Welcome

GEEP Africa

Webinar: 06 December 2023
GEEP Africa Webinar

Transforming Education Across Africa: The Nexus of Climate Justice, Social Justice, and AI

December 6, 2023
4:00-5:15 PM
Central Africa Time
9:00-10:15 AM
U.S. Eastern Standard Time
Webinar Themed Discussions

- Unpacking the themes and Agenda 2063
- Climate and Social Justice in Africa
- AI in the face of climate emergency and education
- Q&A session

- Dr Ravhee BHOLAH, Mauritius, Associate Professor, Mauritius Institute of Education, Mauritius
- Dr Adedoyin Adeleke, Founder and Executive Director of Green Growth Africa, Nigeria
- Ms Kerry McLean, Coastal Programmes Manager at Wildlife and Environment Society of South Africa, South Africa

Thank you to all our speakers and NAAEE team!!!
Use chat to join conversation & ask questions

We Want To Hear From You

Have Your Say Here!

Live captioning and translations: click Closed Caption
• Type questions in the chat throughout
• For closed captions and translated captions, click Closed Captions
• This webinar will be recorded and shared
Setting the Stage

Dr Ravhee Bholah

Associate Professor
Mauritius Institute of Education
Transforming Education Across Africa

Dr Ravhee BHOLAH, Mauritius, Associate Professor,
Mauritius Institute of Education, Mauritius

06 December 2023
Africa

- Second largest and second populous continent
- 20% of Earth’s land
- 54 states
- 5 Regions
- African nations - African Union
- 17.89% world’s population
- The continent’s population reached 1.2 billion in 2015
- Projection:
  - 1.7 billion in 2030 and 3 billion in 2063.
  - An increase to 29% of world population in 2063.
  - About 46% of Africa’s labour force will be young people aged 15-34 (~ be an average of 12.1 million a year)
- Africa’s youthful population structure provides a significant potential to reap demographic dividend for economic transformation.
Major Challenges facing Africa

• Poverty
  • Lack of access to basic needs, unemployment, income equality

• Political instability

• Conflict and Violence

• Limited Access to adequate Health care
  • Limited access to medical facilities, diseases prevalent in the region, lack of sanitation

• Inaccessible Quality Education

• Inadequate Infrastructure

• Lack of Economic Diversifications

• Climate change
  • Loss of biodiversity

• Poor waste management and pollution

• Deforestation and Land degradation

• Water scarcity

• Energy access and transition

• Food security and Agriculture

• Urbanization and infrastructure challenge
Education as a Remedy

Unsustainable Development Situations (Persistent Poverty, Growing Social Inequality, Economic Crisis)

Climate Change impacts (new risks and unknown impacts)

Loss of Ecosystem Services (erosion of the resource base & life support systems)

Education

Equity
Sustainability
Resilience
Adaptation

Challenges in Education across Africa

Access to Education
Quality of Education
Equity in Education

(Adapted from Lotz, 2017)
Challenges: Access to education
Many Children across Africa still face barriers to accessing education, including inadequate infrastructure, long distances to schools, and cultural or economic obstacles.

Challenges: Quality of education
Issues such as outdated curricula, lack of trained teachers, and limited resources often lead to disparities and inconsistencies in the quality of education across different regions in Africa.

Challenges: Equity in Education
Gender disparities, unequal access for marginalized communities, and imbalances in educational funding contribute to inequities in educational opportunities across Africa.
How is education transforming and shaping the future of Africa?
Education in shaping the Future of Africa

Education as a catalyst for Development

Africa Agenda 2063

UN SDG 2030
1. A prosperous Africa based on inclusive growth and sustainable development
2. An integrated continent, politically united and based on the ideals of Pan-Africanism and the vision of Africa’s Renaissance
3. An Africa of good governance, democracy, respect for human rights, justice and the rule of law
4. A peaceful and secure Africa
5. An Africa with a strong cultural identity, common heritage, shared values and ethics
6. An Africa where whose development is people-driven, relying on the potential of African people, especially its women and youth, and caring for children
7. Africa as a strong, united and influential global player and partner
### The Agendas: Vision and Frameworks

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<td><strong>Vision</strong></td>
<td><strong>Vision</strong></td>
<td><strong>Focus Areas</strong></td>
<td><strong>Focus Areas</strong></td>
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<td>A world that is resolved to free the human race from the tyranny of poverty and want and to heal and secure the planet</td>
<td>Pan-African Vision and African Renaissance</td>
<td>Inclusive socioeconomic development, peaceful societies, accountable institutions, environmental sustainability, climate change, Inequalities</td>
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<td><strong>Breakdown:</strong></td>
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<td>15-Year Global Action Plan</td>
<td>50-Year Continental Integrative and transformative Agenda</td>
<td><strong>17 Goals</strong></td>
<td><strong>7 Aspirations</strong></td>
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<td><strong>Vision</strong></td>
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<td><strong>Focus Areas</strong></td>
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<td>The Africa We Want: An integrated, prosperous and peaceful Africa, driven by its own citizens, representing a dynamic force in the international arena</td>
<td><strong>Focus Areas</strong></td>
<td><strong>Breakdown:</strong></td>
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<td>Inclusive socioeconomic development, peaceful societies, accountable institutions, environmental sustainability, climate change, Inequalities</td>
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<td><strong>169 Targets</strong></td>
<td><strong>20 Goals</strong></td>
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<td>Inequalities</td>
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<td><strong>232 Indicators</strong></td>
<td><strong>39 Priority Areas</strong></td>
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<td><strong>Focus Areas</strong></td>
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<td><strong>255 Targets</strong></td>
<td><strong>13 fast-tracking flagship projects</strong></td>
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<td><strong>63 Core Indicators</strong></td>
<td><strong>Domestication</strong></td>
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# Linking Agenda 2063 and the SDGs

<table>
<thead>
<tr>
<th>Agenda 2063 Goals</th>
<th>SDGs No.</th>
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<tr>
<td>1 A high standard of living, quality of life and well-being for all citizens</td>
<td>1, 2, 8 and 11</td>
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<td>2 Well educated citizens and skills revolution underpinned by science, technology and innovation</td>
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<td>3 Healthy and well-nourished citizens</td>
<td>3</td>
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<td>4 Transformed economies</td>
<td>8 and 9</td>
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<td>5 Modern agriculture for increased productivity and production</td>
<td>2</td>
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<td>6 Blue/ocean economy for accelerated economic growth</td>
<td>14</td>
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<tr>
<td>7 Environmentally sustainable and climate resilient economies and communities</td>
<td>6, 7, 13 and 15</td>
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<td>8 A United Africa (Federal or Confederate)</td>
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<td>9 Continental financial and monetary institutions established and functional</td>
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<td>10 World class infrastructure crisis - crosses Africa</td>
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<td>11 Democratic values, practices, universal principles of human rights, justice and the rule of law entrenched</td>
<td>16</td>
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<td>12 Capable institutions and transformative leadership in place</td>
<td>1</td>
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<td>13 Peace, security and stability is preserved</td>
<td>16</td>
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<td>14 A stable and peaceful Africa</td>
<td></td>
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<td>15 A fully functional and operational APSA</td>
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<td>16 African cultural renaissance is pre-eminent</td>
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<td>17 Full gender equality in all spheres of life</td>
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<td>18 Engaged and empowered youth and children</td>
<td>4 and 5</td>
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<td>19 Africa as a major partner in global affairs and peaceful co-existence</td>
<td>17</td>
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<td>20 Africa takes full responsibility for financing her development Goals</td>
<td>10 and 17</td>
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**SDG 4**: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
Transforming Education in Africa

Priority Actions
(including Youth in Africa)

Success Stories:
Initiatives, Projects

Partnership and Collaborations (e.g. Networks)
Priority actions to advance Education in Africa (1)

1. Implementation of two major strategies through Member States and Partners using the cluster method:
   • Continental Education Strategy for Africa (CESA)
   • Continental strategy on Technical Vocational Education and Training (TVET)

2. Promoting women and girls in education in Africa
   • Technology, E-learning and Blended learning
   • Teacher Training and Professional Development
   • Infrastructure and Resources – School facilities, learning materials and ICT
   • Research and Development
Priority actions to advance Education in Africa (2)

Promoting

- Promoting development curation and use of education statistics (e.g. M & E – data collection/Impact assessment)

Increasing

- Increasing number of highly qualified citizens in the fields of sciences, technology and innovations with skills that are aligned to the continent’s human resource requirements
Youth in Africa

- The Continental Education Strategy for Africa (CESA)
- The African Charter on Democracy, Elections and Governance
- The African Youth Charter
- The Demographic Dividend Roadmap
- The Ouagadougou Declaration & Plan of Action on Employment
- Continental Strategy on Technical Vocational Education and Training
- The Continental Education Strategy for Africa (CESA)
Success Stories - Education Initiatives & Projects

Initiatives

• International Conferences on Education or related themes
  • AU-EU-UNICEF education event ‘Building skills for the future’ on 20 April 2021
  • Its follow up at the 76th UNGA in 2021 when the AUC and UNICEF convened Ministers of Education and development partners to discuss ‘Reimagining Education in Africa’ at the margins of the General Assembly
    • Launch of Transforming Education in Africa Report (AU-UNICEF joint report): 8 specific recommendations to support transforming education systems in Africa

• International Agreements/Commitment
  • African Union Commission has a MOU with UNICEF, UNESCO, WFP and the EU and are collaborating in areas of common interest including Education and Skills Development, Culture and on Home Grown School Feeding

• Projects
  • UNESCO Projects
    • Better Education for Africa’s Rise II (BEAR II)
    • ASPnet School Project
  • Fundisa for change
  • Ecoschool Project
  • Others
Levels of Implementation

Partnership and Collaboration (1)

Institutional arrangements

Implementations

Decisions
Global Environmental Education Partnership (GEEP) – A global Initiative

Goal:

to create a vibrant and inclusive network designed to build capacities in countries around the world to strengthen environmental education leading to a more and sustainable future
A just and sustainable Africa through meaningful thought leadership and lifelong learning to maximise Africa’s potential

To enable and strengthen a dynamic regional sustainability movement that is transformational, collaborative, and grassroots oriented, using multi-sectoral networks, social inclusion, and indigenous knowledge to advance Environmental Education for a just and sustainable Africa.
Thank you
Social and Environmental Justice

Dr Adedoyin Adeleke
Founder and Executive Director of Green Growth Africa, Nigeria
TRANSFORMING EDUCATION IN AFRICA: THE NEXUS OF CLIMATE JUSTICE & SOCIAL JUSTICE

Adedoyin Adeleke, PhD
Executive Director

www.thegreengrowth.org
Today’s Talking Points

Introduction: Africa at Crossroads

Why Social Justice for Africa?

Why Climate Justice for Africa?

Africa’s Ultimate Competitive Advantage: Her Youthful People

Interlinkages between climate justice and social justice & impact on transforming education in Africa

Recommendations for the Way Forward: Mainstreaming E-STEAM & climate education, pedagogical transformation, etc.
1. Africa at the Crossroads
Africa has historically faced complex, intertwined, wicked problems...

More than half of the world’s extreme poor live in Africa

Proportion of the employed population living on less than $1.90 a day, 2019–2021 (percentage)

Note: “Extreme poor” refers to the percentage of the population living below USS1.90 per person per day.
Food Insecurity

Hunger in Africa: The Situation is Serious
Grading of countries in Africa according to the World Hunger Index 2021

Source: Welthungerhilfe

Reimagining African Development
Conflicts & Displacement

- There are now an estimated 40.4 million forcibly displaced Africans (internally displaced persons, refugees, and asylum seekers), more than double the figure in 2016 – ACLED, 2023

- 9600 schools (about 2 million students) closed due to conflicts as at 2020
Healthcare challenges

maternal mortality ratio 531 deaths per 100,000 live births

Africa accounted for 69% of global maternal deaths in 2020
2. Why Social Justice for Africa?
Why Africa Needs Social Justice

• Socio-economic Inequality: The combined wealth of Africa’s top three billionaires surpasses that of the bottom 50%, encompassing around 650 million people.

• Structural Inequality: Gender Inequality, Ableism, etc

• Intergenerational Inequality: Youth unemployment & poverty
Mapping of income inequality in Africa

Youth employment status in Africa, 2015

- Contributing to the economy
- Not actively contributing to the economy
  - Unemployed and discouraged 31%
  - Vulnerable 35%
  - Wage 15%
  - Inactive 19%

Source: World Bank (WDI), latest year as of December 2016
3. Why Climate Justice for Africa?
• Climate change is an existential crisis & justice issue
• Despite contributing a mere 3% to the global average of greenhouse gas emissions, Africa faces disproportionate vulnerability to climate change impacts.

Flood incidents in Africa have surged tenfold since the 1960s, leading to over 20,000 deaths.
Climate change impacts amplify existing problems in Africa: extreme poverty, food insecurity, hunger, poor health, conflict, internal displacement, etc.

Worsening droughts since the 1960s have led to over 500,000 deaths.
Africa Is on the Frontline of Climate Change

Index scores for climate resilience of African countries in 2022

$50 Billion per annum

Cost of adapting to climate change in Africa by 2050

Based on assessment of 180 countries for readiness, vulnerability and GDP.
* Averages based on 10 countries in Southern Europe, 53 in Africa.
Sources: Henley & Partners, Statista calculations
We must close the climate/environmental education gap

50% Of countries have no reference to climate change in their curriculums
– UNESCO, 2021

>40% Of teachers in countries with climate change referenced in curriculums feel self assured to teach about climate change
– UNESCO, 2021
4. Interlinkages between Climate Justice & Social Justice
Climate Justice & Social Justice are two sides of the same coin: the climate crises exacerbates existing inequalities

**Income-Inequalities**: Low-income countries and vulnerable populations within them face heightened susceptibility to climate-induced loss and damage.

**Structural Inequalities**: Women, persons with disabilities having fewer resources to adapt, are disproportionately affected.

**Intergenerational Inequalities**: Younger generations, who didn’t contribute to the present climate crises, would bear the brunt.
What would the nexus of social and climate justice then look like in Africa?

- **Redistribution (of resources)**
  - Financing Africa’s adaptation (Loss & Damages Fund, Global Adaptation Fund) by polluting countries to strengthen the continent’s resilience; Shift from non-renewable energy to renewable energy

- **Recognition (of marginalized groups)**
  - Acknowledging the existence and impact of climate change in Africa & how it compounds existing inequalities and aggregating data on inequalities

- **Participation (of individuals and groups)**
  - Giving room for effective participation in Climate-related decision-making especially sufficient representation, etc
The solution to Africa’s problems lie in Africa

– George Ayittey
Africa is the only continent in the world where more than 60% of its population are under age 25.

AFRICA IS THE MOST YOUTHFUL CONTINENT

% OF THE POPULATION UNDER 25 YEARS OLD

- 59.9% AFRICA
- 26.5% EUROPE
- 31.4% NORTH AMERICA

Source: 2019 World Population Prospects Vol 2 Demographic Profiles

Reimagining African Development
• This demographic dynamic presents a substantial opportunity for Africa.

• However, young people in Africa are faced with the continent’s many troubles – which affects their ability to harness the potential.
6. Way Forward: Transforming Education in Africa
1. Investing in E-STEAM & Climate Education

- Investing in her youth through quality, environmental and STEAM-based education is the only avenue for Africa to keep up with global development dynamics that climate & social justice will bring about.

- It also holds the key to leapfrog Africa’s development.

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Zero Carbon Transition

New questions & new knowledge

Changes in Industry & Skills relevance
“By the end of the decade, the labour needs of the sustainability transition will most likely be different” – Demos Helsinki
3. Pedagogy Change: Adopting Experiential/Active Learning

Kolb’s Experiential Learning Cycle

rethinking what you already know and connecting it to new ideas, that is, all learning is relearning!
Why Experiential Learning?

1. 21st Century Learning Contexts
   • Relevant
   • Engaging
   • Effective
   • Learner-centric

– UN Educational, Scientific and Cultural Organization (UNESCO) 2015
2. Project and problem-based learning employs the 4Cs Principle

- Critical Thinking
- Creativity
- Collaboration
- Communication
THANK YOU!

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Reimagining African Development

@GreenGrowthHub
Climate Social Digital Justice

Ms Kerry McLean,

Coastal Programmes Manager at Wildlife and Environment Society of South Africa, South Africa
CLIMATE JUSTICE

Governance

Technology

Finance

Capacity building

AI

ACCESS

USE

INNOVATION

DIGITAL JUSTICE!!

IMPLEMENTATION OF TECHNOLOGY

Governance
Digital Justice: NB framing questions for local contexts

Who is developing this technology, for whom and for what, and with what data?

Who profits from this technology?

Who holds sovereignty and ownership rights to the data, and what is at stake, and for whom, in the resulting applications?

Does this technology reinforce an extractive economic system or do these systems contribute to possibilities for environmental and climatic justice?

AINOW - Meredith Whittaker
“Technology should augment human capabilities, not replace them. Our focus is on using technology to solve real problems that Africans face, from access to education and health services to financial inclusion. Technologies like mobile money, e-commerce, and e-learning have the potential to create new opportunities if developed with the needs of African users in mind,”

H.E. Dr Amani Abou-Zeid, AU Commissioner for Infrastructure and Energy
Agenda 2063

Science, Technology and Innovation Strategy for Africa 2024 (STISA-2024)

African Union's Digital Transformation Strategy

African Union's Africa Data Policy Framework

African Union Digital Education Strategy & Implementation Plan

AFRICAN POLICIES AND FRAMEWORKS
Transformative Education for Sustainable Development

Agenda 2063 - "An Africa with Development Led by the Knowledgeable, Skilled, and Innovative Citizens"

AI Application:

* Personalised learning experiences
* Adaptative learning platforms
* Engaging and effective learning

**ADvLEARN at ADvTECH SCHOOLS**
Inclusive and sustainable Economic Growth

Agenda 2063 - “A Prosperous Africa Based on Inclusive Growth and Sustainable Development.”

AI Application:

* Inclusive and equitable access to quality learning resources.
* Bridge gaps in educational opportunities, aligning with the goal of inclusive growth.
Youth Empowerment for Sustainable Development

Agenda 2063 - "An Africa Whose Development is People-Driven, Relying on the Potential Offered by People, Especially its Women and Youth."

AI Application:

* Relevant skills for the future.
* Emerging fields (artificial intelligence, robotics, and green technologies)
* Preparing the youth for impactful roles in sustainable development.
Ethical AI in Education:


AI Application:

* Ethical integration of AI frameworks into educational systems in alignment with cultural values.

* African Union Digital Education Strategy & Implementation Plan
Lifelong Learning and Innovation:

Agenda 2063 - "Africa as a Strong, United, and Influential Global Player and Partner."

AI Application:

* Adaptive learning environments encourage continuous skill development and innovation.
* AI-driven entrepreneurs
* Accessible, affordable training
AI Adoption & Implementation Challenges

* Digital divide
* Exacerbation of inequalities
* African data is limited
* Job losses
* Complexity & speed - regulatory challenges
* Environmental cost
AI POWERED TRANSFORMATION IN AFRICA
Thank you!
Mentimeter: To capture your Thoughts

www.menti.com

Type in Code: 63 50 91 6
Webinar Closure

Professor Mphemelang Ketlhoiwe

Advisor
GEEP Advisory Board Member
THANK YOU