# SDG4 Via ODL for Life Long Learning for All









### Excited to Be Here



- Thanks to the Univ of Ghana School of Continuing Education for this historic conference. It is an honour.
- A Mark of being sensitive to the immediate environment and current in global focus to critically look into SDG4 and ODeL.
- I am glad to be back home to Accra.
- This keynote is only to set the tone and be provocative in an area requiring extensive discourse.
- The conference will incisively expatiate and x-ray all areas through the sub-themes







### Curtin University



University of Abuja





Collateral Learning and the Eco-Cultural Paradigm in Science and Mathematics Education in Africa 1995

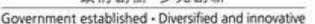


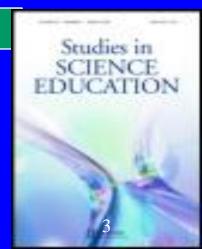
Olugbemiro Jegede













## Contacts

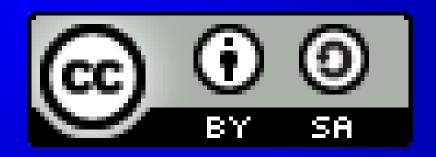


- Telephone: (+234) 8034116363
- jegedeo@gmail.com,
- ojegede@noun.edu.ng,
- jegedeo@olugbemirojegede.com.
- Website: www.olugbemirojegede.com



## Creative Common Licence





### Attribution-ShareAlike (CC BY-SA)



## t'ocus



- Introduction
- Education and Development
- SDG4 and ensuring LLL for All
- Indices of Indispensability
- ✓ Using ODeL as tool and pathway
- Education as Disruptive Force
- **✓** Value Principles and Radical Reforms
- **✓** Preparing for the Future: Waves of Change
- Conclusion



## Tangible Outcomes



**Achieve Sustainable Development Goal 4** 

Use Open, Distance and Electronic Learning (ODeL)

Ensuring Life Long Learning for ALL



### Why Are We Here?



- Opportunities to share new knowledge and innovation
- Push Africa's Agenda (What Africa Wants)
- Examine all the related areas as listed in the Sub-themes
- Go back home with invigorated ideas and zeal to implement them
- I shall be intentionally provocative





## Global Dilemma



- 20th & C21st global changes
- Provide two contrasting aspects of humanity: development and doom
- War, catastrophes, digital divide
- Search for peace, cure for AIDS
- Education identified as solution



## The Questions



- Why educate everyone?
- Why remove disparities in educational access?
- Why search for alternative delivery modes
- Why look for flexible and cost effective means?



## The Answer



Critovam Buarque, the Brazilian Minister of Education says that,

'the twenty-first century has arrived and there is a consolidated critical mass ready to move forward' (p.5, 2003).

The instrument re-identified, is education



Nelson Mandela, an anti-apartheid revolutionary, former South Africa President, and Nobel Peace Prize awardee "Education is the most powerful weapon which you can use to change the world."

"No country can really develop unless its citizens are educated."

"There is nothing I fear more than waking up without a programme that will help me bring a little happiness to those with no resources, those who are poor, illiterate, and ridden with terminal disease."



### Africa's Future on My Mind



- It is time for Africa's emancipation
- How can learning become more inclusive and more effective?
- What radical reforms do we require?
- How do we undertake the radical rethink, in form and structure, of our education?



# Sub-Sahara Africa

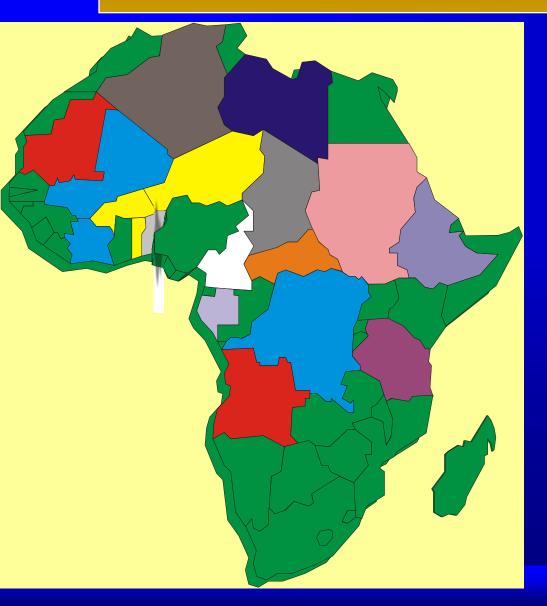


# Obvious Characteristics



## Sub. S. Africa





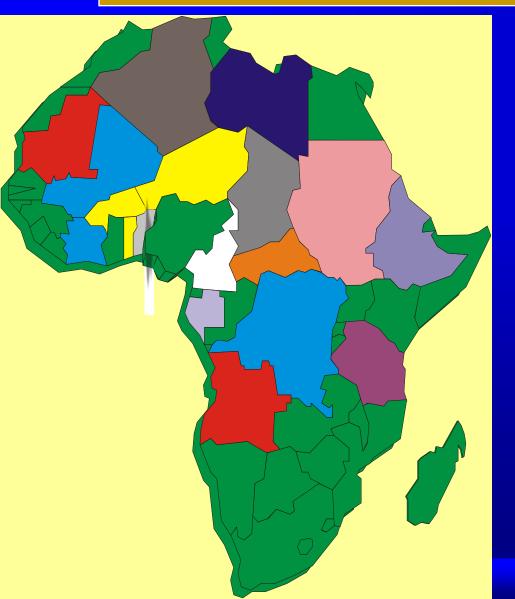
### **POPULATION**

- Over 1.2 billion, 75% rural
- \*3% population growth
- double in 35years, to
- **2.3billion in 2050**
- The world's youngest region.
- Youth 15-24 years about 70% of the population
- •Have 30% of the world's poorest people. Extreme poverty



# Sub S. Africa





### **EDUCATION**

- 4% Annual increase in primary school enrolment
- 30 million ready for school
- 45% of the population are children under 15 years
- In real terms, reduced expenditure on education
- Schools need 4million more teachers.
- Higher Educ need 465,000 academics
- Weak STEM base



22-10-2018









### Security and Fairness



- "human history becomes more and more a race between education and catastrophe" (HG Wells)
- 'human insecurity comes in many forms. The most basic and lethal are illiteracy and innumeracy' (Amartya Sen)
- only the well educated will be able to act effectively in the Information Society' (Michael Barber)

22-10-2018



### Redemption Song Bob Marley



- Old pirates, yes, they rob I, Sold I to the merchant ships Minutes after they took I From the bottomless pit
- But my 'and was made strong By the 'and of the Almighty We forward in this generation Triumphantly
- Won't you help to sing
  These songs of freedom?
  'Cause all I ever have
  Redemption songs
  Redemption songs
- Emancipate yourself from mental slavery
  None but our self can free our minds Have no fear for atomic energy 'Cause none of them can stop the time How long shall they kill our prophets While we stand aside and look? Some say it's just a part of it We've got to fulfill de book

Won't you help to sing
These songs of freedom?
'Cause all I ever have
Redemption songs
Redemption songs
Redemption songs

**Emancipate yourself from mental slavery** 

None but our self can free our mind Have no fear for atomic energy 'Cause none of them can stop the time How long shall dey kill our prophets While we stand aside and look? Some say it's just a part of it We've got to fulfill de book

Won't you help to sing
These songs of freedom?
'Cause all I ever had
Redemption songs
All I ever had
Redemption songs
These songs of freedom
Songs of freedom



### C21st World



- Technology will increasingly dominate domestic, economic and social life
- Financial and economic world will change into a plastic world
- Increase in demand for constant communication and use of telecommunication
- Society will become less personal, concentrate more on nuclear family
- Unrivalled demand for education



### To Survive the 21st Century



- Sub- Saharan Africa must engage in the following:
- Building strong economic foundation;
- Economic integration regionally and continently;
- Massive job creation;
- Embarking on effective food security measures;
- Health and environmental provisions;
- Innovations and creativity buoyed by education;
- Energy reforms and attention to combating climate change; and
- Massive investment in education, especially tertiary education.

22-10-2018



### The Africa We Want 2063



- the AU Commission/the United Nations Economic Commission for Africa (UNECA)/the New Partnership for African Development (NEPAD) in a document called, *Agenda 2063 says* by the year 2063 there should be:
- \*created an Africa of our dreams that is prosperous, healthy, vigorous, creative and exciting' (Versi, 2015).
- To achieve this, as has been done in other parts of the world, Africa must re-focus on using education as the fundamental and virile instrument for continental, regional and national development.

# The Africa We Need



## The Africa We Need



- Dr Akinwumi Adesina, the President of the African Development Bank (AfDB), has opined that we need a
- "new Africa with prosperous, sustainable and inclusive growth;
- one that is peaceful, secure and united,
- regionally integrated and globally competitive".



### Goals of the C21st



- sustainable development
- highly educated, mobile and adaptable workforce
- multi-skilled and multi-tasked
- a knowledge and a learning society
- use of ecological and geographical conditions to continental advantage

22-10-2018



### Education and Development



- clear relationship between a country's institutional governance frameworks, economic progress and education offered its people.
- Level of development in Africa related to the level of education
- Illiteracy, poverty, low development indices have roots in low level of Education



# Recent Imperatives on H.E and Sustainable Development



- global and regional agendas have risen up to the challenge of using education for development.
- several initiatives have emerged as solutions to the issues of sustainable development and higher education.
  - ► Education 2030 Framework for Action (FFA). SDG Goals
  - The 2015 United Nations Paris Climate Change Conference (Conference of Parties 21),
  - ► Agenda 2063 (AUC/ENECA/NEPAD), and
  - ► Continental Education Strategy for Africa (CESA 2016-25).

22-10-2018



### From MDGs to SDGs



### Millennium Development Goals (MDGs)

2000 - 2015

### **Education for All**

- Addressed developing countries south
- Addressed Basic education

The Dakar Framework

for Action

Education for All
Meeting our Collective Commitments

the Cultury of Education for All
Meeting our Collective Commitments

the Cultury of Education for All
Meeting our Collective Commitments

the Cultury of Education

The Collective Commitments

The Cultury of Education

The Collective Commitments

The Collective Collective Commitments

The Collective Collective Commitments

The Collective Collective Commitments

The Collective Collective Collective Commitments

The Collective Collec

### SustainableDevelopment Goals (SDGs)

2015 - 2030 (2030 Agenda)

"Towards inclusive and equitable quality education and lifelong learning for all"

Addresses all countries of the world

Addresses all levels of education, including higher education



## SDGs for the World





## SUSTAINABLE GEALS

17 GOALS TO TRANSFORM OUR WORLD

On 25 September 2015, the United Nations General Assembly formally adopted the universal, integrated and transformative 2030 Agenda for Sustainable Development, along with a set of 17 Sustainable Development Goals and 169 associated targets.

22-10-2018





### SUSTAINABLE DEVELOPMENT



### 17 GOALS TO TRANSFORM OUR WORLD







































22-10-2018

32



### Education in All SDG Goals



#### **TABLE 0.1:**

### How education is typically linked with other Sustainable Development Goals

Education is critical to lifting people out of poverty.	Goal 10	Where equally accessible, education makes a proven difference to social and economic inequality.
Education plays a key role in helping people move towards more sustainable farming methods, and in understanding nutrition.	Goal 11	Education can give people the skills to participate in shaping and maintaining more sustainable cities, and to achieve resilience in disaster situations.
Education can make a critical difference to a range of health issues, including early mortality, reproductive health, spread of disease, healthy lifestyles and well-being.	Goal 12	Education can make a critical difference to production patterns (e.g. with regard to the circular economy) and to consumer understanding of more sustainably produced goods and prevention of waste.
Education for women and girls is particularly important to achieve basic literacy, improve participative skills and abilities, and improve life chances.	Goal 13	Education is key to mass understanding of the impact of climate change and to adaptation and mitigation, particularly at the local level.
Education and training increase skills and the capacity to use natural resources more sustainably and can promote hygiene.	Goal 14	Education is important in developing awareness of the marine environment and building proactive consensus regarding wise and sustainable use.
Educational programmes, particularly non-formal and informal, can promote better energy conservation and uptake of renewable energy sources.	Goal 15	Education and training increase skills and capacity to underpin sustainable livelihoods and to conserve natural resources and biodiversity, particularly in threatened environments.
There is a direct link among such areas as economic vitality, entrepreneurship, job market skills and levels of education.	Goal 16	Social learning is vital to facilitate and ensure participative, inclusive and just societies, as well as social coherence.
Education is necessary to develop the skills required to build more resilient infrastructure and more sustainable industrialization.	Goal 17	Lifelong learning builds capacity to understand and promote sustainable development policies and practices.
	Education plays a key role in helping people move towards more sustainable farming methods, and in understanding nutrition.  Education can make a critical difference to a range of health issues, including early mortality, reproductive health, spread of disease, healthy lifestyles and well-being.  Education for women and girls is particularly important to achieve basic literacy, improve participative skills and abilities, and improve life chances.  Education and training increase skills and the capacity to use natural resources more sustainably and can promote hygiene.  Educational programmes, particularly non-formal and informal, can promote better energy conservation and uptake of renewable energy sources.  There is a direct link among such areas as economic vitality, entrepreneurship, job market skills and levels of education.  Education is necessary to develop the skills required to build more resilient infrastructure and	Education plays a key role in helping people move towards more sustainable farming methods, and in understanding nutrition.  Education can make a critical difference to a range of health issues, including early mortality, reproductive health, spread of disease, healthy lifestyles and well-being.  Education for women and girls is particularly important to achieve basic literacy, improve participative skills and abilities, and improve life chances.  Education and training increase skills and the capacity to use natural resources more sustainably and can promote hygiene.  Educational programmes, particularly non-formal and informal, can promote better energy conservation and uptake of renewable energy sources.  There is a direct link among such areas as economic vitality, entrepreneurship, job market skills and levels of education.  Education is necessary to develop the skills required to build more resilient infrastructure and  Goal 17

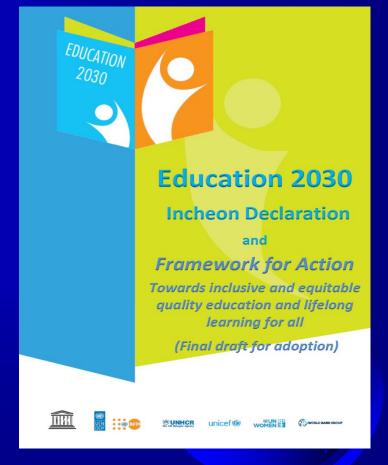
Source: ICSU and ISSC (2015).



# Education 2030 Framework for Action (FFA)



UNESCO is entrusted to lead Sustainable **Development Goal 4** (SDG4) - Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all through the Education 2030 Framework for Action (FFA).





### Targets & Implementation



### **Seven Outcome Targets**

- Universal primary and secondary education
- Early childhood development and universal pre-primary education
- Equal access to technical/vocational and higher education
- Relevant skills for decent work
- Gender equality and inclusion
- Universal youth literacy
- Education for sustainable development and global citizenship

- Three means of implementation
  - Effective learning environments
  - Scholarships
  - ► Teachers and educators





# Framework for Action Education 2030:



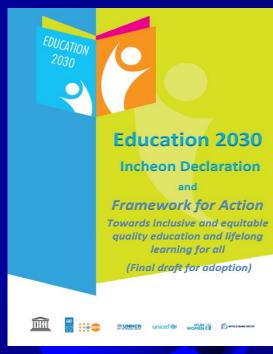
### Target 3, point 43.:

A well-established, properly-regulated tertiary education system supported by technology,

Open Educational Resources (OERs) and distance education modalities can increase access, equity, quality and relevance,

narrow the gap between what is taught at tertiary education institutions and what economies and societies demand.

The provision of tertiary education should be progressively free, in line with existing international agreements.



November 2015



#### The Change



#### From focus on

- Quality of students admitted
- Qualification of faculty
- Design and management of programmes
- Rigour of marking
- Course outputs as intended outcome

#### To focus on

- Student engagement and satisfaction
- Data analytics
- Reflective assesments by students
- > Student-instructorstudent interaction
- Assessments for learning
- Faculty satisfaction and engagement

# Where are we now?

Three years after.....

38

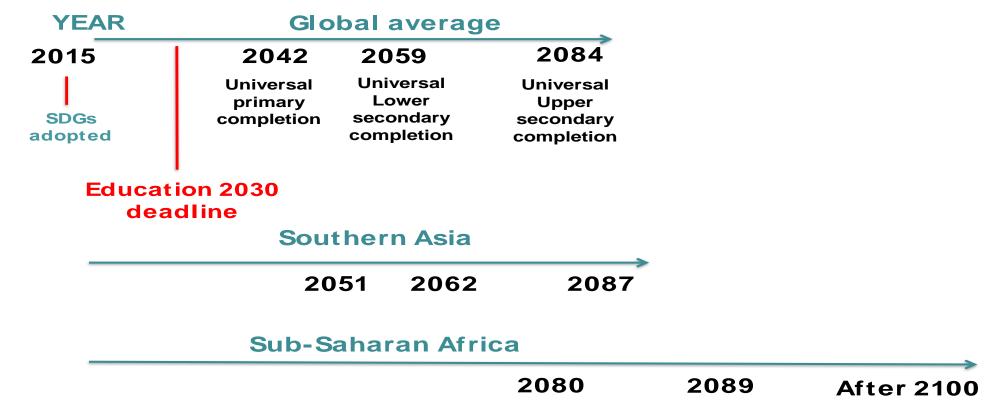


#### Achieving SDG Goals



#### **PROJECTIONS FOR EDUCATION 2030**

World is not set to achieve key global education commitments until 2084.





## UNESCO Says



- "Education needs to fundamentally change if we are to reach our global development goals"

Press release 6, September 2016

# Open Access: a 21 st Century Imperative





#### Indices



- Five indices of indispensability:
  - > Demographic trends
  - Rising enrolment
  - **Globalisation**
  - Knowledge as a commodity
  - Lifelong learning
- Inform the need for viable option



#### Mass Education



#### Open, Distance & e Learning:

- weapon of mass instruction
- democratises and liberalises education
- flexible and life long
- quality assured and includes all
- allows individualised learning and at own pace, time and place

22-10-2018



#### Evolution of ODeL

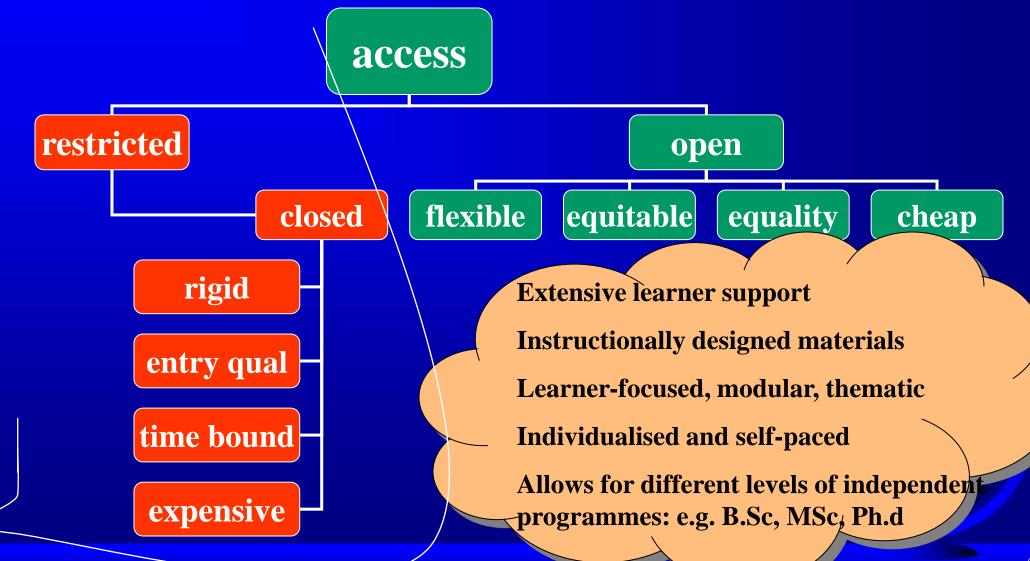


- ODeL is virtual teaching & learning
- First documented in 1728 when Caleb Phillipps advertised for students to learn shorthand
- Evolution: correspondence to distance learning to online learning to technology enhanced to ODL to ODeL to Virtual learning
- Distance learning at tertiary level first used in 1892 at the University of Wisconsin
- 3 conceptual models for network-based educational services:
  - Virtual Class/Campus
  - Flexible & open Learning
  - On-demand learning



### Open and Close





- •Infrastructural Development
- Physical facilities
  - Laboratories

- Human Resource Development
  - CapacityBuilding

## Open, Distance & E-Learning

- Academic Units
- Instructional Delivery
- Learner Support

- Information and Communication Technology
- Other SupportSystems

# Lifelong, Life-wide & Life Sustaining

## Learn Inc 202-10-2018



#### Life Long Learning?



Lifelong learning is the "ongoing, voluntary, and self-motivated" pursuit of knowledge for either personal or professional reasons. Therefore, it not only enhances social inclusion, active citizenship, and personal development, but also self-sustainability, as well as competitiveness and employability.



Trump v the spooks

The stain of Guantánamo

Pop stars and patronage in Congo

Inflation's welcome return

#### Lifelong learning

#### How to survive in the age of automation

A SPECIAL REPORT



**January 14, 2017** 



#### Lifelong Learning



- making learning a continuous lifelong activity
- learning through a flexible, easily accessible mode
- development of a 'Learning' or 'Knowledge' Society
- global movement towards ODeL

### Diversity of Learning Spaces

**Temporal** 

Learning Society

Adult

Varied learning styles

**Formal** 

Sharing with others

**Informal** 

Self-directed learning

Non formal

Flexibility in time, space, content

Home school Nork Re



#### 'Cradle to the Grave'



- Coping with the constant change in life.
- Need to successfully manage our daily living in today's world calls for making learning a continuing lifelong activity.
- Lifelong learning, not as a privilege or a right but, a necessity for every individual
- Lifelong learning will become the norm rather than the exception as a means of getting the whole society to learn continuously from "cradle to the grave" as some would say.



## The K-Power



## knowledge as a Commodity



#### High Level Forum 2015



- Societies moving from a postindustrial information society to a knowledge economy,
- Higher education, as a knowledge producer, has become a major force in the emerging global knowledge society.'
- "a well-established, properlyregulated research-oriented tertiary education system is required".



## **Koolishness**



"Foolish people! How long do you want to be foolish? How long will you enjoy making fun of knowledge? Will you never learn?.."

Proverbs 1:22



## The Knowledge-based Economy



There are increasing signs that our current paradigms for higher education, the nature of our academic programs, the organization of our colleges and universities, and the way that we finance, conduct and distribute the services of higher education may not be able to adapt to the demands of our time. JJ Duderstadt (2001)



## Knowledge First

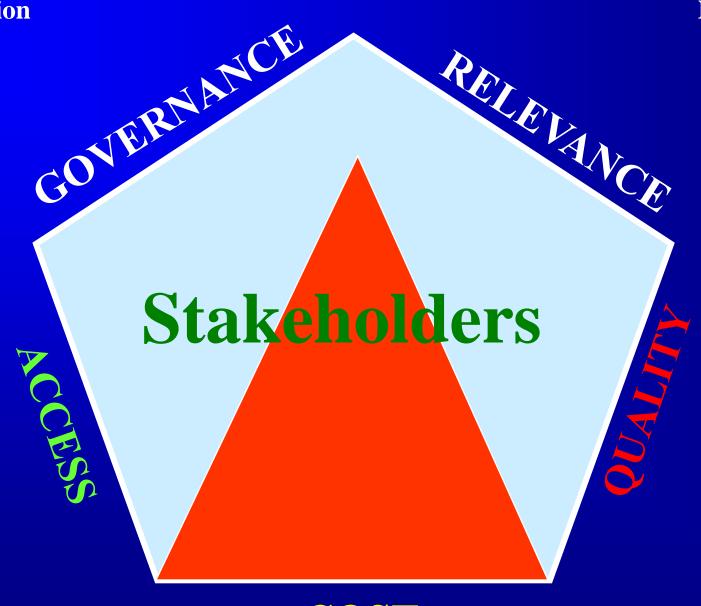


"I will give you wisdom and Knowledge. And in addition, I will give you more wealth, treasure, and fame..."

2 Chronicles 1:12

The Iron Triangle of Education

The NIGAVEKAR pentagon



**COST** 



#### Juality Assurance



**Institutional** 

•Blueprint

•Strategic Plan

•ICT Plan

•Servicom

**Programme** Development

Assignments& **Examinations** 

(Technology)

Delivery Mode Course Materials Learner Support Development

& Other supports

**OPP** 

**DPP** 

**Print** 

Audio/Video Broadcast E-Learning



#### Global Data



- 30% of the world's young people are currently neither in employment, education nor training.
- ONE billion more youth will enter the job market in the next decade and only 40 per cent are expected to be able to get jobs that currently exist.
- The global economy will need to create 600 million jobs over the next 10 years
- Global priority is how to reverse the youth employment crisis.
- Otherwise, the socio-economic and socio-cultural cost, will be colossally high!



#### Irresistable Change



- The world is changing at a rate most humans cannot keep pace with
- The silent evolution of the brain is adding copiously to knowledge and information
- Four major changes are shaping the world
  - Space Exploration
  - The future of jobs and human capital development
  - **Emergence of Artificial Intelligence**
  - Use of education as disruptive force





# Education as a Disruptive Force



#### Radical Reforms



- University learning should be
  - more inclusive
  - more effective, and
  - >more efficient
- Replace current/cancel examination systems
- Scrap degrees, use life portfolio system
- Forget graduation continuous learning
- Study for free
- Age no more a factor in employment
- The line btwn F2F and ODeL to disappear



#### Value Principles



- If we are to achieve life long learning for all towards a path of real freedom, justice and equity
- We must subscribe to value principles of:
  - > All lives have equal value
  - Freedom and flexibility to choose the mode, medium, time, place, and pace of study, and
  - Education is a basic need that should be accessible to all



#### Open Educational Practices



#### Open Access

Inclusive and equal access to educational opportunities without barriers such as entry qualifications and ability to pay. All lives have equal value

#### Open learning

► Ability to study and learn at anytime, anywhere and at any pace.

#### Open scholarship

Releasing educational resources under an open licence that permits no cost, access, use, adaptation 65



## What Vision?



"Where there is no vision, the people perish..." Prov 29:18



#### What is the Vision?



'Our belief is that deep, radical and urgent transformation is required in higher education as much as it is in school systems. Our fear is that, perhaps as a result of complacency, caution or anxiety, or a combination of all three, the pace of change is too slow and the nature of change too incremental.

Perhaps it is ignorance and current limitations of our thoughts



Michael Barber, Katelyn Donnelly & Saad Rizvi

Foreword by

Lawrence Summers,

President Emeritus, Harvard University



# The Future

# of Learning



#### Change or Be Changed



"change is coming/ (has come) whether we like it or not. If we are not involved in shaping it, others will do it for US" (Eisenberg, 1998)



#### Learning in a Volatile World



Online personalised learnig





## The C21st Way



- Use the imperatives of the 21<sup>st</sup> century for education, learning and development needs; new focus on teacher educ and HE
- Embark on knowledge generation emphasis on ODeL research and initiatives
- Explore and exploit new learning tools and environment enhance OER, social networks, MOOCs, Social Media
- Negotiate with digital networks to donate satellite space for learning activities



#### C21st Teachers



- not the boss but the facilitator
- 'no longer sage on stage but guide on the side'
- learning with technology must begin with educating teachers
- must always operate within the students IT- driven learning environment
- Should be equipped to relate globally to other teachers and learners



## C21st Learners



- easily bored, require multiple stimuli
- know more about technology than teachers and parents
- access to information= acquisition of knowledge
- Please text, email, bbm, WhatsApp, etc
- Check my web, facebook, blog or twitter
- Gone through waves of change in learning



## From Ghetto to the Bank



Wave

to

Wave





# Global Trends & Waves of Change



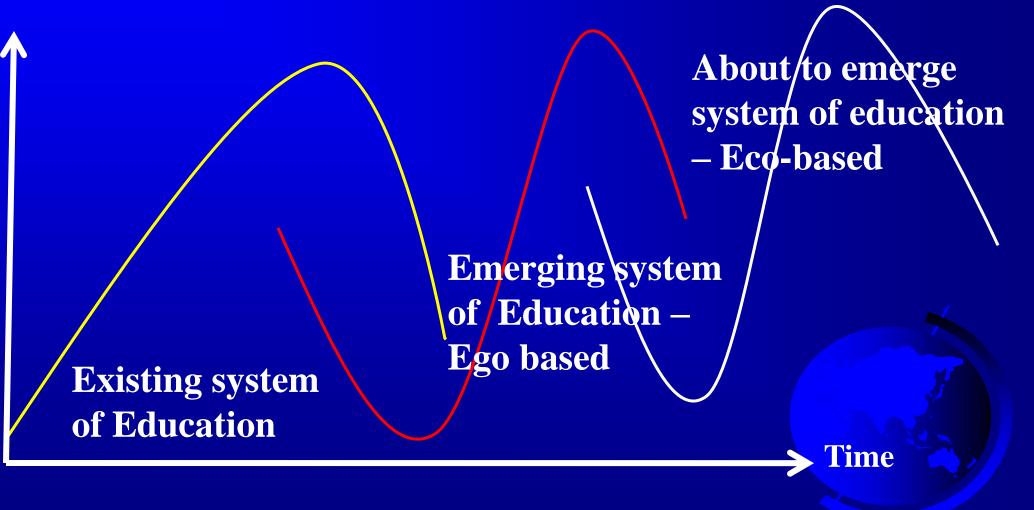
- Open, distance e-learning, is now going mainstream: online, blended, open, flexible and technology enhanced learning.
- Digital transformation is challenging the relevance of brick and mortar educational institutions all over the world.
- New innovations are enabling a shift from personalized learning and assessment.
- Education is on the brink of a revolution caused by convergence of research. Education, Cognitive Psychology and Neuroscience: powerful advances in optimizing online learning experiences.
- Skills and employment, are hot topics in all regions. Life long Learning is becoming more important than ever.





## Waves of Change







## Waves of Change in Learning



**System-Determined Learning** 

**Personalised Learning** 

**Trans-Personal Learning** 

Brick and
Mortar,
Chalk and
talk learning

Predetermined content, time and pathway by the system

Online learners
have power
over content,
time and place
of learning

Ego-based learning\
for , determined by self, society directed

C21st skills

Eco based earning for self, society, leisure and life

Time

- **Existing system of Education**
- **Emerging system of Education Ego based** 
  - About to emerge system of education Eco based



### Skills for the 4<sup>th</sup> Industrial Revolution



- Soft Skills: sharing, negotiating
- Combine mathematical and interpersonal skills



#### Top 10 skills

#### in 2020

- 1. Complex Problem Solving
- 2. Critical Thinking
- 3. Creativity
- 4. People Management
- 5. Coordinating with Others
- 6. Emotional Intelligence
- 7. Judgment and Decision Making
- 8. Service Orientation
- 9. Negotiation
- 10. Cognitive Flexibility

#### in 2015

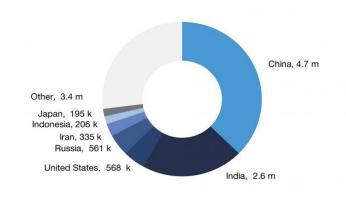
- 1. Complex Problem Solving
- 2. Coordinating with Others
- 3. People Management
- 4. Critical Thinking
- Negotiation
- 6. Quality Control
- 7. Service Orientation
- 8. Judgment and Decision Making
- Active Listening
- 10. Creativity







#### Where are the world's recent STEM\* graduates?



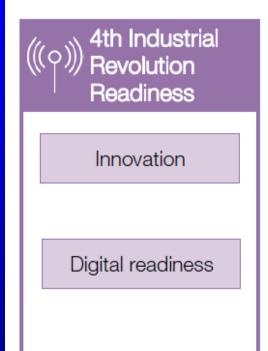
\* Science, Technology, Engineering and Mathematics
Source: Human Capital Report 2016, World Economic Forum

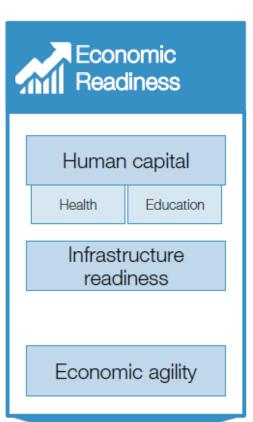


## Prepared For the Future?

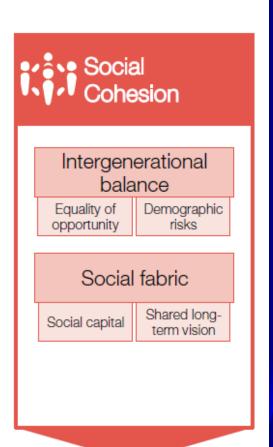


Figure 1. The nine categories of the Future Preparedness Framework











**Category** 

Competencies

## C21st Skills:



#### WEF 16 skills across 3 categories

**Helps students** 

..complex challenges

	approach		
oundational	everyday tasks	Literacy	Technology literacy
iteracies		Numeracy	Financial literacy
		Scientific literacy	Cultural and civic literacy
		Information communication	

Critical thinking and

problem-solving

**Character Qualities** 

er ...changing environments

Curiosity

Initiative

Persistence/grit

Collaboration

sity

Leadership

sive

Social and cul-

**Related Skills** 

Social and cultural awareness

Communication



## Inclusive Learning



- Learning for All Through life
- Offer strategically redesigned programmes (with current sector skills) to the public
- Hands-on, self-employed programmes, e.g:
  - **Events Management;**
  - Compering (or Master of Ceremonies);
  - Confectioneries and Executive Cake Making;
  - Speech Writing;
  - Hair Dressing;
  - Applications Development;
  - Contemporary music,
  - Theatre Arts/Movie Acting



# Conclusion



# Specific Messages



Quality first: quality digital, open and flexible education

- Collaboration: at all levels, on content, courses programmes, methodologies, infrastructure, internationalisation....
- Take leadership: for the future we want lead educational transformation



# Three Little Birds Bob Marley



- Don't worry about a thing 'Cause every little thing gonna be alright Singing' don't worry about a thing 'Cause every little thing gonna be alright
- Rise up this mornin'
  Smiled with the risin' sun
  Three little birds
  Pitch by my doorstep
  Singin' sweet songs
  Of melodies pure and true
  Saying', (this is my message to you)
- Singing' don't worry 'bout a thing 'Cause every little thing gonna be alright Singing' don't worry (don't worry) 'bout a thing 'Cause every little thing gonna be alright

- Rise up this mornin'
  Smiled with the risin' sun
  Three little birds
  Pitch by my doorstep
  Singin' sweet songs
  Of melodies pure and true
  Sayin', this is my message to you
- Singin' don't worry about a thing, worry about a thing, oh Every little thing gonna be alright, don't worry Singin' don't worry about a thing, I won't worry "'Cause every little thing gonna be alright
- Singin' don't worry about a thing 'Cause every little thing gonna be alright, I won't worry Singin', don't worry about a thing 'Cause every little thing gonna be alright Singin' don't worry about a thing, oh no 'Cause every little thing gonna be alright

