Educação aberta à distância e o desenvolvimento sustentável na Africa

Olugbemiro Jegede

CC BY SA

Great to Be Here

- Thanks to ESUD2018 for the invitation. It is an honour to visit Brasil and Natal the City of the Sun.
- Carlos, Alexandre, Maria & Fabiola made it happen.
- Right step for ESUD to inquire what other regions of the world are doing about SDG4, LLL to guide Brasil
- The advantage of speaking last at a conference.

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

1995

Olugbemiro Jegede

Focus

- Introduction
- Education and Development
- 21st Century World: SDGs & Life Long L for All
- Global & Continental Initiatives
- Indices of Indispensability
- Using ODeL and OER as tool and pathway
- Challenges of Higher Education in Africa
- Preparing for the Future: Waves of Change
- Conclusion

Education and Development

Global Dilemma

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

The Questions

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

The Answer

- Cristovam 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.”

Sub-Sahara Africa

Obvious Characteristics

Sub-Sahara Africa

POPULATION

- Over 1.2 billion, 75% rural
- 3% population growth
- The world's youngest region.
- Have 30% of the world's poorest people.

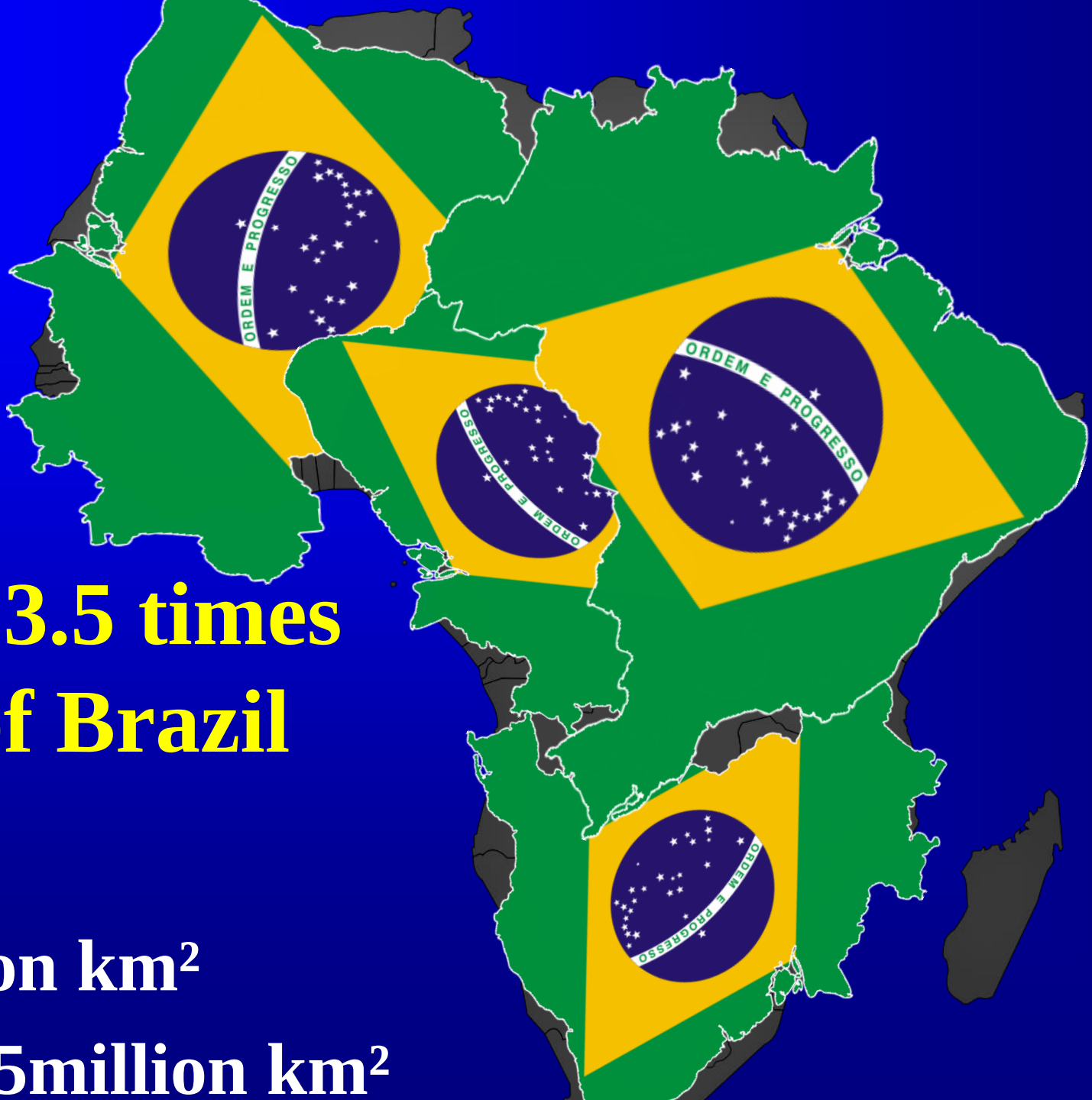
EDUCATION

- 45% of the population are children under 15 years
- Higher Educ need 465,000 academics
- Weak STEM base

Brasil & Africa

Country Vs Continent

Differences & Similarities



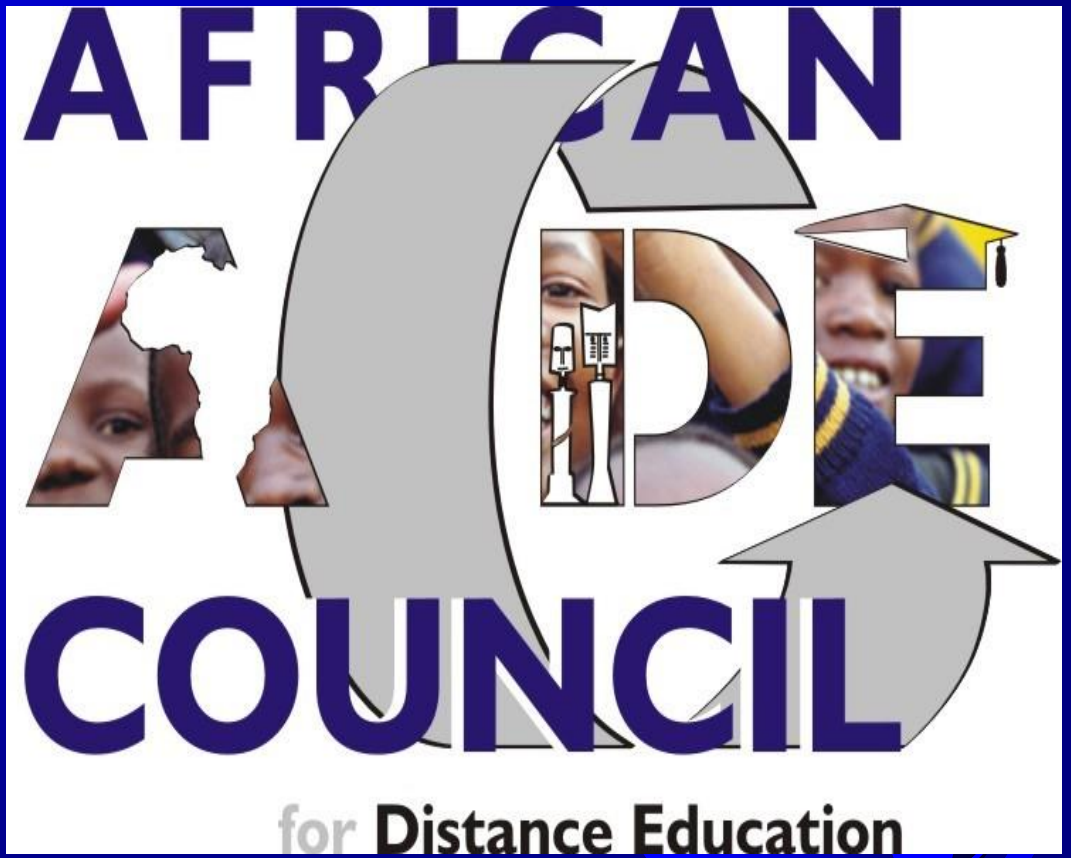
Africa is 3.5 times the size of Brazil

Africa:

30.37 million km²

Brasil: 8.5million km²

Data Sources



	Africa	Brazil
Population	1.3 billion E-9: Nigeria, Egypt	212 million – E9* country
Division	56 independent countries	26 States in the Federation
Economy	Still rudimentary Main stay: Oil, Mineral Resources	Oil, now diversified. Coffee, Tourism, sugarcane, ethanol. Newly Industrialised.
Languages & Groupings	Over 1,000 ethnic groups, 5 main African Union official languages	Numerous tribal nations, Multicultural, ethnically diverse
Higher Education	1,600 HEIs	2364 HEIs 360 ODeL

*E-9:Bangladesh Brazil China Egypt India Indonesia Mexico Nigeria and Pakistan

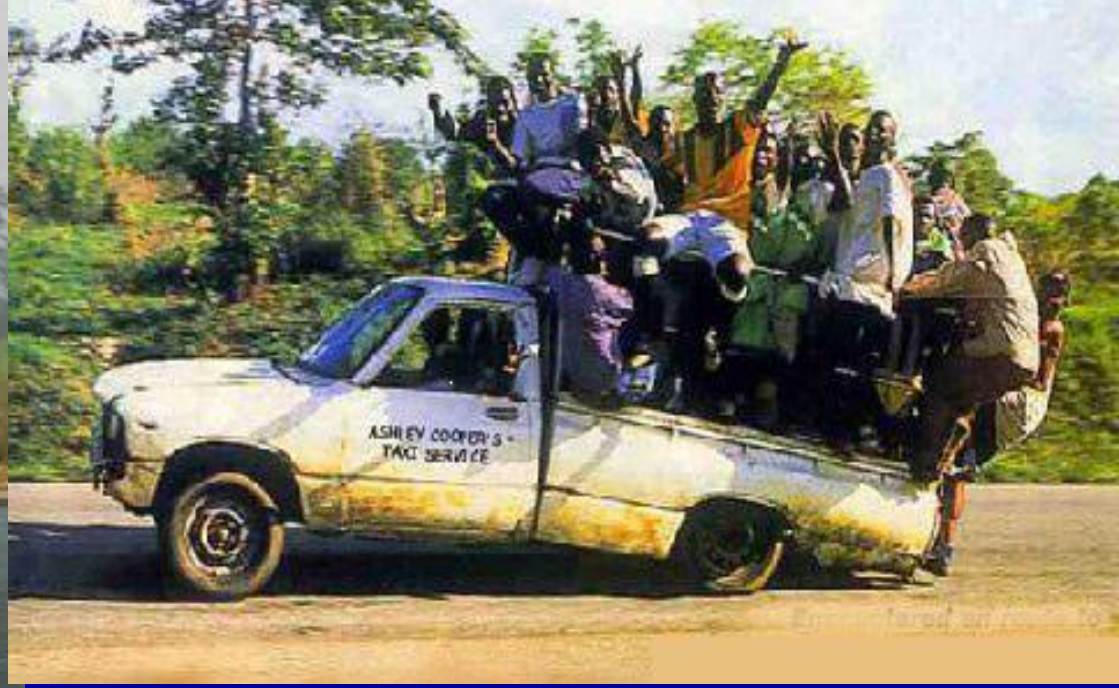
	Africa	Brazil
ODeL institutions	14 Open Universities, 65 Dual Mode, Pan African Virtual & E-Learning University	UniRede Network - Virtual University of Brazil.
Association	African Council for Distance Education (ACDE)	ESUD -Brasileiro De Ensino Superior A Distancia
Culture & Tradition	Very well respected, Music & Dancing	Very well respected, Music & Dancing
Sports	Football Frenzy	Football Crazy
Corruption	Massive & life style	In the system
Poverty & Illiteracy	At least 75% of the Population	About 50% of the population

Illiteracy
&
its price

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

National


ASHLEY COOPER'S
TAXI SERVICE

Security and Fairness

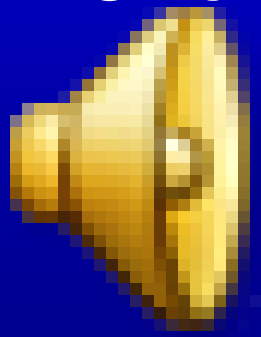
- ‘human history becomes more and more a race between education and catastrophe’ (HG Wells)
- ‘human insecurity comes in many forms. The most basic and lethal are illiteracy and innumeracy’ (Amartya Sen)
- ‘only the well educated will be able to act effectively in the Information Society’ (Michael Barber)

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?

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

Recent Imperatives on H.E and Sustainable Development

- **global and regional agendas have risen up to the challenge of using education for sustainable development.**
  - **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).**

SDGs for the 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.

SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD

Education in All SDG Goals

TABLE 0.1:

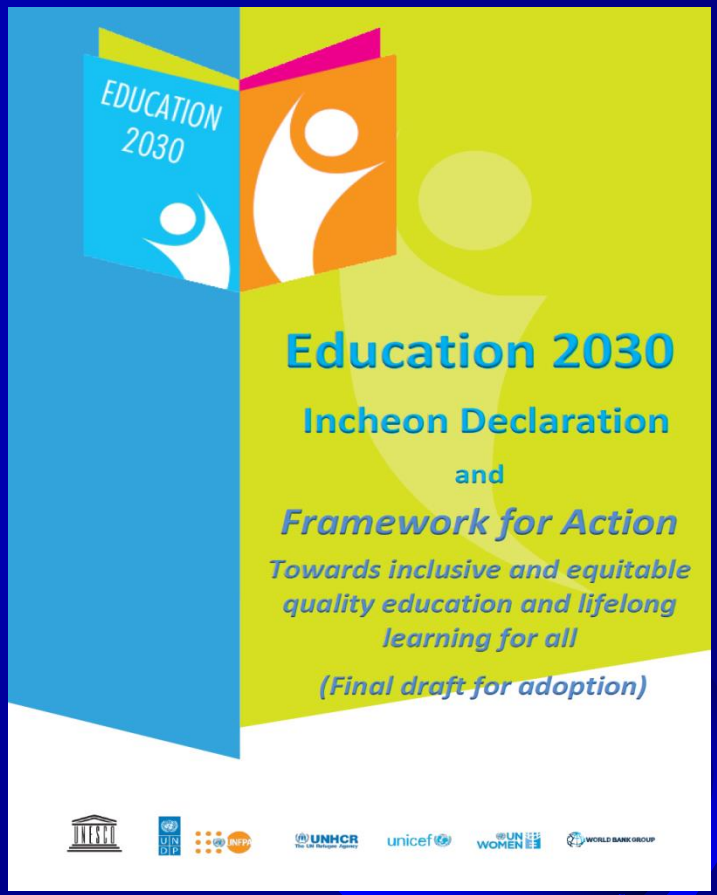
How education is typically linked with other Sustainable Development Goals

Goal 1	Education is critical to lifting people out of poverty.	**Goal 10**	Where equally accessible, education makes a proven difference to social and economic inequality.
Goal 2	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.
Goal 3	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.
Goal 5	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.
Goal 6	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.
Goal 7	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.
Goal 8	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.
Goal 9	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.

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:

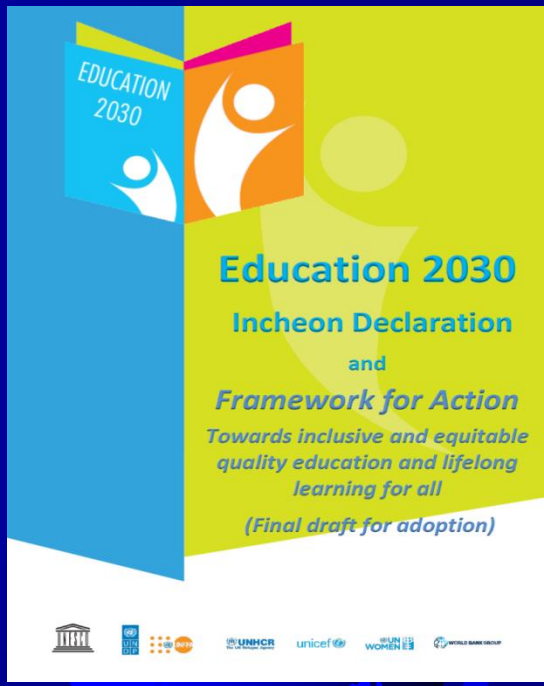
Target 3, point 43.:

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

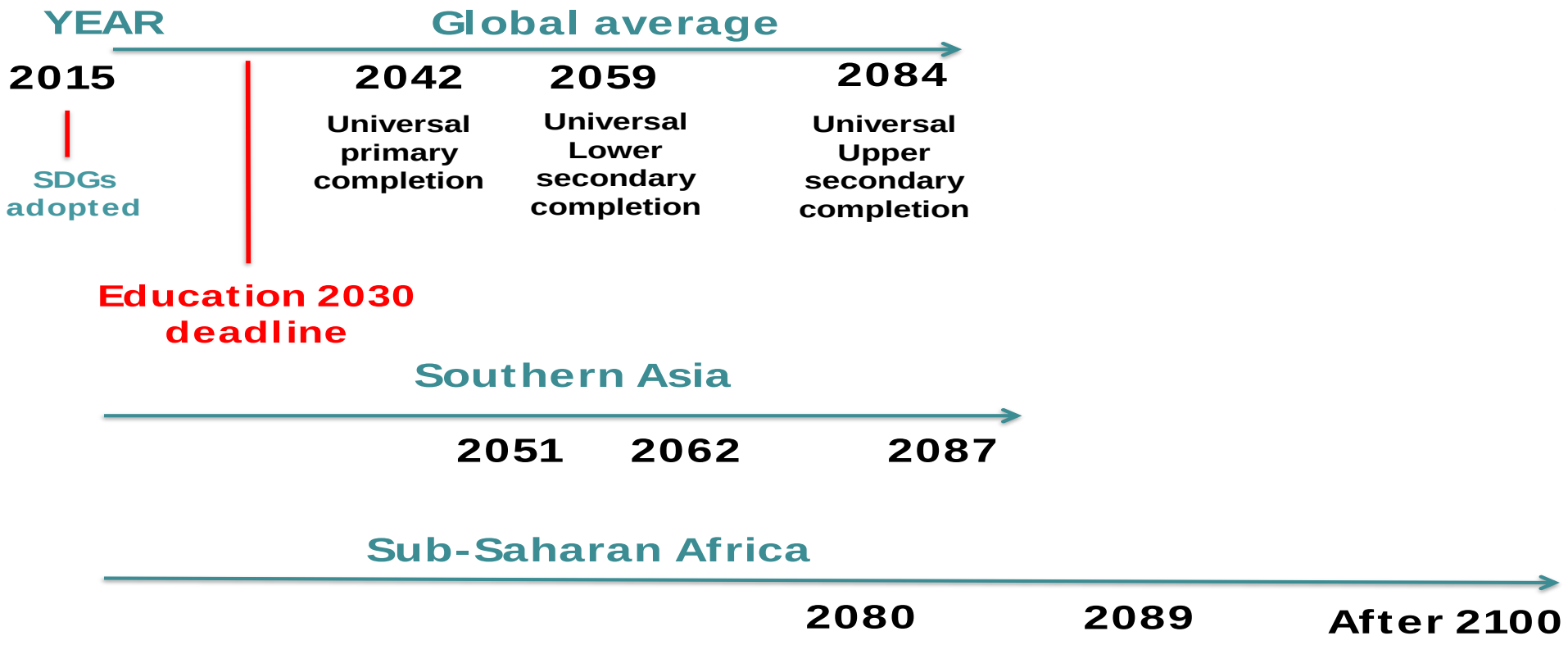
Where are we now?

Three years after…….

Achieving SDG Goals

PROJECTIONS FOR EDUCATION 2030

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



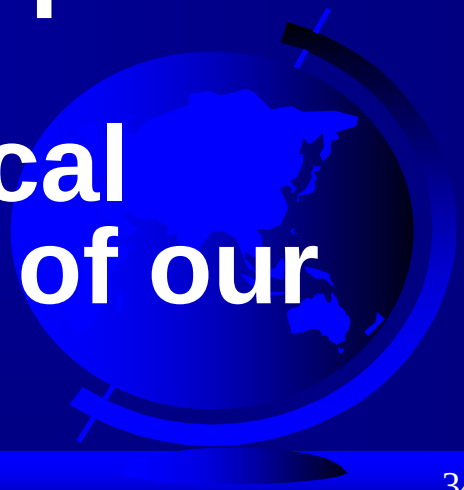
UNESCO Says

- "Education needs to fundamentally change if we are to reach our global development goals"
  - Press release 6, September 2016

The Africa We Need

Africa's Future

- 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?



5 Indices of Indispensability

Indices

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

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.

Goals of C21st HE in Africa

- TrustAfrica highlights that with more than 1,600 higher education institutions operating in Africa today. It is critical to:

- "Develop a high quality, massive, vibrant, diverse, differentiated, innovative, autonomous and socially responsible higher education sector that will be a driving force [in achieving the continent's long-term development goals].

- Produce the human capital required for the continent's inclusive and sustainable development, democratic citizenship, and repositioning as a major global actor."

Open Access: a 21st Century Imperative

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 and redistribution by others

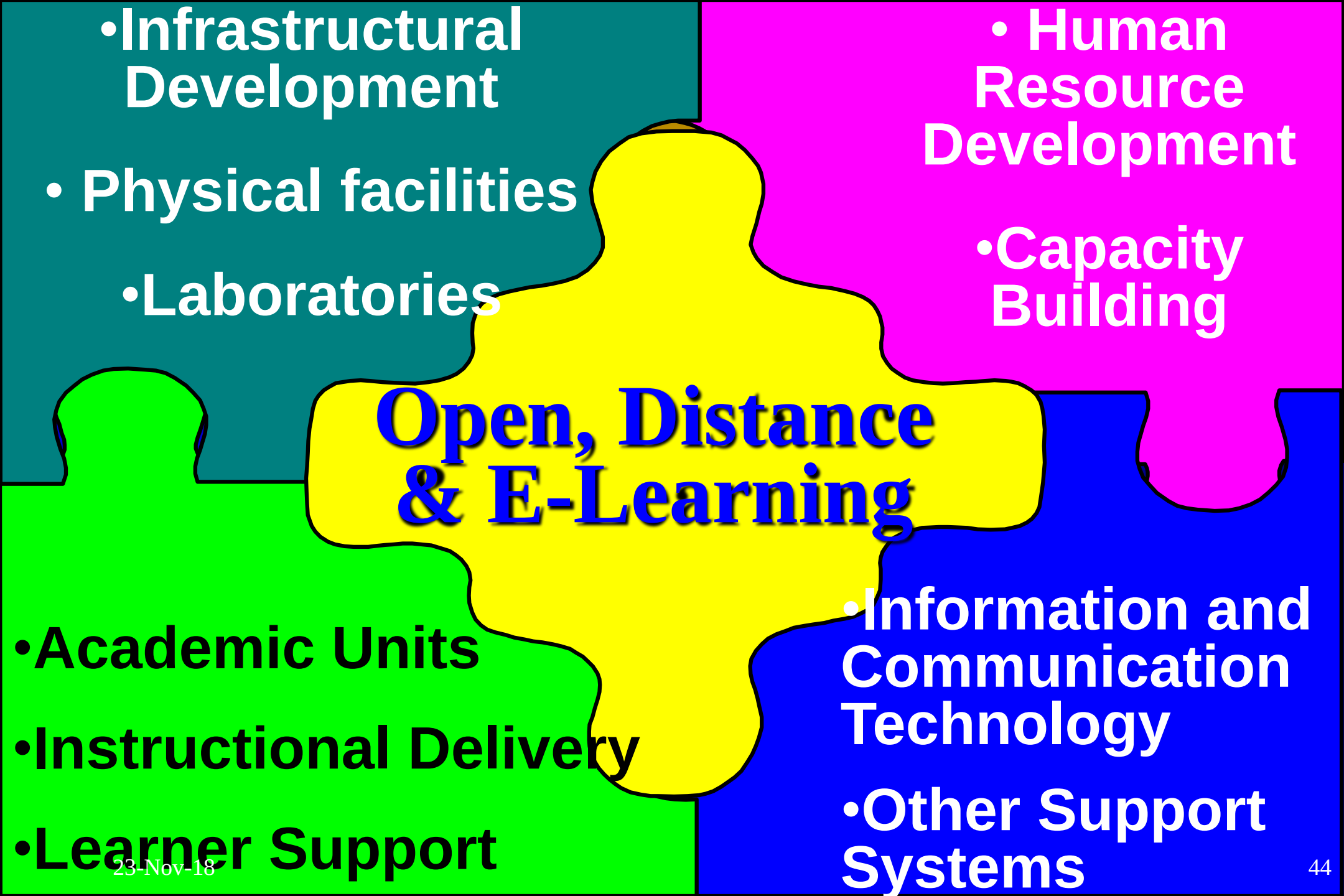
3-Pronged Related Solutions

- Educacao aberta e a distancia e e-learning
- Aprenizado ao longo da vida e para todos
- Recursos educacionais abertos
- Open Distance and E-Learning
- Life Long Learning for All
- Open Education Resources (OER)

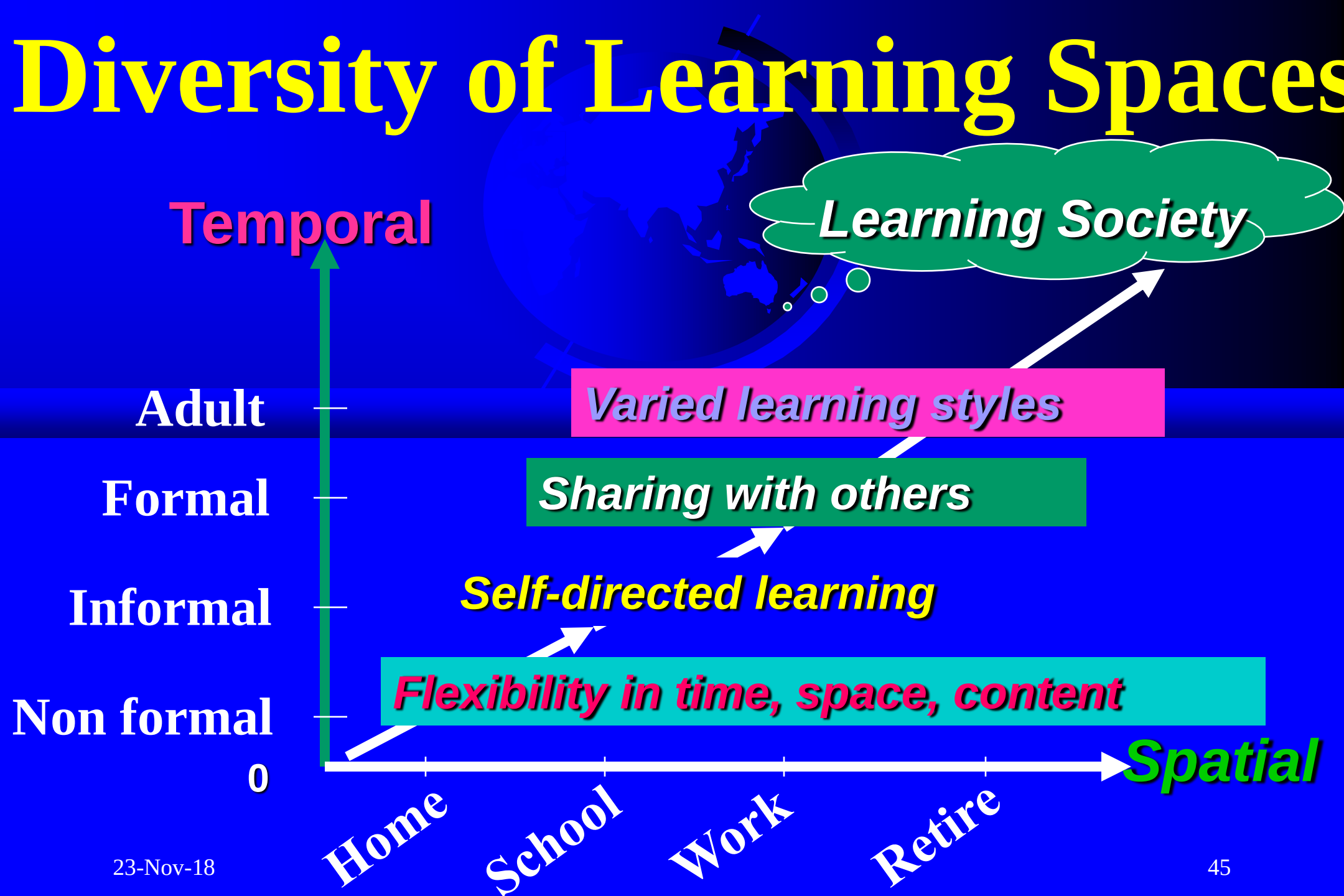
Mass Education

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

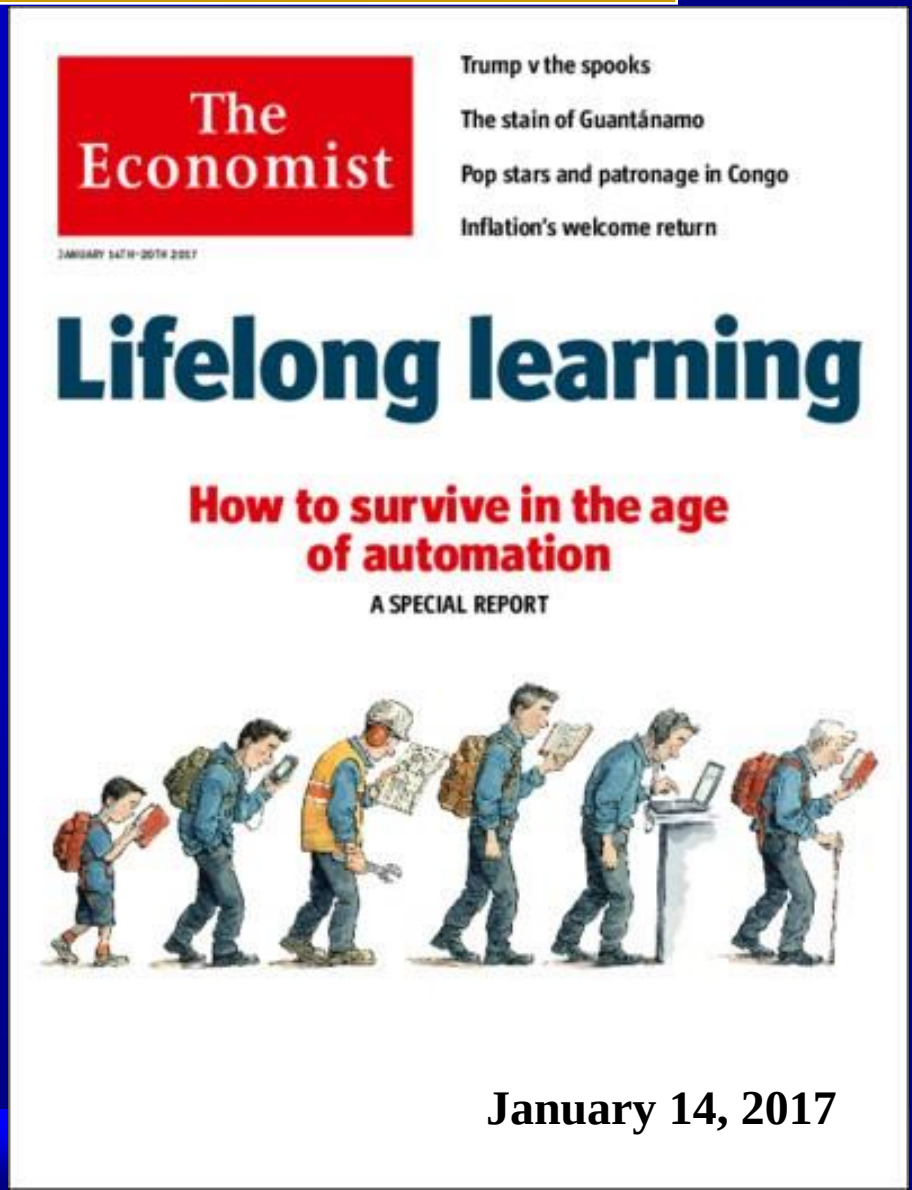

•Infrastructural Development
• Physical facilities
•Laboratories
• Human Resource Development
•Capacity Building
Open, Distance & E-Learning
•Academic Units
•Instructional Delivery
•Learner Support
•Information and Communication Technology
•Other Support Systems

Diversity of Learning Spaces



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.



Wikipedia

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

‘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.

Status of ODL in Africa

- African Council for Distance Education (ACDE) established in 2005
- ACDE QA Toolkit
- 14 Open Universities (single mode)
- UNISA the oldest ODL institution in Africa (1946)
- 65 Dual mode Universities (30 in Nigeria)
- National regulatory bodies (National Universities Commission)
- National Quality Assurance Frameworks

Status of ODL in Africa

Online Learning:

- Online Learning is very limited –only ISCED, Mozambique
- Some universities run postgraduate programmes online
- Some selected postgraduate programmes are offered as fully online
- There at least 100 foreign institutions with cross border online learning in Africa

Status of ODL in Africa

- **Continental Effort:**
- **Many Africa governments are now taking ODL seriously with the advent of SDG Life long learning for All**
- **A number of Africa Presidents/Head of State trained through ODL –Egypt, South Arica, Zimbabwe, Nigeria, Ethiopia**
- **African Union planning to establish Pan African Virtual & E-Learning University (PAVEU)**
- **Slow adoption of ICT for delivering quality higher education**
- **The future of ODL is quite bright in Africa**

The K-Power

Knowledge as a Commodity

What are OER?

- Open Educational Resources (OER) are:

- Technology-enabled, open provision of educational resources for consultation, use and adaptation by a community of users for non-commercial purposes”

Why OER

- Improve delivery of higher education
- Allows cutting-edge information to be readily available
- Attract interest in policy making and institutional circles
- Made freely available over the Web or Internet
- Emerging practices all world wide

Genesis of OER

- OER was originally coined during a UNESCO Forum on Open Courseware held in 2002
- In Africa, the OER Africa emerged as part of the South African Institute for Distance Education
- ACDE general assembly of 2008 held the first preconference discussion on OER

OER Initiatives: Future

Mainstreaming OER

- Finalised the Development of a National Policy on Open Educational Resources.
- The OER Policy to be ratified and operational by the end of July, 2018.
- The URL is: www.nusoer.org
- By the end of this November 2017, all universities would have uploaded information about their OER materials on the website.
- Massive capacity development in OER being planned for higher education institutions, teachers and students.
- Long term future plan is to extend the OER to the lower levels of education.

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

What is the Vision?

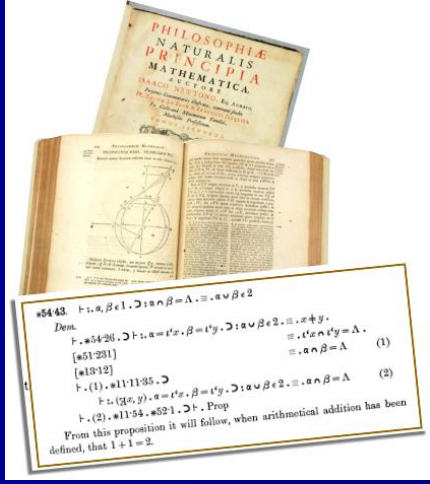
'Our belief is that deep, radical and urgent transformation is required in higher education as much as it is in school systems. Our fear is that, perhaps as a result of complacency, caution or anxiety, or a combination of all three, the pace of change is too slow and the nature of change too incremental.'

Michael Barber, Katelyn Donnelly & Saad Rizvi
Foreword by
Lawrence Summers,
President Emeritus, Harvard University

Perhaps it is ignorance and current limitations of our thoughts

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)



The Future of Learning

Learning in a Volatile World

Online personalised learnig

Personalised online learning that opens the door to the world of long life opportunities

Volatile
Uncertain
Complex
Ambiguous
world

Towards the Future

To have a fulfilling future that is engineered by education,

Higher Education must prepare the people for :

- Prepare the people for C21st Way of Life
- Produce effective C21st Teachers
- Prepare C21st Learners to learn effectively

Global Trends & Waves of Change

- Open, distance e-learning, is now going mainstream: online, blended, open, flexible and technology enhanced learning. This will lead to **Ubiquitous 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 in Learning

System-Determined Learning

Personalised Learning

Trans-Personal Learning

Perceived utility of Education

Brick and Mortar, Chalk and talk learning

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

C21st skills

Predetermined content, time and pathway by the system

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

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

C21st Skills

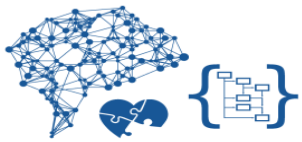
Skills for the 4th Industrial Revolution

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

WORLD ECONOMIC FORUM
COMMITTED TO IMPROVING THE STATE OF THE WORLD

Top 10 skills

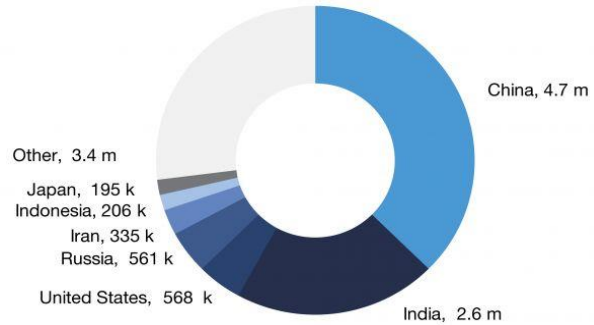
in 2020	in 2015
1. Complex Problem Solving	1. Complex Problem Solving
2. Critical Thinking	2. Coordinating with Others
3. Creativity	3. People Management
4. People Management	4. Critical Thinking
5. Coordinating with Others	5. Negotiation
6. Emotional Intelligence	6. Quality Control
7. Judgment and Decision Making	7. Service Orientation
8. Service Orientation	8. Judgment and Decision Making
9. Negotiation	9. Active Listening
10. Cognitive Flexibility	10. Creativity



Source: Future of Jobs Report, World Economic Forum

WORLD ECONOMIC FORUM
COMMITTED TO IMPROVING THE STATE OF THE WORLD

Where are the world's recent STEM* graduates?

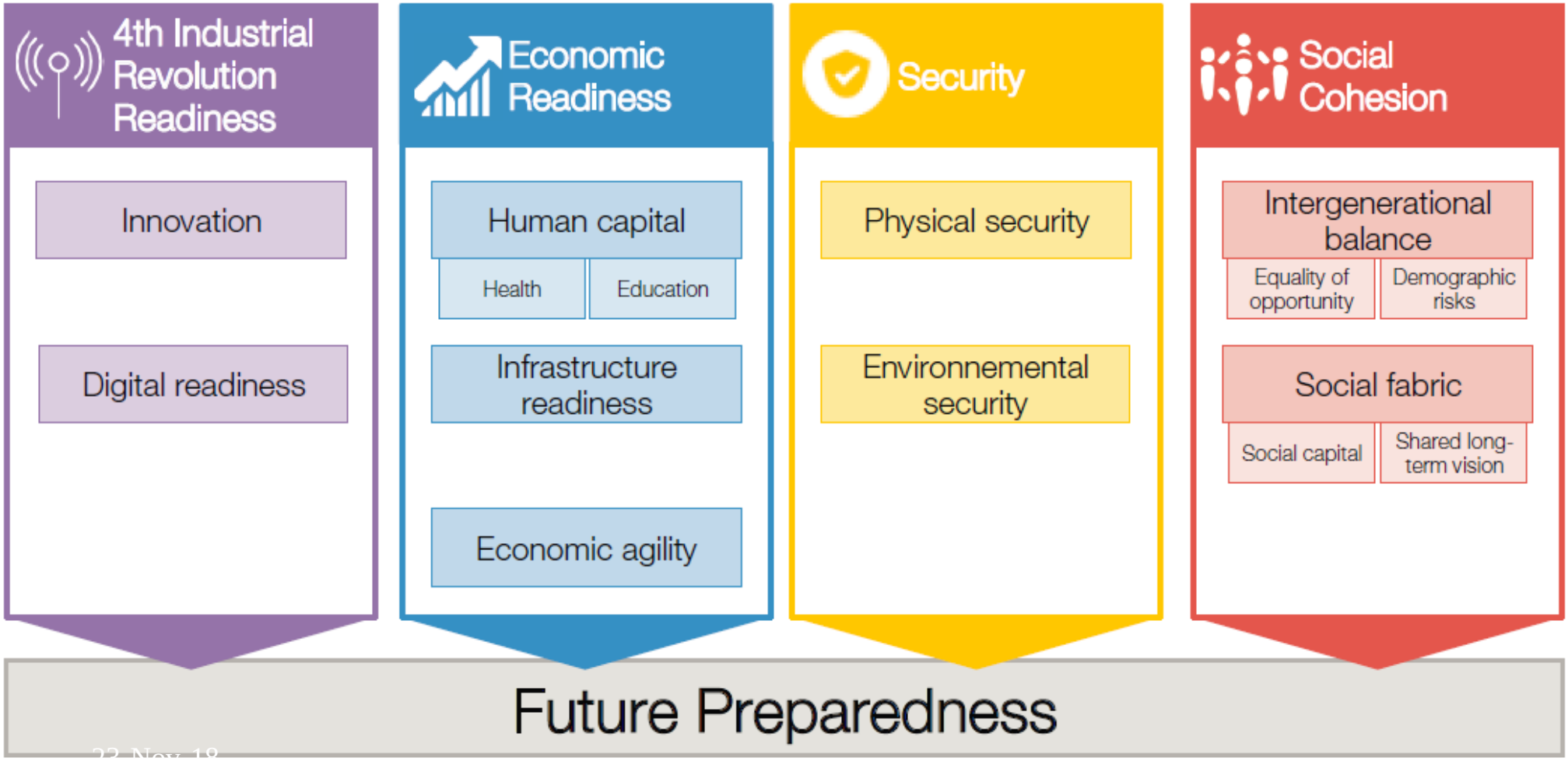


* Science, Technology, Engineering and Mathematics

Source: Human Capital Report 2016, World Economic Forum

Prepared For the Future?

Figure 1. The nine categories of the Future Preparedness Framework



Conclusion

Specific Messages

- Prepare for the future thro ODeL, SDGs, OERs & C21st Skills
- **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

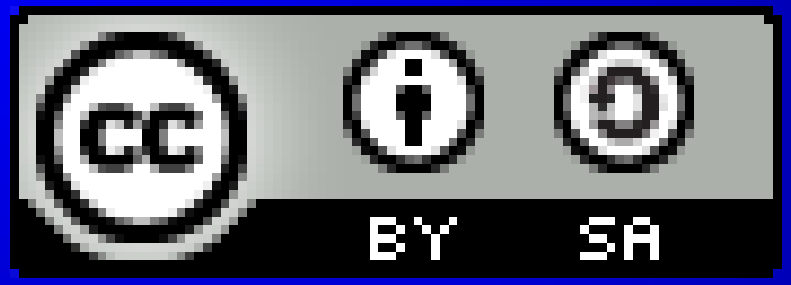
- Singin' don't worry about a thing, worry about a thing, oh
Every little thing gonna be alright, don't worry
Singin' don't worry about a thing, I won't worry
"'Cause every little thing gonna be alright

- 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

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)

Obrigado

Thank you

Boa Tarde

Tchau