!

Dare Lawal

My proposed kind of education; EDUCATION that helps each child to develop PRINCIPLES and PRECEPTS that shapes CURIOUSITY is its totality and builds CONFIDENCE and FREEDOM to ASPIRE and confront challenges and obstacles to becoming the best each child can BE.

Abass Taiwo

From the presentation the time is now and the tomorrow is today. A collaborative inua is what is needed to educationally develop Africa. I have have course to attend and be in training with South Korean, Japan and the South American good enough my Ghanaian counterparts where also there at the General Electric in 2015 in US.

I understand that the Asia's I mean the Japanese and Koreans were on a scholarship from their government to study all the modules design for the whole program which will last for six months I was surprise that the state can do that from all perspectives it is a way to understudy the technological and development stride of the West in comparison to there's I believe.

I believe that Prof. as captured almost if not all we needs to know about the development of Education in Africa and the attributes therein to cultivate. We must first off accept what is Africa study it understood it and in addition acquire the technological drive by exchange study with a focus on using African.

Much have been said on the presentation and most are fact findings and ideas. Let's all put ourselves in leadership position and believe we are the change required to bring to Africa its lost Bermuda.

We should stop the blame game and start Creating, Evaluating, Analyzing, Understanding, Applying and above all Remembering and recognizing that we Africans must come together to reengineer the wheel of the fourth revelation as the future is Technology and the vehicle is driven by Technology.

Ajenifuja K. Ahmed

The current educational deficit in Africa is part of the deliberate tactics of the colonial masters to continuing enslaving Africans indirectly. Except we alternate this model, Africa will remain in this trap.

According to Desmond Tutu " the white man gave us religion, ask us to close our eyes then stole our land before we could open our eyes".

Africa needs to reevaluate the curriculum of the system and form of education. But, let me first define my own understanding of education as teaching of uncommon knowledge in order to unlock problems. In essence, for an effects educational model, it must be far from just teaching speaking & writing languages which can only result into carrying files and searching for jobs.

Even, Islam teaches that "we should aspire for quality education even if it is as far as China".

Therefore, we need a result driven educational model right from the preparatory school. Practical I learning should be encouraged.

The government and stakeholders in private educational sector should lay more emphasis on scientific career. This will lead us to to the desire development in areas like medicals, engineering, computer technology, food processing, manufacturing etc.

In addition, these are some determinants of successful development in Africa;

- 1. Location
- 2. Education
- 3. Information
- 4. Association.

Being in this association has given me a lifetime privilege to some information that shall reshape the education of my generation.

Furthermore, we may need to design a national pledge to be recited in all Africa schools. This is to get the mindset of the children on the right path. It is called catching them young.

On how to market this product to become a success, we need to consider using embelembe radio being an international radio station.

Okoh Olayinka

Although many things have gone wrong in education and many of these have been attributed to the quality of teachers. Yes, I agree to an extent.

However, I believe the society, the parents and the students also have contributed immensely to the rot in the sector. This might be a topic for another day. There is therefore a need for society, in particular, to change how the educational sector is handled.

I really love the emphasis placed on the Cambridge Learner's Attributes. I doubt if there is anything of such that is practically operational in Africa. Let us even leave out such well-articulated attributes; many students do not know the mottos of their institutions. Those that know, do not align with it/them, and the institutions are not even consciously or subconsciously instilling these mottos (which most times are like core values and attributes) into the students.

I think we can start from there and move towards having unified African Desirable Attributes for African Learners. I think it will be fantastic for OAI to draft such desirable African Learners Attributes, sell it to African leaders and then to the upcoming generations using various media; such that each African has the attributes in him/her and demonstrate them subconsciously.

On turning Teacher Education to Post-Graduate. It is a good one as the product of such teachers will be highly competitive anywhere. It is just like some Ivy primary schools where M.Sc. holders teach. Such teachers are even sponsored on international conferences, workshops and seminars for up to date training. Definitely the products of such will be exceptional in most cases. But truth be told sir (taking Nigeria as a case study), most NCE holders; who are the foundation of formal education, struggled to sponsor themselves to that level, not because that is what they desired, but what they could afford, and that not easily. Some are limited by lack of funds, while for some it is their educational ability. Setting the bar higher for primary educators might make primary school teachers a dream insurmountable for such people, especially in this era of gross unemployment and high cost of education (public institutions inclusive).

I would just suggest that the minimum qualification(s) for NCE should be reviewed upward and should include Credit passes in Mathematics and English Language.

However, I would advocate better for the strategy adopted in Singapore. So, I will suggest we consider a unique training, for our prospective primary school teachers, which will empower them to train our children in critical thinking, creativity, innovations, societal problems identification and problem solving. That will mean a complete departure from the present curricula. If these skills can be acquired from primary school (both in informal and formal ways), every other knowledge acquired by the student subsequently (informally or formally to University level) will be channeled subconsciously by the students into solving societal problems and making the society better.

Conclusively, I completely agree that our education should prepare our students for the future. It will therefore be great if in each African country; Leaders, Foundations, NGOs, Philanthropists, etc., can start offering about five (5) scholarship opportunities per annum in each of the identified areas critical for the future (AI, IoT, Biotechnology, Data Mining, etc). And the T&C must include utilizing the knowledge gained in Africa for a specified period.

Taiwo Fatai Raji

In addition to the writer's points, Africa continent faces these challenges; lecturers or teachers weaknesses, government failures, weak practical background, environment, sentiments, trusts/patriotism, crisis or instabilities, morality e.t.c., we can see an almost endless list of challenges.

My personal view is to relate most of these challenges as human factors. If that is agreed with me, then it requires the human factor concept as the pivotal for all other factors to resolve the challenging issues.

The education for knowing(academics), education for doing(technical) and education for living together are integrated and every personnel must work together notwithstanding the hierarchy,tribe,colour or whatever, the company CEO can't not instruct a loader wrongly, the later can decline while the former will not feel bad due to the understanding of human factors concept (courtesy human factors concurrent trainings),

This can also work like reorientation. It will assist in both leadership and other human endeavours moving our continent forward. Most of the underlying challenges will be taken care of. Human factors consists the following;

- *effective Communications.
- *Stress management.
- *Complacency.
- *Teamwork.
- *Pressure reduction/management.
- *Awareness.
- *Adequate knowledge.

- *Resources.(adequate funding/ making use of available resources judiciously).
- *Assertiveness.
- *Norms.

If we can put these in place where human factors are taking a larger portion, then we will get there gradually. I believe once again that is not only about leadership, in as much as we urgently need good leadership, we are as well in need of the real followeship that are willing to cooperate in working towards the accomplishment of defined goals while demonstrating high degree of interactive teamwork.

Bar. Christian Wogu

I feel obliged to lend my perspectives to the pool of discussions as following:

Education Creates *Unemployment in Africa*

Bamgbose was very succinct in his Paper, when he asserted, "Whether we like it or not, education is the bedrock of life." Our findings, however, is that this is not always the case. It is common knowledge that yearly our institutions of higher learning churn out innumerable graduates, who enthusiastically look forward to securing white-collar jobs that are hardly, if ever, forthcoming.

Shechinah Business School (SBS) is driven by Solving Unemployment - Creating the Employers. SBS believes that the singular feat to be achieved to move Africa forward is optimum employment. SBS holds that many African economies would resolve themselves if people who could work were engaged or got themselves engaged in business ownership and out of the job markets. This, in our view, has to be private-sector driven with education as the special purpose vehicle.

Meanwhile, year by year, grievous unemployment stares armies of graduates in the face. This is simply because all through their stay in their different institutions, they were never equipped with entrepreneurship skills to be leveraged, after graduation, in order to establish themselves independently of white collar job or to become employers.

How may students be empowered to escape this ravaging trend plaguing our society presently prior to getting through with their education? What indispensable skills will they acquire as effective survival tools? How may they appropriately apply these skills for financial empowerment as an integral part of their education? These are the additional issues that the future of education in Africa may have to address and to resolve.

Inadequacy of Received Education

The question abounding in some of the reviews shared, relate to changing the type of education that we have. That may be fine. Until that is done, my concern is whether we, the people of Africa, have done our best with education, as it is? I do not think that we have. Most of the colonized nations, blazing into first world economies, received similar education like we received in Africa.

They have used the education, as received, as stepping stones into different levels of advancement. Dubai came up with _What Works_ in their educational revolution. They believed that if you got a set of baboons and taught them, "A' is for apple," "B' is for ball," "C' is for cat," then it would be a matter of time, those baboons would give same back to you. Hence, within the context of same education, they began a dedicated search of _what works_ . Solutions derived are seen in the per capita income attained by that emirate over a relatively short period of time.

Practical Education

When we were in secondary school, we farmed beds and ridges for practical Agriculture. We planted cassava, corn and other crops. Marks were awarded. We were happy to pass. Looking back today, with acquired transactional intelligence, I ask myself, was there a business angle to our Agric practical, which we, the students missed out on? Who harvested the crops we farmed? That is an aside. The main point is what happened to the continuity of such practices in schools today? Imagine the positive impact on our respective economies if, we had every student in Africa farming five beds or ridges, yearly, with a variety of crops, as a curriculum requirement for passing out! This is education.

A client of mine, many years ago, had read electronics from the University of Nigeria. After graduation and the compulsory national service, he paid and served apprenticeship to a radio repairer. He did that diligently until he got "freedom." He is currently working and doing business in the UK and has numerous real estates in Nigeria to show. He admitted that the practical boosted his value delivery to multinationals where his services were in use. Besides, a lawyer, in our firm, attested during the interview, of learning to repair mobile phones after graduation. That information and her capacity to create graphics and designs got her the job.

Apprenticeship

This brings into focus the apprenticeship type of education. This is that type of education where one or number of persons submitted to a master who trained them in a particular line of business for an agreed number of years. After which the apprentice is freed and settled to begin to transact and to train others. This type of education is not new in Africa nor other climes. In any case, it drives micro-enterprises. Micro-enterprise is the bedrock of any functional economy. Micro-enterprises grow into big businesses with chains across cities, nations and continents. They eventually become corporations and multinationals. They begin to employ in their ones, tens, hundreds and thousands. Our finding is that those who did not go to school or were not educated formally and who are the owners of these micro enterprises ultimately become the employers of those that graduated from the ivory towers. That is not all. They become the landlords to those who went to school. They provide the malls for those that went to school to shop in, and so on. In real terms, the lives of those that got educated, revolves to some appreciable extent, around those that did not go to school for survival.

For starters, what may be missing, is the practical expression of what is learnt in the school. The entertainment industry, in general, and Nollywood, in particular, is consistently growing into a multi-billion-dollar industry.

Many of the main players from actors to producers, to executive producers, to directors, to make-up artistes and others were not graduates. Many were not produced by regular educational institutions. On the other hand, they are the subjects for studies in regular educational institutions today.

Funding

The excuse of lack of funding, has become a recurrent decimal, for non-performance. My view is that educational institutions, by their very nature, should be able to be self-funding. They have brands. The have human and intellectual resources. They have land. They collect fees. There are other ways they can generate funds. They can reverse educational tourism. Madagascar was said to have just discovered a cure for covid-19 and is poised for massive exports of the drug with attendant foreign exchange earnings. Our position is that no matter the amount expended in funding nothing, that fund would eventually evaporate. On the other hand, where there is something, that thing, with time, would generate funding for itself by giving value.

Summary

Summarily, Muyiwa Bamgbose has settled, with his Paper, what education is not and what it is. In addition, from the foregoing, I propose as following:

- 1. The persons who have transactional intelligence but are lacking in formal education should have access to formal education.
- 2. Those who are lacking in micro-enterprise mindset; but are educated formally, should acquire transactional intelligence.
- 3. Let us put education to use, as the base to solve unemployment for Africa, which, by extension shall deal decisively with the dilemma of poverty and hunger.
- 4. I urge OAI to add structured and sustainable apprenticeship and mentorship as part of her strategic educational objectives.
- 5. I submit, in addition, that reality shows like Shechinah Business School's _The Employer_; Donald Trump's _The Apprentice_; BAM Nigeria's _Eagle's Nest_ could be used to bolster whatever education that there is or that is lacking.
- 6. Besides, OAI can organise spelling bees, mathematics competition, science competition and technological competition with tours to further deepen qualitative and practical education.

- 7. OAI should push for prizes and awards to be instituted by African governments, institutions, corporations, non-governmental organisations, religious organisations and individuals for innovative breakthroughs in Technology, Engineering, Agriculture, Literature, Artificial Intelligence, Internet of Things, Data mining, Nanotechnology, Renewable Energy, Self-driving vehicles, Quantum computing, Biotechnology, etc.
- 8. Such innovative breakthroughs shall subsequently be patented, mass produced and marketed globally.

Conclusion

In conclusion, I see the author's reflection on the Best Education Systems in The World by 2016 Ranking, where Africa belongs among the nations that populate the lower half index, as being worrisome. Nevertheless, I am assuaged by the glimpse of excitement captured in the quote from Tewogbade Olalekan Oke, "Education must be the driver of social change in Africa' by which young Africans must be taught to think, contemplate and learn not only to be critical, but also to be virtuous with the spirit of nation building." Hence, I can confidently assert that the future of education in Africa lies in our hands.

My perspective to the future of education in Africa is as laid out herein. The race, by Africa, to the Fourth Industrial Revolution can, accordingly, be triggered!

Allwell Okpi

My little contribution focuses on the relationship between education and the created future (the vision of the Africa we want).

In my view, Africa needs an outcome-based education. Our education system should be designed to produce well-defined outcomes in terms of skills development (4th Industrial revolution relevant skills), self/environmental awareness, ability to communicate, critical thinking, national development, etc.

Whatever future we create for Africa, it must be anchored on Africans solving the problems of Africa and building that future. But Africans need to be certain kinds of people and think in a certain kind of way to achieve this.

So apart from moving from 'Remember' & 'Understand' to 'Apply', 'Analyse', 'Evaluate' and 'create', mindset shifts must be built into our educational system. This reminds of what Rwandan President Paul Kagame said about how Kigali became about the cleanest city in Africa.

I was one of the young people that had a chat with Kagame when he visited Lagos in 2012 for an event. When I got an opportunity to speak, I asked him what exactly he did to get Rwandans to keep their environment clean.

In response, he said he held several community town hall meetings over several months convincing the people that the default African way of life is that you take a broom and sweep your environment when you wake up in the morning. He said he also educated the people about the benefits of a clean environment. All that education was aimed at eliciting compliance with his government's policy on regular general sanitation programmes. And of course, the stick was also applied. The outcome was a cleaner environment.

What I see here is that the vision of leadership (a clean environment) was translated into education (about sweeping our environment being part of our African heritage and its benefits). The education produced some levels of willingness to compile with government policy established to create that future. And then in a matter of time, the result was clear.

I do not suggest that Kagame is altogether exemplary or that his methods are always correct, but I believe Africa's education system can be designed to produce results in a manner similar.

The paper pointed out some things that education is not, including that it is not going to school. Another point in Kagame's story is that education does not always happen in schools.

In defining access to education in Africa, it might serve us well to look beyond indices, such as the number of out-of-school children, school enrolment rate, attendance and completion rates, etc. In many cases, culture, societal norms, parents, peers, social media, churches and mosques have done more in shaping individuals than schools possibly do.

This calls for a holistic approach to overhauling Africa's education system. School and non-school education should be reviewed carefully.

Abiola Sanni

I have a strong view on a few issues on

education as a law teacher, but my opinion is, of course, that of a lay man, not being an expert on education.

The SDGs are no doubt the pathways considering the rot in which we have

found ourselves, but they must be seen as baseline if Africa wants to build a foundation for a robust and competitive education for future leaders.

A discussion of the future should consider the past and present to determine where we got it wrong and establish a strong basis for recommended future actions. While Africa should dare to be creative, it will be worthwhile to have an insight into the education system of leading African model and global model. I saw a video on Finland's educational system which I considered to be a Thriller. I will share it once I lay my hands upon it.

Speaking about Nigeria, education will have to be a priority again which is a question of leadership. I said, again, because it has been a priority

before especially by the civilian rule immediately following independence.

This will drive everything from policy, language of instruction, finance, curriculum, human capital, research and innovation etc.

Titiloye Oni

My comments and suggestions are as follows:

- 1. African believe so much in certificates. Most people think that the more your certifications the more; respect, chance to make it etc. Piling up certificates without corresponding value adding i.e. application is just a mere waste of time. Certificate is supposed to be a reflection of knowledge/skill added. Of what essence is knowledge acquired without applying? We need to reorientate ourselves.
- 2. Technical school is tailored to job creations. In the olden days when there were supplied jobs in Nigeria for example, technical school was functioning very well and well respected. Nowadays, no matter how competent you are technically, once you are not a degree holder, your hope is limited in the labour market as no one believes you ever went to school.
- 3. African education is tailored for students to memorize and pass exams not minding if they are unable to apply themselves. If not, I do not see any justification for not allowing students to use a suitable calculator for any exams that require such. Why are students not supplied with necessary formulas for exams that need it? At the workplace, no one is expected to memorize any formula because everything is preloaded in Microsoft excel.
- 4. I am of the opinion that, at this stage, it is critical to identify child talent at early stage and enrol such child in a school that will enhance the optimization of the inherent gift instead of allowing the child wasting away in a school that is not adding to him/her or that may make such child forget his/her calling. It implies creation of some special schools, in various categories, where the gifted children are assembled for learning, development and mentoring.

- 5. When I was an undergraduate, most of the things we were taught seemed abstract. Rather, they are well appreciated at the second degree level because I have had some practical experiences at the place of work. I suppose it would be of great advantage if students could be made to have a year of compulsory experience in-between before earning a degree Certificate.
- 6. For education to be for all, government at all levels should make it their key responsibility. In the past, there wasn't anything like private schools and all the public schools were up to standard turning out competent and capable graduates. The more the education is left in the hands of a very few capitalist as it is today (individual or religious body) the more some indigent children will continue to be cut off. Invariably, education for all will forever remain a dream.
- 7. Education in the 21st century is the ability to learn, unlearn and relearn. There is a need for a paradigm shift in Africa educational system. This is only possible with the readiness of everyone to let go of some myths and align today's curriculum in such a way that will be able to take care of the future. Presently, most of our curriculums are backward looking just like inner mirrors and side mirrors of any car. Truly speaking, this has to be urgent.
- 8. African multicultural heritage must as a matter of fact be made compulsory for every student irrespective of course of study before graduating.

We lost everything when we were made to believe that our cultures, beliefs and ways of doing things are all inferior to Western cultures, beliefs etc. Incorporating our cultural heritage in our curriculums will make African unlearn what we were made to believe, relearn what we have lost and ultimately enable us to value the riches in our cultures and ways of life.

Finally, I want to submit that no matter how hard we strive to get Africa educational system well, If we failed to inculcate in ourselves by way of education that African cultures, beliefs, ways of life etc. are fantastic and inferior to none, no matter what we do to our educational system, inferiority complex will eat everything for lunch.

Michael Adeleye

I will like to add few points to the discourse:

1. It has been said that no nation can rise above the quality of its education, and I dare say the quality of the teachers, since one of the major determinants of the quality of education is the quality of the teachers. At the heart of the teaching-learning processes are: the content/curriculum, facility/physical infrastructure & resources, the faculty and the pupils. Until we address the issue of teachers' professional training and motivations, Africa may find it difficult to catch up with the rest of the developed world. One of the main reasons Singapore was officially named the country with the smartest high-school kids in the world in 2015 was because its education system prioritizes teachers.

The country's academic success has helped it become one of the best performing economies in the world. And they achieved this feat by recruiting their teachers from among the best students coming out of their schools, training and motivating them. In Nigeria and some other African countries, the remuneration for teachers is not attractive, that's why most are "accidental" teachers as rightly observed by the presenter and other previous contributors. Those who took up teaching appointments as a last resort may not be very passionate and motivated to deliver optimally. The reform in our educational system in Africa must start from teacher recruitment and training to reposition our nations to adequately prepare our youths to confront the challenges of the 21st century.

- 2. The method of delivery needs to be modernised. Many teachers still encourage rote learning (memorization of facts), when the world has moved on from rote learning to encouraging creativity and right application of knowledge to solving problems. Sadly, I still see colleagues even in the Universities still dictating notes to students for more than half the lecture time. And some even encourage students to "give it back" to them word for word in examinations. One thing that's clear to them in Singapore is that the world economy no longer rewards people for what they memorised or even for what they know, rather the world economy rewards people for what they can do with what they know. Google knows everything. So Singapore places emphasis on the application and creative use of knowledge. Science, Technology, Engineering and Mathematics (STEM) teachers also need to increase hands-on practical activities and simulations in their lessons to demystify some of the seemingly abstract topics.
- 3. Funding: The future of education in Africa depends on funding, adequate funding by government and other stakeholders is required for provision of required infrastructure, laboratory equipment and apparatus, as well as research and development.

Faruk Chibuzo Akaolisa

Let me start by saying that Africa's growth will depend on educating the new generation of African children who will take up the mantle of leadership in the near future.

With Africa's population rising exponentially, which is expected to double by 2050 according to the United Nations, the need to reform Africa's educational sector cannot be overstated.

Women occupy about two-thirds of the world's illiterate population. The World Bank estimates that 63 million girls are out of school globally, about half of them in sub-Saharan Africa.

In many rural communities, there are little basic facilities for girls to attend school. The female, unlike the male, are sensitive in nature; therefore, in order for girls to be in school, there is a need to provide basic amenities, such as a clean toilet, bathroom, and continuous water supply.

The Global Partnership for Education estimates that investing in girls education can boost agricultural production in sub-Saharan Africa by 25 percent, and an increase of 1 percent of women with secondary education raises the annual economic growth rate of the individual by 0.3 percent.

Poverty is another factor that deprives children of education. Most parents struggle to feed their children, hence cannot afford the financial burden of sending their children to school. For this reason, many children have been deprived of the pride of school uniforms. They are thirsty for knowledge but are fed with shattered aspirations.

In the West, the worth of education is measured in gold, but in Africa certificates are priced higher than knowledge. And there are lots of untapped potential. The prosperity of our continent, Africa, lies in redefining the concept of our educational system. As Pastor Muyiwa said, *"Education is not going to school, it may involve going to school."*

"Education is not acquiring certificates, it is the highest problem in our society." I agree, this is the biggest problem in our society. I have also read great views on this platform which recommends redesigning the African curriculum to reflect African cultures and values. It is important to integrate the teachings of African civilization, cultures, languages and history as a critical approach to fostering a multicultural society and cultivating a spirit of nation-building in the minds of our young people. Africa has strong cultural values embedded in morality discipline and respect for elders. A high standard of character is very important in producing a conscious society.

Unfortunately, Westernization extincts these values at an unprecedented pace. The failure to build strong academic institutions leads to weak public and private institutions and a failed state. And we see this happening all over Africa. It is unfortunate that some African students studying in different African universities outside their home country engage in unwholesome acts such as prostitution, drug abuse, internet fraud and cultism while their parents sent huge amount of money back from home.

Corrupt practices in our universities such as sex-for-mark scandal, certificate forgery must be completely eliminated to ensure that lecturers and students abide by professional code of conduct and discipline.

MY THOUGHTS

- 1. We must work together to promote girls' education in all its forms. When we empower a woman, we build a community.
- 2. The rights for education need to be considered a Fundamental Human Rights. OAI must work with the government policymakers to ensure there are fair policies that provide affordable, accessible and quality education for all. Education must not belong *ONLY* to the wealthy families.

- 3. Strong political will is necessary to invest in educational infrastructure equipped with modern learning facilities
- 4. Improve teacher's training and allowances and make teaching a lucrative profession.
- 5. Set up more libraries, institutions for skill acquisition and vocational learning. Adult education centres and after-school-learning classes
- 6. Set up inter-school co-creation programmes in STEM and promote inter-school debate with attractive rewards and scholarships especially in primary and secondary schools to boost study morale among young people.
- 7. Combat cultism and drug abuse in secondary and tertiary institutions and reduce the negative influence of entertainment in school environments
- 8. Fight against malpractices, bribery and corruption in all our institutions of learning
- 9. Job opportunities for graduates should be on merit and not based on *who you know*
- 10. Design subject that promote research and practical study of science and technology in elementary schools not the usual *Introduction to Technology* which our schoolchildren were taught in primary schools.

Chuks Obioma

In your second to the last paragraph you hammered on "the teacher quality and quantity". One of the sustainable development targets in Africa on Education by 2030 is on *TEACHERS*. Teachers are the key to achieving all of the targets enumerated in your piece. It requires urgent attention with a more immediate deadline because the equity gap in education is exacerbated by the shortage and uneven distribution of professionationally trained teachers, especially in disadvantaged areas of the continent. As teachers are a fundamental condition for guaranteeing quality education, teachers and educators should be empowered, adequately recruited and remunerated, motivated, professionally qualified and supported within well resourced efficient and effectively governed systems in order to deliver.

Charles Ukeje

We produce things we do not need, and need things we do not produce. For us to resolve this contradiction, we need a new purpose-driven philosophy of education- not the type that has become so fixated with skills acquisition and entrepreneurship as if that is the proverbial magical wand to wish away all our problems!

Let me say upfront, just so I am not misunderstood, that I do not subscribe to the view that hands-on entrepreneurship or technical education is the way out of Africa's developmental knot. Actually, I believe that it should be a second eleven priority for us. Those who say it is the game changer, the only way out, are quick to draw examples, and China typically comes up as a model. I am sure the Chinese intelligentsia who know better what they did; the sleepless nights of thinking, would just be laughing at our collective ignorance thinking that China became the new storekeeper nation of the 21st century simply by channeling everything towards factories and heavy engineering. We are missing the fact that success would not have happened without the deeper and more robust intellectual root that produced the Chinese 'miracle'. It was exactly the same way it happened to the British for much of the industrial revolution until the first quarter of the 20th century (before power shifted across the Atlantic to the US and across Europe, to the USSR).

I understand that it is very easy to become 'lost' trying to resolve the chicken-and-egg dilemma as to which comes first between entrepreneurship/skills acquisition versus liberal education that places a premium on deep and critical thinking. I know this might not sound politically correct the way we are wired, but I would still say it: liberal education is the substructure that drives all the superstructures we see today, in terms of technological advancement, not the other way round!

With the benefit of hindsight, there is not a single society or civilization that experienced the take-off that W.W Rostow referred to in Stages of Growth that did so by willfully placing the proverbial cart before the house. The bedrock of all civilizations (and it is going to be the case with the fast-approaching 5th Revolution) is not set by 'zombifying' citizens to acquire skills but creating the right opportunity for them to pursue knowledge through deep and critical thinking; the type that helps to connect the dots, and proffer innovative solutions for society.

Now, please don't get me wrong: I am not by any chance suggesting that teaching our kids to use their hands or to become entrepreneurs is necessarily bad. My point is that it should come second, a far second at that, to the higher imperative to recreate educational systems that make them think deeper and act with their heads.

I am glad that my "learned brother", Professor Biola Sanni (and I am sure he would remind me that I am unlearned since I am not a lawyer!) shared the video of what the Finns did to rise- and remainto the enviable top of the global educational ladder. The underlying philosophy behind that success should not be lost: it was to build citizens with all-round knowledge and competences.

As the head teacher actually said to his American guests at the end of the video (it was precisely the same approach that made America great, but has since been abandoned). At the heart of the Finnish education model is the quintessential philosophy of liberal education.

Let's face it, the reason we seem to have become uncritical embracing the fad that our kids need to learn a trade, a skill, use their hands and not necessarily their heads, is that we have failed to create a system or environment in which they can thrive and do so to the fullest. What we are doing, in my view, is to try shifting the blame for our mortal and shameful failure to create adequate opportunities that our children can leverage now and in the future, on the educational system as if that sector is standing alone, far away from the penkelemes we have created.

To tackle the crises in the educational sector (and I acknowledge this in plural) we must solve the deeper and more systemic social, economic and political problems we face as a nation/continent. Incidentally to solve those myriad problems, we need to tackle the crises in the educational sector. In essence, the two are interlinked and woven intricately together. As a Siamese, to understand and address one would also unlock the other potentials of the other.

I am certain we all remember what happened in the 1990s, following the disastrous failure of neoliberal economic and political reform agendas in every single Africa country where SAP was implemented. Following that, the world bank and the imf told African countries that they do not need university or tertiary education; that all we need to do is set up technical and vocational training institutions. We should, as a collective, be worried that we are returning to the same tired prescriptions, by ourselves, without them prompting us. I think it was Sarah Bracking at King's College that used the phrase "governmentality" to describe a situation in which third world intelligentsia would think, act and make policies (indeed, generally mimic and reproduce) based on the ideas or ways that global neoliberal institutions would like them to, without any prompting. The worst form of power is not the one in which you wield the big stick to enforce compliance; it is the one you are fully aware others would think and act exactly the way you want them to, even without any directly telling them what to do.

I fear that the way we are pushing the overdue agenda to reform/revamp our educational system on the continent might just be one sad example of how not to proceed. Let us rethink the basis of what we should be doing, otherwise posterity may not be kind to us for squandering another opportunity to redeem our countries/continent. Even more, posterity would judge us harshly for not leaving a better world for our children to enjoy a better, peaceful and prosperous future.

Chinedu Nnamani

Education to me is our major problem as well as the solution to our problem. The colonialists handed down a type of education that only helped them accomplish their purpose and not principally to develop us nor the continent.

The emphasis should be a type of education that produces a complete human being, capable of thinking and providing solutions to the challenges in society and answer problems encountered in our everyday life.

For the future of education in Africa, we must focus on those areas that will create a holistic system that can fully restore the dignity of the human persons.

Principally among the reason for founding universities in West Africa according to Edward Wilmot Blyden is to expose and correct the fallacies upon which our foreign teachers have proceeded in their misapprehension and perhaps contempt of African character, university according to him will also destroy that deep tinge of servility and the spirit —conscious inferiority which are really more degrading and emasculating than the alleged intellectual sterility of Africans. Was he correct on that western perception? Yes, but have we changed the perception, I think, the answer is No.

The above has been the single narrative that we ought to have changed after almost 60 years of African political independence. What has gone wrong, our educational system, leadership, or our attitude? As mentioned above education has been our problem and will also provide solutions only if we change our direction and focus our energy on mass education which can only be achieved through educating women.

African women are known to have been very hard working right from the primordial time and are still the same today but have not been given the right education which can be passed on to generations.

Let us not forget that any society is judged by how educated their women are. The estimated 97.5 million out-of-school children in Africa are a direct outcome of their illiterate mothers, who do not understand or appreciate the importance of education and thus could not afford to send their children to schools even if it is free.

In her groundbreaking documentary, Ascent of woman, Amanda Foreman revealed the roles of women throughout history, this was only possible because those women received education as was available at their times. Education focused on women will benefit Africa more, as an empowered woman means an empowered society.

The emphasis has been basically on technical education and entrepreneurship, which by all means sounds right, but that alone will not produce the change we need in Africa. Education generally emphasizes three important areas, the cognitive, the affective, and psychomotor. So emphasizing one and negating the other will not engender the development we so much desire.

Our minds should be focused on the intellectual development of our youths, leadership training which has been our intrinsic problem, and then technical education plus entrepreneurship. These I think will not only engender the needed development but will place Africa in her pride of place as the cradle of modern civilization. May God help us as we work together through education to restore the dignity of man.

Ajiroghene Sunday

During my academic year, one thing was certain, which wasn't peculiar to me alone but to all who studied *technical* courses in the higher institutions, especially Nigeria. Most of the subjects on taught courses were obsolete! Today, *Africa* depends on Foreign technology but someday she would provide the same on a global scale.

However, relying on the current curriculum we run in our institutions on technical subjects to meet this dream is like hoping to fly a bicycle by a simple *peddling*.

Admittedly, the determined tech minded individuals who were impoverished with state of the art technical information during their academic training often go ahead to develop the right skill So that they can meet the current industrial trend. This they do by investing hard earned income to fund personal research and development, as well as online paid courses .

Permit me to quickly sight a few instances. I did Masters in Electronic and Telecommunication, Nigeria. Could you believe that as such advance level of study in Engineering, we were still taught *Sat 1* (*satellite one*), meanwhile *Sat 1* technology marked the beginning of satellite development, which had long been discontinued but this learning continues till date, crafted in the department's curriculum. Again, we were also taught assembly language (A-language), and it was one of the core courses, designed to be compulsory for all electronic student, meanwhile the real world is talking about *OOP* (Object Oriented programming languages) like *Python*, *Kotlin* *R-language* etc to highlight but a few for Artificial intelligence (AI), Machine Learning (ML), Computer vision computation, deep learning algorithm/study etc. A quick question for us is, _how can students with Assembly language measure up with the current trend of AI, ML, IoT, Big data etc?_

We have little or no interest in R & D both as institutions, individual countries in Africa and as a Continent at large. Granted, there are individual researchers but it's always on a small scale. As the paper had highlighted, What stops us going big like South Korea, Japan, Singapore, China etc.

It may surprise you to know that Singapore produces virtually all they need as a country with little or no importation, ranging from consumer electronics to sophisticated technology and agriculture. This is also true about Japan and South Korea. Here comes the mind boggling question, are these countries talked about more Innovative, intelligent, and creative than *Africa*?

The answer is $*_NO_*$.

The trade secret is simple, good investment on Research and development, while creating a favourable environment through policy, boom! they are excelling.

We have great professors in our institutions yet no *invention*. So great a natural resource but no *technical infrastructure to harvest them*.

To move forward

- ✓Our institutions need restructuring.
- ✓ curriculum should be geared toward up to date information/technology, not the how "_Lady Ada developed counting system_ " as introduction to computer courses in the curriculum.
- Learning should be geared toward what can you _develop_ and not how many A's you make. As a matter of fact, true intelligence is not in the *A's* but in *_creativity_*

Action Call

Let us tap into the potentials of innovators and creators while the flame is up. Later or sooner, if these flames aren't sustained they would migrate themselves to Europe, US and Asia countries for a greener pasture. _Little wonder Africa is losing her best hands to the west._

There are successful business magnates on this forum, Ambassadors, professors, Leaders of various walks of life, it's time we set up a Research based team and fund it. If we can not fund R&D directly, your amiable office and exposure can lead the trail to it.

Peter Kolawole Obasa

Today, we are better educated about education. Some of what we hitherto called education, have been revealed to be processes or even by-products. Astonishing.

The new holistic deal gives us a stratified society in which every stratum is given the wherewithal to fulfill its well defined obligations to the community. Are we scrapping what is existence to create a new edifice? I don't think so. Looks like restructuring what we have to create a broader and deeper foundation for the future which is already on us.

The way forward of course is technology in all its ramifications. It is the language of the great and mighty. Africa is expected to do a triple jump in this field if it aspires to play in the big league. Whether we adopt the Japanese model or the Chinese, we will be doing essentially the same thing

in that we capitalise on what is known and evolve a new and dynamic African model that commands attention. What would that look like?

Look at the past. The success story has revolved around innovation, breaking fresh grounds and creation of new devices. Microsoft has made itself relevant by a continuous process of updating or upgrading its products to higher planes.

Telepathy is the science of thought transfer, the devices of which have not been fully developed. Teleportation is another area worth investigating. Are these outlandish and as such gross waste of time and resources? It is assumed that these can be investigated when Africa can speak on equal footing with the first eleven team in all the existing fields.

But come to think of it, if teleportation is feasible, you can shorten the travel time between Earth and Mars. Consider the implications of that.

Medicine is another area where Africa can make a mark.

An Africa with the human and economic resources that we have seen, should be able, to emerge after its homework, with its machine firing from all chambers heralding its arrival on the playing field.

Dr. Ike Neliaku

- 2. I couldn't agree more with the scholarly work of the week, that education is a big deal and a critical issue. It forms the very foundation and essence of everything, which is why serious nations take education seriously.
- 3. When I was in secondary school, the motto of my school was 'Education for Responsibility'. The founders of the school, Comprehensive Secondary School Nawfia, a mission school built by the Anglican Church, seemed to have understood the weight of education in not just nurturing and raising a child for the future, but in building a better society and raising successful and sustainable nationhood.
- 4. Before the curtain draws on the subject on the floor, I wish to add to the outstanding comments already made, and videos duly circulated, on the subject by our compatriots.
 - 5. Today, as I look back, I ask myself, did the education I had at 'compi' as it was called, had any bearing on who I am today? My answer is yes. It may not be a perfect picture but it prepared me to some extent. I follow the trajectory further to ask what was the greatest singular obligor that made the most significant impact. It was my principal, Mr MIchael Emechebe. Who was my most outstanding teacher? 'Okpu 1' as he was fondly called. Why? He taught us biology in a most exciting and memorable way. Why? He loved his work,

enjoyed his teaching, liked the environment, felt valued by his students, enjoyed the respect of his colleagues and school authorities, and had a good heart.

6. I will like to support the position of the author, and my fellow compatriots with input along the following four dimensions:

i. Mindset:

I believe it still boils down to mindset. Mindset of the education planners and administrators in Africa, mindset of school administrators, mindset of the teachers, mindset of students, mindset of parents, and mindset of the society. The mindset we carry determines how we see and perceive things. Africa needs a rethink and a reset of what education means to us. It was important that the scholar succinctly defined for us what education is and what it is not. Such in-depth consideration would help us in deprogramming what we now have and reprogramming the right education suitable for Africa, covering the curriculum, recruitment, enrollment, etc.

ii. Value:

Everyman is assessed by the quantum of value he carries and brings to the table. Likewise, qualitative education is determined by the value it adds to students. This implies that when African education begins to impact the right values, the people and society at large begin to make an impact and speak well for Africa. This will ultimately make the rest of the world pay appropriate attention to Africa.

The questions at this point will be, what value does the current education system imposed on us have for Africa? What value did our indigenous education have before it was truncated and replaced? What value do we now seek from the right African education? Is it not time we move into the arena to not just design, develop, but deploy the African education, with the curriculum that speaks Africa, hears Africa, and resonates with Africa.

iii. Culture:

It is said that culture is a people's way of life. What is Africa's way of life - the good, the bad and the ugly? Can we reassess the positives of our cultures and integrate them into an Africa worldview used to redefine the education Africa wants. There are many examples where this has worked.

South Korea, Japan and Singapore are listed in the 2018 OECD index among the top 10 best educated countries on earth. I tried to identify factors that were responsible and found that while Japan that was second is driven by hard work and technology, Singapore that came third rebuilt its primary education from the scratch to make it reflect who they are. This implies that they integrated their peoples, their values and their culture in developing their education system to suit their needs. In other words, culture helped to advance their education. Compare this to the 2012 Index leader Finland whose educational culture and value were based on allowing the children to have 'enough' time to relax. Maybe they were over relaxed and in the process lost their number one

position to South Korea, and couldn't make it among the top ten. Maybe they also forgot that discipline is a key element in successful education.

iv. Dignity

In refining and redeveloping African education it will be necessary to place a reasonable measure of importance to matters of dignity. Dignity for the teachers especially. Teachers in our continent have not been accorded their dues as moulders of good fortune. They are hardly paid well and many times made of no repute by society at large.

Teaching should be brought to a level that it becomes an attractive profession to be pursued by choice not by socio-economic circumstance. I also discovered that this is part of what is responsible for the high global rating of education in the Asian countries earlier cited.

7. Further to recommendations already made by the author and other compatriots, I wish to add that the Convener should put a small team in place to work with our scholar of the week to develop an African Educational Blueprint for Africa. I feel that this has become a timely value OAI should provide, thus enabling us to go beyond report writing to taking concrete actions.

Ajani Abdulazeez Adio

In addendum to it, here are my submissions:

The day one is subjected to Education Slavery marks the day he loses his Value, it may be hard to forecast into the future if yesterdays was blurred, at a point I asked my myself _Who did this to Africans?_ The colonial masters! our forefathers! our fathers! or our generation! _who made us see our Fathers as fools, who made us hate ourselves, who gave us impression that white men are ever superior, who made all Africans to be partisan yet claiming to be neutral._

Back to the point, some of the key problem with our Education system are:

- *Inconsistent Policy on Education:* every tenure of governance tends to bring in selfish ideas just to make their folks make money.
- ✓*Porous Curriculum*: It's clear and sinker that our basis of learning can't take us anywhere in the fight for liberation, from elementary to tertiary institutions the syllabus is full of jargons, pathetically most graduates are just graduates of certificates not of practicals.
- ✓*Qualified Incompetent Teachers:* We were made to understand from childhood that _"Teacher are the builders of tomorrow"_ but most teacher of today happened to be the most dollard of our high schools, o'level best results are either for Universities or Polytechnics but 2 credit pass will be begged to go for NCE which in turn became a threat to the future of our education system.
- ✓*Competent Unqualified Teachers:* My Muyiwa had discussed this.

However, there is no ailment without vaccine, For the future of Education in Africa the following must be looked into:

- ® Save our Education system from politics.
- ® Increase the standard of requirement for NCE.
- ® Make teaching a lucrative Job so as to entice brilliant minds.

Ayobamidele

Indeed I share greatly in the concocted sentiment "education should be at the driver's seat in trajectories of Africa development" hence, technology should be the driving contrivance in achieving a laudable proportion of educational far-sight.

The Cambridge university's quest to their visionary of life long learning bid is a ploy which is worthy of emulation and that has certainly put them in good stead of their due discharge, hence it will be of reward to influence the ministry of education in setting a long span pace to fit our context as that enlisted by pastor Muyiwa

However, we shouldn't nurse a parochial feeling towards the high level of pet collaboration and cooperation instigated to tribalism in our educational sphere, our institution can't be of this nuances, a (west base) thesis supervisor who is a North descent favouring supervisee of same extraction in cost of merit, by so we are enmeshed in the acqua of selfishness and crosscurrent, for the community to be rebranded the agent of branding itself should not be left out, of course nothing is unachievable if action is been taken, in pursuing success it should be at all cost, this is the bedrock of major power centers today, their race first, all eye on second class citizens, can africa be devoid of lopsidedness, segregation, marginalization, self centeredness, amongst all, all these is achievable only if we put zero relevance to hemispheric condition, **black* *is black** whether from the East or south of Africa.

Oladele Medupin

critically I see a two edged sword depending on which side of the divide; Pro or Anti, For or Against, Action or Inaction please let me explain further, the status quo prophesies limitation of African potentials, frustration on all fronts because education is the bedrock of life.

Having said, *for Africa to Change, Her Education Must Change*. And the most effective way is to start from the foundation! I look up a description of what is obtainable in Nursery and Primary school teaching about the function(s) of the part of the body and it says "the Head is for carrying Load", so I quickly browsed to find out what do Americans say, to my surprise it was strange to their culture except for the poor, from a book; how the poor live in America.

The antecedents suggest that Africa does not have any excuses for where it is today following the freedom from Hamitic curse. Remember that at some point in history enlightenment came from Egypt for example the pyramids, solutions to complex problems, etc, hence access to light, knowledge and science was unhindered.

Having established that there is an urgent need for a change in Education.

The Way Forward for Africa

Taking a cue from Mandela saying Education is the Most powerful weapon with which you can change the World and Lynch theory, one of the strongest method to educate is the mind game, just as the Holy Bible said "As a man thinks in his heart, so is he" meaning whatever picture is painted on the mind has so much force to make it happen vis à vis heritage, values, environment. Instead of using a book that says head is for carrying load, why not begin to use a book that *showing Africa continent lands on the moon* Trust me, we can never fathom its weight of influence on the future of Education in Africa.

This reminds us of the legacy by JF Kennedy!

So let's begin to paint pictures of greatness, as teaching aids in our schools from the Nursery to Tertiary, who says Africa cannot have a man on the moon. In my research I discovered that putting a man or a team in the International space station requires a collective effort of G7 nations, so Africa can leverage on that by creating a platform for integration to achieve the same feat.

Education For All

Government should as a matter of urgency begin a free education, top in her agenda as it affects especially the vulnerable in the society. The western region of Nigeria attests to the competitive edge it enjoys in the today Nigeria.

Teacher: Quality & Quantity

"Accidental" teachers can be changed or transformed to "Intentional" teachers by engaging the Public/Private partnership to come up with programs, policies promoting the *indispensability* and the importance of education via the teachers.

Finally, should engage the government and its parastatal on improved remuneration that relates with the day's realities.

Skills For The Future

Here the skills of Africans in the Diaspora come to play, where an exchange program is put in place to give back to Africa entrenched on a continual basis.

Finally, the unexpected Covid-19 Pandemic has brought to the fore a new Normal to deal with challenges of social distancing. The future is here, hence for Africa not only to be relevant but to

stand out, the skills that our amiable Pastor listed are germane e.g. artificial intelligence, robotics, etc.

Igo Isaiah Ogbu

From my experience in school so far, I will like to make my contributions in the following areas;

1. Retaining of 1st class students as lecturers

For any student to be retain as a lecturer, proper examination, workshop and training should done to know if he or she can teach and equally have passion for teaching profession. I attend tutorials in school (student-to-student lessons) and I understand more what is being thought than a lecturer.

2. Abandonment of students research papers

Student research papers should be made attractive my reviewing and implement them

Industries should also be made align with students' projects by sponsoring them. So doing, it will encourage students to do a thorough and implementable research paper as their project

They should be allocation to education agencies to fund students research papers especially those considered relevant to national growth

An online porter should be made available to students to upload their research work for public view, implementation and funding. If possible, the research paper can be sold to the gain of the student who uploaded it.

3. Deplorable state of learning environment

Lecture rooms/halls if not construction of new ones, should be refurbish to enhance comfort and effective learning

Government should give franchise to institutions to run, generate funds and manage the school development affairs themselves. The yearly school fee paid by students I believe is even enough to improve our learning environments.

4. Lack of student-lecturers relationship

Workshop and training on human management should be organize for lecturers

5. Corruption within the academic spheres

Transparency should enforced in learning environment by checkmating the lecturers and students activities

Mini court in partnership with relevant judicial authorities should be set up in schools to punish and teach students of what is obtainable in outside world

Investigating journalism should be establish and championed in schools

Tobi Sanusi

All the targets from one (1) to seven (7) of the Sustainable Development Goals (SDGs) of United Nations Organization on Education are highly articulated and achievable but not realizable in Africa contexts generally and Nigeria specifically.

In my opinion, there is need to declare a state of emergency in the education sector as the structure and foundation are porous and nothing to write home about. Some of the shortcomings and difficulties include:

(i) Stakeholders such as education providers have seen education as a means of money making ventures rather than a learning arena where sectors are declaring remittance to the federation pulse rather than according to the merit it deserves.

Suggestion/solution.

the government at all tiers should take charge and over of the education from pre-primary to tertiary level. More so, provision of facilities and enabling learning environments should be taken with a high esteem.

- (ii) Parents (part of stakeholders) on the other hand have been seen to indulge in all forms of education malpractices as a short cut for their ward(s) to excel at any non negotiable cost. Comments/suggestion, delineation of the sectors into separate categories by the government such as: Best/Genius brains school, Intermediate/moderate level school and Technical and vocational schools, so as to dislodge the era of certification worshipping.
- (iii) Employment and engagement of right and professional tutors within and among the education sector in a way to forestall the idea of being the last result for the unemployed and education prostitutes who do not fit into the system.
- (iv) Inculcation and indoctrination of the three major languages (Yoruba, Hausa and Igbo) in the mode of teaching, if possible at all levels.

Ngozi Uzoigwe

I will only want to contribute the following:

It is providential that OAI came now, when our beloved Africa is still battling with making a major breakthrough in Education. Sadly we have seen some who have excelled sell off their patents, like Emeagwali who designed one of the fastest computers but had to sell off his patent I understand due to a lack of funding to continue.

Many of our youths take the easy way out, by going to "special" centres where exams are done by mercenaries for them and flaunt certificates they cannot defend. The society we live in now, may also be a contributing factor to this, where paper qualifications are sought after, and those who do not have it, get desperate because there is that will to survive in an environment which we could say is not particularly friendly.

I quite agree with Michael Adeleye addressing the issue of teacher's professional training and motivation; they need to be upgraded ever so often, as technology is advancing at a rate that waits for no one, and we cannot afford to be left behind - Africa has what it takes - PEOPLE, EDUCATED PEOPLE. We need to leave our comfort zone and make that difference.

True also is what Emeka Onyema commented on: "Students being managed by unqualified teachers". It's a vicious cycle.

We need to make that difference.

GREGORY OZEGBE

It is clear that the presenter Pastor (Dr.) Muyiwa Bamgbose is an educationalist and well versed in the theory and practice of education. Many of his remarks are technical and highly specialized and are more suitable for discussion and consideration by future education committees that OAI would establish. I am not qualified to comment on them.

However, there are other areas of a more general and practical nature concerning future policy and in terms of developing a position where I can make some observations. The following stems from style of taking specific quotes from the presenter and align my comment/s to it.

"The United Nations Organizations (UNESCO, UNICEF, UNCHR, UNIDO, ILO) have proposed a number of Sustainable Development Goals (SDGs, that are listed as Education targets to be achieved by the year 2030 on page 6 below. These SDG's should be on the to-do list of the OAI Education Committee."

The presenter quotes other speakers:

"Andy talked of an urgent need to develop "An African education system that aims to train, educate, reorient and enlighten Africans on their heritage, value system in line with our background".

Allwell Okpi talked of using the media to "inspire pan-Africanism and validity of our African identity" in our Primary and Secondary schools."

It would be a monumental task to define Africanism in a continent of 54 nations each with their particular mix of traditions, religions, languages, governance and economic systems. Couple that

with the different histories and colonial interference that created artificial boundaries across natural, geographic and longstanding arrangements for their own short-term benefit and the task becomes impossible.

The proposition by Tewogbade Olalekan Oke that "Education must be the driver of social change in Africa" by which young Africans must be taught to think, contemplate and learn not only to be critical, but also to be virtuous with the spirit of nation building" seems a more achievable proposition. Instead of focusing on an African education system the writer proposes a more universal approach.

Once young Africans are "taught to think, contemplate and learn not only to be critical, but also to be virtuous with the spirit of nation building" only then will they be able to define the positive attributes of who they and what their nations should be.

This is an outcome that OAI should strive for, encourage and nurture as this will define true Pan-Africanism and provide the unifying motive and energy for the 54 countries to form a cohesive bloc with shared and mutually respected values, systems of governance and economic integration and cooperation.

The various conflicts around Africa often involving unnecessary trade barriers and even warfare at a great cost and suffering of innocent people would then cease and African Unity would become a reality!!

"Unity and strength in diversity" should be more than just a slogan. Regardless of the many shortcomings of the United States of America, mainly because of its ruling hierarchy, we must not forget the countless technological, artistic and cultural contributions that its people have made to the world, many of which were freely shared. It is generally recognized that the diversity of its population was the spark that ignited such phenomenal creativity.

In summarizing, the presenter promotes a list of skills for the future:

"Finally, the Future of Education should be directed towards Skills for the Future!

We should not prepare the children for the present world but for the future!

The First Industrial Revolution was in the 1700s and can be symbolized by the Steam Engine.

The Second Industrial Revolution was in the 1800s and can be symbolized by Electricity.

The Third Industrial Revolution was in the 1900s and can be symbolized by Computing.

The Fourth Industrial Revolution is here! It is symbolized by connections! The evolving industries include:

- Artificial Intelligence
- Internet of Things
- Data mining
- Nanotechnology
- Renewable Energy
- Self-driving vehicles
- Quantum computing
- Biotechnology etc.

The future is technology and the vehicle is technology!"

There is no questioning that these technologies are important and essential for life now in the 21st century and in the future and must be owned by Africans and strongly centred in Africa.

But we must not forget that they are merely sophisticated tools intended to facilitate and improve the daily tasks of living and production and not an end in themselves.

There seems to be a general perception that if it can't fit in a pocket and be operated by two thumbs then it isn't technology.

To underline my point I would ask how the technologists and the end users would survive in a world without:

Agricultural, food production, processing and distribution industries

A health care sector

A manufacturing sector

An engineering and construction sector

A transportation sector

Media and communication sectors

And many others not mentioned by the presenter, all of which are products of the previous industrial revolutions. The new Africa must expand, modernize, manage and own all of these sectors as well as the latest technology.

A cohesive and unified Africa can only be strong and successful if it adopts a balanced approach to education and covers the entire spectrum of human activities. It is only this way that the continent can throw off the yoke of dependence on foreign expertise and be its own master.

In summary the presenter makes numerous informed and pertinent points that concern the future of Education in Africa and demonstrate the need for highly qualified educationalists and professionals to be involved in setting and implementing education policy rather than politicians. To demonstrate the folly of the latter, South Africa, which has the highest per capita expenditure on education on the African continent, also has the lowest education standards and outcomes.

"Friends and co-travelers on this reconnaissance journey, I will try to take us through some thoughts on "The Future of Education in Africa". Whether we like it or not, education is the bedrock of life: Today is a product of the yesterday's education and tomorrow will be a product of today's education. In other words, Africa is where it is because of its education, and for Africa to change, education must change."

Also perhaps because of the lack of education as far as the majority of its people are concerned.

"Before I delve further, permit me to highlight some attitudinal changes that are essential for us as a people to be the Change Agents. In the book of Genesis, Noah and his family had just survived the flood that wiped out the whole world, and he decided to relax with wine. He got drunk and stripped himself naked.

Genesis 9:20-25

20. And Noah began to be a farmer, and he planted a vineyard. 21. And he drank of the wine and was drunk, and became uncovered in his tent. 22. And Ham, the father of Canan, saw the nakedness of his father, and told his two brothers outside. 23. But Shem and Japheth took a garment, laid it on both shoulders, and went backward and covered the nakedness of their father. Their faces were turned away, and they did not see their father's nakedness.

24. So Noah awoke from his wine, and knew what his younger son had done to him. 25. Then he said:

"Cursed be Canan; A servant of servants he shall be to his brethren."

There are over 1.34 billion people living in the 54 countries on the African continent of whom about 550 million are Muslims. While it is admirable that the presenter quotes a pertinent narrative from the Bible, is it sensitive given the foregoing statistic? On the other hand how would staunch Christians feel if the presenter quoted from the Quran to make such an important point?

Probably the majority on either side wouldn't mind but in this time of global strife is it worth the risk?

So another suggestion for our list of zeros could be Zero Religion or Zero Sectarianism.

"Many Christians who were involved in the Slave Trade referred to this curse They were not Christians. They were hypocrites, as true Christians would never have done such a thing! or as a curse on the black race, the Hamitic race. Of course, they were wrong, since we have been redeemed from every curse by the death of Christ, but every now and then, we see a repetition of the attitude of Ham in the black race evidenced in the blame game, and refusal to own problems. The difference between Ham and his brothers was that while he was blaming and shaming their father for his irresponsible behavior, Shem and Japheth did something about it. It is good to have an attitude of not blaming others if we are to get Africa out of the rot.

"About a year ago, I visited my children in the UK and their son was playing football for a boys' club, so I went with them. As the match progressed, there was an easy goal missed by a striker and everyone chorused "unlucky". Not too long after, there was a mild back pass to the goal keeper and he missed it and it went into the net. Again, they shouted "unlucky"! I had to ask my son, because I expected everyone to blame the keeper and he told me that the kids are taught not to blame each other! Wow! It struck me like a bolt! In Africa, we would have insulted the players for making "us to lose the match" and done nothing about it beyond blaming the defaulter or coach."

This is a nice story and while relevant to the ethos of the particular school it is no more representative of UK or European culture than of African culture. Perhaps the school's philosophy and ideology should be examined in more detail to see what other lessons can be learned from it.

The redemption of Africa will not happen from a blame game! Let us own the problem, if necessary, blame ourselves and get up to do something about it.

I will therefore like to step back to review a major part of our assertions during the first presentation, where we saw leadership as our problem. I wish to state that Leadership is not the only thing; Followership is also very important. Followership is important, not just because leadership progresses from followership but because followership has a lot to contribute to solutions to problems facing the system and education is what equips them all!

I will like to take some excerpts from a recent article in Aumedia.info titled "What Nigeria needs to be rich and industrialized like USA and China".

"Many believe that our continued underdevelopment is a leadership issue, while others say when the followership is ready, a true leader will emerge. In other words, our leadership is a reflection of our wider society, the quality of followers and their collective intelligence to understand our real collective aspirations.

The greatest impediment to our economic and political freedom and development has been externally inspired moralist propaganda. Even when we have an exceptional leader, his followers

are easily disoriented with corruption propaganda since they are not educated to know their cultural identity and aspirations in concrete terms."

The problems of Leadership and Followership can be equally blamed for Africa's problems.

On Leadership:

Of the 54 African countries how many can be said to have strong, progressive and ethical leadership that is concerned with the well-being of their people and their long term development?

How many leaders are preoccupied with their own wellbeing and self-interest and are effectively selling their country and its resources to the highest bidder without any concern for the long-term benefits or environmental damage to their country and health of its people?

On Followership:

It is unlikely that a well-educated and informed Followership would elect such leaders and allow them to degrade and loot their countries. Yet this seems to be a recurring reality in many countries where Followers idolize and keep on electing leaders who are known to be corrupt to the extent of even depriving their children of sustenance for their own insatiable greed.

Could this be one reason why some leaders and their governments do not encourage high standards of public education and send their own children to expensive private local or overseas schools?

"It's not enough for the leader to know and try to do what it is right. He must ensure an epistemic democracy, the wisdom of the multitude, or the people will be turned against him. The politicians might not be able to convey the messages without raising undue suspicions of playing politics. Instead, the cultural elite must create think-tanks to influence public discourse, opinions and policy. The masses must know the road map from the origin to destination and if sufficiently agitated will know which leader to back and rise in defence of their collective aspirations.....

.....otherwise the best laid logical development plans will be sabotaged by the ignorant."

We can easily call the ignorant, the uneducated, who should be the focus of education in Africa

No wonder Nelson Mandela said, "Education is the most powerful weapon with which you can change the world!"

In the earlier presentation, we called for redesigning our own educational content, rejecting some of the existing curricula, bringing in education for character, strength and development. A new educational policy that is pro-Africa, designed to address our needs.

So, what is Education? In defining Education, we should start from what it is not!

Education is not going to school! It might involve going to school

Education is not reading and writing! That is literacy

Education is not acquiring certificates! This is a problem of our society!

Education is not passing examinations! If it were, Africa would not be like this!

Education is not teaching or instruction! They are parts of the process.

So, what is education?

The word education comes from "educe" (related to the Greek notion Latin word of educere), to bring out or develop potential.

My closing is for OAI to see education in Africa in the body of the following statement..... Education is derived from two Latin words: "educare" which means to train or mould and "educere" which means to lead out (Bass & Good, 2004). Bass (1997) supported that it was a balance between educare and educere, the passing on of knowledge and preparing students for the changes that they will face in the future that best represents the term "education", "The act or process of imparting or acquiring general knowledge, developing the powers of reasoning and judgement, and generally of preparing oneself or others intellectually for mature life"

DR. MUYIWA RESPONSE TO MEMBERS COMMENTS

Appropriate technology should be based on the right values and culture. This is why imported

technology will continue to be imported and not acquired

We need to encourage every parent to do the major work of establishing the foundation of culture

while the educational institutions build on it

I am sure many of us are aware of the popular "Education in Mother Tongue: The Ife Primary

Education Research Project (1970-1978) by late Prof Babs Fafunwa which proved the value of the use of Mother Tongue, but which cannot be operated because of the attitude of parents who would

love to see their children recite English poems that they do not understand!

Yes, the Educational institutions should be reminded of the importance of values and culture, but

the homes should set the pace or at least encourage the schools

Response to: Dr. Ahmed Mohammad

By inference, limitations are passed to the learners by incompetent teachers. "Nemo dat quod non habet" -(you can't give what you don't have), which is worsened by teachers trying to be the source

of knowledge instead of facilitating.

Students can find out more than the teacher knows if the teacher knows how to guide them

Response to: Goke Agbakosi

Research and academics are always competing for the time of the lecturers, and good universities

keep endeavouring to maintain the right balance. The kind of research is however an area where the African Academic is missing it. The issues around Relevance and Quality come to play here: The

distance between the "gown" and the "town".

Our researches by the dons in gowns are not directed towards solving the problems in the town with

the result that we keep looking abroad for expensive and inappropriate solutions.

Response to: Edward Kings

The Indian States deliberately prepare their kids for IT in places like Bangalore, etc.

They go to school from morning to evening and even go to school on Saturday!

It is a deliberate strategy.

Incidentally, despite our neglect, the African IT person is a top flyer! Imagine if we gave ourselves the right support!

Response to: Mowo Oduru

We conducted a survey some time ago to trace the more than one million students who fail Senior Secondary School Certificate Examination in Nigeria! Guess we found most of them? Teaching in Primary Schools!

On the Teaching Service Boards, they are there, whether you know it or not, and they do visit schools, not to ensure quality but to extract their own "palliative"!

Response to: Emeka Onyema

After my last disillusionment with friends that we supported into positions, I concluded that I will stop looking at anyone for the answer. I will do what I can within the sphere of my influence.

That should be our personal resolution to change Africa.

Response to: Chux Mogbolu

Our problem is that God pampered us with too much goodness to the extent that we expect Him to do everything for us!

A joke about creation story says the Angels were envious of Africa! No earthquake, no typhoon, no volcano, good fertile land, minerals, etc.

Response to: Isa Nuhu

We should stop blaming the colonialists. We have fumbled and are fumbling big time

One thing I did not delve into is the societal discouragement of Education! How do we counter the obvious!

Parents would rather buy "Home video" than books.

Corporate sponsors would rather promote promiscuity than virtue because it attracts audience!

These are deep values being eroded! To some of the coming generations, we look like "foolish old

school"!

Any ideas of what we can do?

Response to: Adamua

Education is the bedrock. But, we can also leapfrog!

Coding is being done in Primary School now in developed countries. Why not in Africa?

There are IT areas that need people. But who knows and who cares.

Have we ever wondered how the Yahoo boys become computer literate?

There are incentives for them for each prey they get.

Response to: James Olu Gbolagoke

The average African is a potential capitalist! And that is a major problem.

But I dare say that Education is the best cure that we have.

Thank God for technology, we can achieve the unexpected.

Response to:

I will say, we are all guilty and can do something about the situation, no matter how little.

I must confess that I don't know what we can do beyond doing the little we can do.

Response to: Big D. Next

Our universities award contracts for things that they should undergo research to study, and patent the solution.

Let us do what we can.

Response to: Chief Tunde

The problem of Almajiri education is not as easy as it looks. Ex President Jonathan's Government spent a lot of money on school buildings, even salaries for Imams, all to to no avail.

Another assumption that is wrong is that the SSCE results for private schools is much better than public schools is not absolutely correct. Surprising but true.

Response to: Festus Osibajo

Sound Education is Sound Education. It is not a native of anywhere but based on fundamentals.

It is unfortunate that we are not following even our plans.

One of the strategies of China was to send thousands of students to study in the USA.

We can learn from anybody, anywhere, anytime, but we should take what we need and apply it accordingly.

Response to: Teee

I had to pause in "responding to the responses" when I got to this treatise from Daniel (from S/A and Zambia).

- 1) I like the definition of education that Pastor Muyiwa uses, drawn from "educe" (related to the Greek notion of educere), to bring out or develop potential. Africa's "new education system" should be correlated to the (latent) potential we wish to unlock or develop. What (potential) might this be?
- The potential is limitless actually. We have seen the lowliest people become great by the unearthing what is in them. Many great Achievers in the diaspora would have been failures if they had been in Africa! It is indeed a tragedy.
- 2) Pastor Muyiwa posits that young Africans must be taught to think, contemplate and learn not only to be critical, but also to be virtuous with the spirit of nation building. Think, meditation and contemplation sounds like stuff religious people do. In Africa, the education system is in dance with religion; many schools were started by missionaries. How might we redefine this dance to align with the potential we are trying to unlock in #1?
- I believe that man is spirit, mind and body. To get the full potential out needs connecting to someone beyond one. I have no doubt about the place of the supernatural. I have designed things I just imagined.

Listen to Halleluya Chorus and imagine how Handel could have composed it overnight!

Yes, there are complaints about the havocs done by the colonialists but things could also have been worse.

I was shocked in Ethiopia to hear their Prime Minister complain about their poor roads "because they were not colonised"! Makes you wonder!

3) Is the idea of learners "taking ownership" of their learning, setting targets and intellectual integrity even possible? COVID-19 has confirmed to us that we have little control of our lives. It

seems that randomness plays a bigger role in our lives that what we so carefully plan. How can we incorporate such thinking in the design/redesign of education?

- There is the concept of making students" independent learners"! We actually practice that in our school. It takes giving a foundation and reorientating the learners, a process usually disturbed by "over-caring parents". Education requires efforts from the learner to bring out the potentials
- 4) The inter-connectedness of life has also been well established by the COVID-19 pandemic. Pastor Muyiwa suggest that education should be more collaborative and supportive; how do we REALLY connect this new way of thinking the new education frameworks to culture, context and community?
- That is the place of relevance: the gown must be connected to the town! Studying in abstract without relatedness is what makes our researchers irrelevant to our problems.
- 5) The strong culture of accountability that Pastor Muyiwa calls for is, in my view, is nothing other than teaching our children that "your word is your bond." How do we incorporate this? I ask, not because it's necessarily difficult to design it, but because we need designers who are, themselves, people of integrity. The current education system makes promises it can never keep. It's out-of-integrity. Can people who are out-of-integrity create an education system that is inintegrity? Just asking.

Nemo dat quod non habet

- Pastor Muyiwa shares that Japan uses a combination of a hard work ethic and technology to make their educational system what it is. No other country deploys technology in education to the extent that Japan does, he says. He also says that Singapore has one of the best primary education systems in the world and they built it from scratch. In relation to question #1, what do we want Africa's education to achieve? We need to resolve this first, before we begin building something that is obsolete by the time the users start using it.
- We need to educate to maintain our current status and to leapfrog to meet the rest of the world. Two sets of need.

Our design should accommodate this. Those who will take us through the leapfrog will come out of those who will maintain.

We need mass training and special training, running pari pasu.

With regard to online education, I was fascinated, in the early days, to see Pastors preaching to empty sanctuaries. Really? How foolish can this be. Fortunately, many of them have discovered that it's easier to move the pulpit (literary) to your sitting room, that to speak to an empty room.

This parable raises the question: How do we adopt the emerging technologies to achieve an Africa-specific agenda?

- This initiative was born out of such adoption. I am sure that good will come out of this pandemic.
- 8) I agree with Pastor Muyiwa that technology should be the main driver for the Future of Education in Africa. It's true that by deploying learning programmes through satellite and terrestrial TV stations, radio stations and the internet, we can reach, probably most of Africa's remotest areas. Question: Given that technology enables us to have huge savings, could we make education including university education free? The future pay offs may be worth it.
- Beyond basic education to eradicate ignorance, I prefer efficiently run scholarship for the front runners. I see a lot of waste where people are given what they don't appreciate.
- 9) I agree that the future of education should be directed towards skills for the future. What am really not sure is what those skills should be, at least for Africa. I know Pastor Muyiwa has listed some of these skills. Are these skills really correlated to, in dance, with the #1 potential we wish to unlock?
- Skills are essential, many times for the immediate. Interestingly, they should be low hanging fruits, if society acknowledges them.

From my experience, most parents want their kids to go to University and not learn trades.

That was the thinking behind 6-3-3-4. If you are not academic enough after 9 years, you are expected to go into Technical college. This has not been allowed to work by parents except in Ghana where you can't easily circumvent the Junior Secondary school pathway.

10) Finally, I read with some amusement that majority of teachers in Africa are accidental teachers who got into the profession for lack of other job opportunities. This is the same for policemen and those in the military. Is it any wonder that, whenever their "services" are required, the police and the military unleash mayhem to the citizens? As for teachers, they may not unleash mayhem, but the "intellectual genocide" upon our children is evident for all to see. Pray, help me, how do we reverse this?

- We can't reverse it, but we can we can harness it. Accidents can bring good people to where they should be.

Response to: Dr. Daniel Kamanga

I am not a Prof. Don't think I am smart enough.

Education should not be sterile! We can't ignore the world otherwise we can't ever catch up.

Foreign studies should be continuous.

Whether we know it or not, the rest of the world is studying us deliberately! Why shouldn't we study them too.

It should be deliberate however.

Response to: Engr. Abass Taiwo

The story of the JSS equipment is a sad one for Nigeria.

I had friends in Nigeria Machine Tools Ltd (NMT) who were trained in India and started installing some of the equipment in schools.

The MD then, Mr. Olu Smith was fired by the Minister for not having Hausas in his management team. He proudly told the Minister that "we are making profit sir". You know the answer?

"You are still a project. Who asked you to make profit?"

He was fired with his team.

This information is first hand.

Response to: Mowo Oduru

If we review the Bloom's taxonomy of learning, we will see the short-circuit! Beyond Understanding, we barely get to Apply, Analyse, Evaluate and Create!

That is definitely the way to go

Keep up the good work of Shekinah Business school.

Response to: Bar. Christian Wogu

Finnish Educational system is ok for a developed people. Not for us!

We got work to do.

Once we drive our Education beyond remember and understand to apply, we will get going.

Response to:

Education was not started by Government. This however does not suggest that Government should not be involved. Everyone should be involved.

Response to: Titiloye Oni

Let us look for a place for passionate teachers and educators who will not allow the discouragement in the environment to deter us.

Response to: Michael Bamgbose