



# UNLOCKING AFRICA'S YOUTH POTENTIAL FOR SOCIO-ECONOMIC TRANSFORMATION

2024 Africa Regional Conference & Exhibition  
on Education and Skills Development (ARC-EDS)

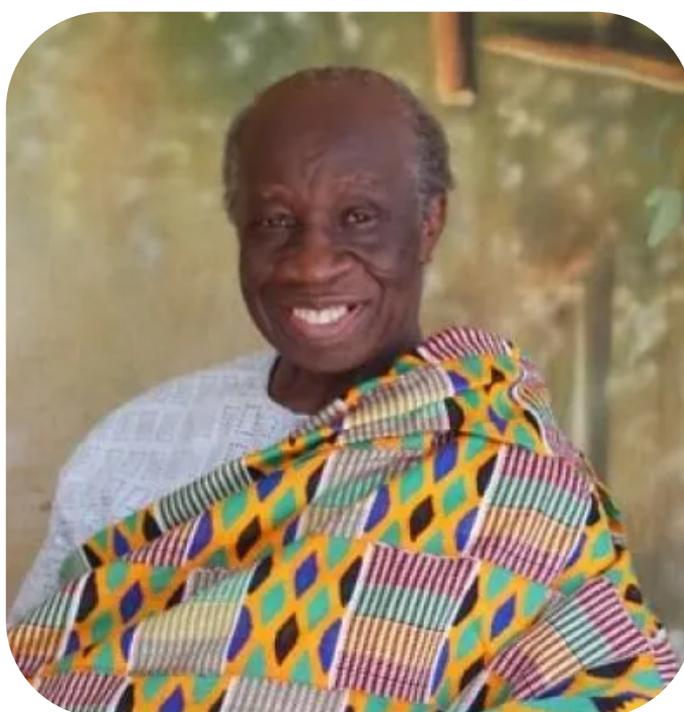
12<sup>th</sup> June 2024,  
Movenpick Ambassador Hotel, Accra

## SUMMARY REPORT

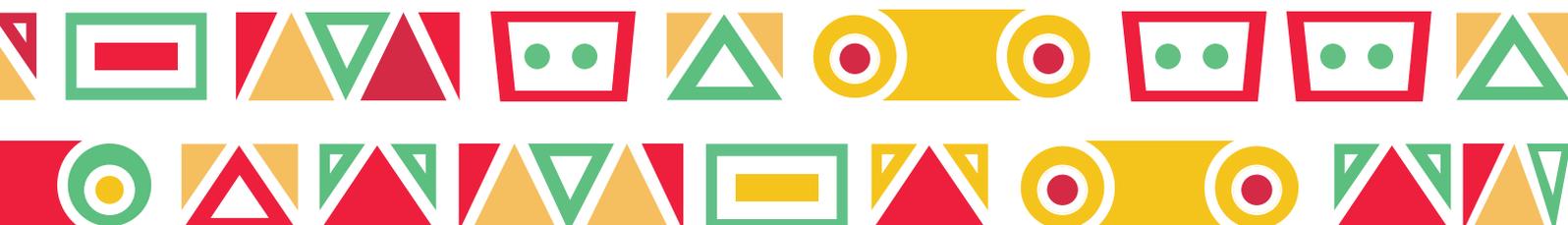




in partnership with



Inspired by the vision and aspirations of the late Prof. Francis K. A. Allotey, the renowned Ghanaian Mathematical Physicist and promoter of STEM education in Africa



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## EXECUTIVE SUMMARY

The ESDEV Foundation Africa launched the Africa Regional Conference & Exhibition on Education and Skills Development (ARC-EDS) with a focus on enhancing quality education, skill development, innovative research, and lifelong learning opportunities to drive Africa's socio-economic transformation. The conference aims to address youth unemployment and skills development, highlighting Technical and Vocational Education and Training (TVET) as a critical pathway for equipping young Africans with entrepreneurial skills and reducing unemployment and dependency in the region. The inaugural 2024 edition, held in partnership with Accra Technical University, provided a platform for stakeholders to engage in collective discussions, fostering hope and opportunities for Africa's youth and socio-economic advancement. The conference's urgency is underscored by the 2023 United Nations Report, which indicated that only 12% of the Sustainable Development Goals (SDGs) are

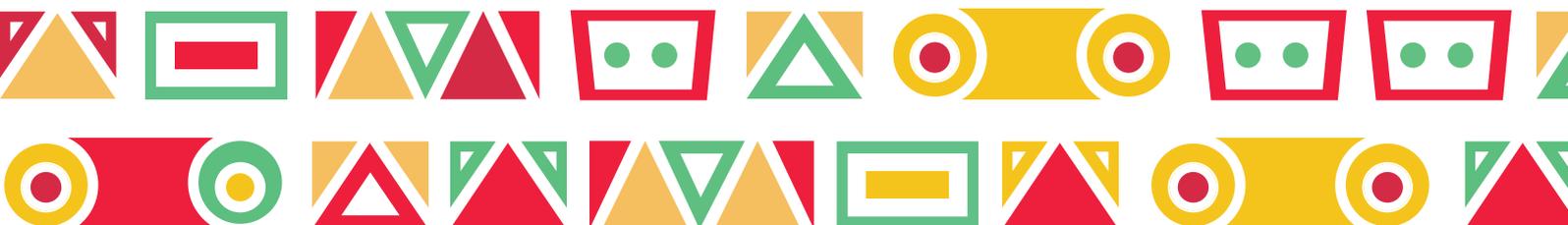
on track to be achieved by 2030, with particular concern about Goal 8 focused on inclusive and sustainable economic growth and decent work for all. With Africa's youth unemployment rates exceeding 30% in many sub-Saharan countries, and projections showing Africa's population reaching 2.5 billion by 2050, there is a pressing need for policy interventions and collective action to equip the youth with relevant skills for employment and entrepreneurship. The conference had three parts. The First part focused on the background context, introduction and opening ceremony. This session, chaired by Professor Jophus Anamuah-Mensah featured notable speakers including Hon. Yaw Osei Adutwum, Ghana's Minister for Education, whose statement was read on his behalf by the Deputy Minister for Education, Hon. Rev. Ntim Fordjour who emphasized comprehensive educational reforms, critical thinking, and practical skills. He advocated for strengthening TVET, public-

private partnerships, and integrating innovation and technology in teaching. Mr. Prosper Nyavor of UNESCO highlighted the UN's commitment to transforming education and creating sustainable employment opportunities, stressing the importance of addressing youth unemployment to prevent exposure to violent extremism and its adverse effects.

The second part featured two plenary sessions, each focusing on a different theme.

Professor Piero Dominici (Universita Degli Studi di Perugia, Umbria, Italy) called for rethinking education to incorporate empathy,

critical thinking, and systemic views in the age of technological dominance. Dr. John Mugo (Executive Director, Zizi Afrique Foundation, Nairobi, Kenya) emphasized the importance of quality education and skilling to harness Africa's demographic dividend, sharing insights from Kenya's Ujana360 program on enhancing TVET systems. Professor Benno Werlen (UNESCO Chair on Global Understanding for Sustainability, Friedrich Schiller University, Jena, Germany) underscored the need for global sustainability efforts that respect cultural and regional diversities, as outlined in the Jena Declaration.



The second plenary session focused on leveraging emerging technologies for youth employment in Africa. Prof. Fengchun Miao, (Chief of Unit for Technology and AI in Education at UNESCO) presented a human-centered approach to AI in education, highlighting UNESCO's achievements in integrating AI into learning, introducing methodologies for human-AI collaboration, and developing AI competency frameworks for students and teachers to ensure ethical and effective use of AI in educational settings.

Professor Nnamdi Nwulu (University of Johannesburg, South Africa) emphasized the potential of technologies like Blockchain and

AI to create job opportunities and enhance productivity. The session also highlighted the need for integrating these technologies into educational curricula and training programs to prepare the next generation for the global economy. The conference also featured discussions on social entrepreneurship and its role in addressing unemployment and environmental sustainability. Dr. Jamie Halsall (University of Huddersfield, United Kingdom) underscored the importance of supportive legal frameworks and skills development programs to promote social enterprises, calling for international partnerships and collaborative efforts to create an enabling environment for their success.





The ARC-EDS exhibition showcased innovative projects from technical universities, highlighting academic achievements and promoting knowledge sharing. The exhibit submissions were evaluated by a distinguished panel of judges, with awards recognizing excellence in innovation and impact. The event concluded with awards for outstanding exhibits, fostering a spirit of innovation and setting a precedent for future conferences.

The 2024 ARC-EDS successfully highlighted the critical role of education and skills development in addressing Africa's socio-economic challenges. The event provided a platform for stakeholders to collaborate, share knowledge, and inspire future innovations. Moving forward, continuous efforts will be needed to enhance educational reforms, integrate emerging technologies, and promote social entrepreneurship to drive sustainable development and economic progress across the continent.

# PART 1

## INTRODUCTION, BACKGROUND CONTEXT & OPENING CEREMONY



# 1. INTRODUCTION



The Africa Regional Conference & Exhibition on Education and Skills Development (ARC-EDS) was initiated by the ESDEV Foundation Africa to enhance quality education, skill development, innovative research, and lifelong learning opportunities for Africa's socio-economic transformation. ARC-EDS aims to tackle the issues of unemployment and skills development for employability among Africa's youth. The conference also champions Technical and Vocational Education and Training (TVET) as a viable option to equip young people with entrepreneurial knowledge and skills, helping to reduce unemployment and dependency across the region.

The inaugural 2024 edition, organized in partnership with Accra Technical University, provided a crucial platform for stakeholders in

education and skills development to engage in collective thinking. The annual event is expected to significantly improve the prospects of Africa's growing youth population, creating hope and opportunities for the continent's socio-economic progress.



## 2. BACKGROUND CONTEXT

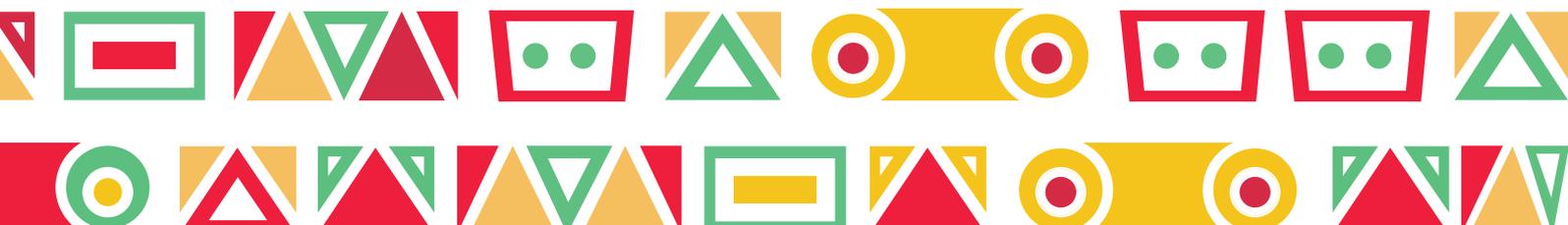


According to the 2023 United Nations Report, Secretary-General Antonio Guterres revealed that only 12% of the 17 Sustainable Development Goals (SDGs) are on track to be achieved by 2030. The report underscores the necessity for a substantial increase in efforts to meet the goals by the deadline. Particularly troubling is Goal 8, which focuses on inclusive and sustainable economic growth, full and productive employment, and decent work for all. Achieving this goal appears unattainable for many African countries, where youth unemployment rates exceed 30% in numerous sub-Saharan African nations.

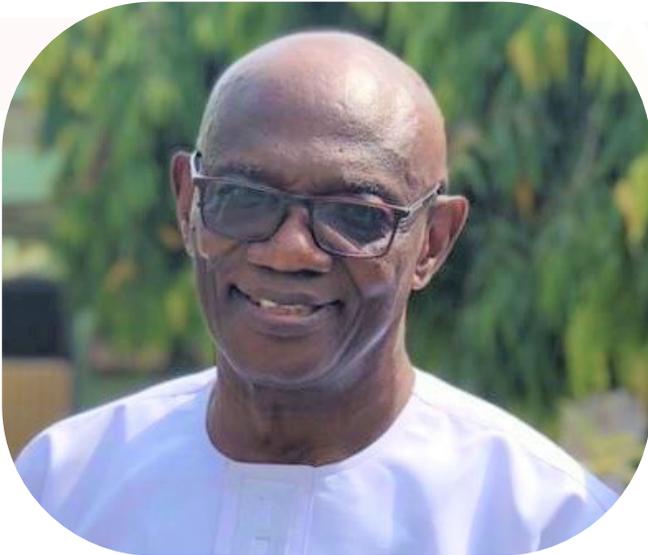
The United Nations projects Africa's population to reach 2.5 billion by 2050, meaning nearly one-third of the world's population will reside in Africa within three decades. This demographic shift presents a significant challenge for African governments. Studies by the International Labor Organization indicate that nearly 13 million young

people in Africa are unemployed, with more than one in four not engaged in employment, education, or training. Two-thirds of these individuals are women. Despite their willingness to work, young people face multifaceted challenges in securing jobs. With a burgeoning youth population, Africa stands at a crossroads. Despite its demographic advantage, the continent faces significant hurdles in education and skill development for employability. This scenario calls for collective action by African governments and stakeholders to equip youth and adults with relevant skills for employment, decent jobs, and entrepreneurship opportunities.

In this context, the ESDEV Foundation Africa views Africa's projected population growth as a call to action for governments and stakeholders to urgently implement policy interventions to address the socio-economic and environmental sustainability challenges associated with this phenomenon.



### 3. OPENING CEREMONY



Prof. Jophus Anamuah-Mensah  
*Chairman*

Under the chairmanship of Professor Jophus Anamuah-Mensah, a renowned Ghanaian educationist, the opening ceremony of the 2024 ARC-EDS was held on June 12, 2024, at the prestigious Movenpick Ambassador Hotel in Accra. The event attracted over 300 participants from 23 African countries, including policymakers, industry leaders, representatives of academic institutions, technical universities, TVET and STEM practitioners, and students. Together, they set the stage for meaningful discussions and collaborations aimed at addressing the pressing challenges of unemployment and skills development in Africa.

In his speech at the ARC-EDS opening ceremony, Hon. Yaw Osei Adutwum, the Minister for Education of Ghana, in a statement read on his behalf, emphasized the government's ongoing efforts towards comprehensive educational reform, focusing on critical thinking and practical skills. He highlighted the importance of

strengthening Technical and Vocational Education and Training (TVET) to equip youth with market-relevant skills, essential for Africa's socio-economic transformation.

The Minister stressed the need for public-private partnerships to enhance the quality and reach of education and advocated for integrating innovation and technology in teaching methods. He called for immediate policy interventions across Africa to support education reforms and promote lifelong learning, ensuring continuous education and skill enhancement opportunities for individuals at all stages of life. His message was a powerful call to action for transforming education and empowering Africa's youth through skills development and innovative learning approaches.



Hon. Dr. Yaw Osei Adutwum  
*Minister for Education*



Mr. Prosper Nyavor, UNESCO

Representing the UN Ghana Country Team, Mr. Prosper Nyavor of UNESCO underscored the collective commitment of the UN to transforming education and creating sustainable employment opportunities for the continent's youth. He noted that the increasing youth unemployment across Africa, particularly in sub-Saharan Africa, needs urgent attention due to its security implications. The current hopelessness among young people risks exposing them to violent extremism and its adverse effects. He acknowledged the timeliness of the conference in highlighting the opportunities available on the continent to address rising youth unemployment in Africa.

Mr. Nyavor continued that the United Nations advocates for greater youth participation in policy and governance, recognizing their innovation and energy. Through the UN country-level Cooperation Frameworks, which aim to end poverty, reduce inequalities, and protect the environment through the SDGs, addressing youth unemployment through enhanced education and skills development is crucial for achieving these goals.



# **PART 2 TECHNICAL PRESENTATIONS BY EXPERTS**

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## PLENARY SESSION 1

### REDEFINING EDUCATION TO ADDRESS SKILL GAPS FOR YOUTH EMPLOYMENT: THE NEED FOR A BROADER POLICY FRAMEWORK FOR AFRICAN GOVERNMENTS



Prof. Piero Dominici  
Universita Degli Studi di Perugia, Umbria, Italy

#### *1.1. Rethinking Education and Didactics in the Age of Obsolescence of Paradigms and Skills*

Professor Piero Dominici's presentation highlighted the pressing need to rethink education in a society increasingly shaped by technological dominance and virtual simulations. He underscored how these trends blur distinctions between reality and virtuality, natural and artificial, eroding accountability and diminishing human roles in society. systemic understanding, effective communication, imagination, and creativity.

The speaker advocated for an educational approach that is socio-emotional and systemic, aligning with ongoing societal transformations. A key focus was on developing new epistemological frameworks to navigate the complexities of modern society effectively.

The presentation distinguished between complicated and complex systems, emphasizing the need to understand these distinctions in educational settings. Africa was highlighted as an ideal context for implementing these educational reforms, given its rich cultural diversity and potential to foster greater inclusivity.

Overall, the presentation called for a thorough reassessment of educational practices to better

integrate human-centric values that can adapt to the complexities of an increasingly technologically advanced world.



Dr. John Mugo  
Director, Zizi Afrique Foundation, Kenya

## 1.2. Quality education and skilling of youth is the way to reap the demographic dividend in Africa

The insightful presentation by Dr. John Mugo, Director, Zizi Afrique Foundation Kenya, focused on Africa's demographic advantage and the imperative of human capital development through education and youth skilling. With Africa projected to lead global labor supply by 2050 and boasting a youthful population, the presentation highlighted significant disparities including the fact that less than half of Africa's children cannot read by age 10, and many secondary school graduates enter unskilled labor.

The Speaker began with an overview of Africa's youth demography, emphasizing the opportunities and challenges in youth skilling. He underscored the evolving skills demanded by the global workforce, driven by rapid technological advancements and shifts in labor markets. A pivotal aspect of this keynote was the exploration of Kenya's Ujana360 program, which aims to enhance the Technical and



Vocational Education and Training (TVET) system. The program's progress and lessons learned in embedding holistic development competencies across policy, research, curriculum, and teacher training were shared at the conference.

The lessons from the Ujana360 program highlighted for other African countries included the alignment of programs with government priorities as a means to influence policy, foster broad stakeholder participation, prioritizing equity and inclusion to reach marginalized youth. The speaker concluded with actionable priorities for policy, research, and practice to leverage Africa's demographic dividend effectively, emphasizing the importance of collective action to avoid potential demographic pitfalls.



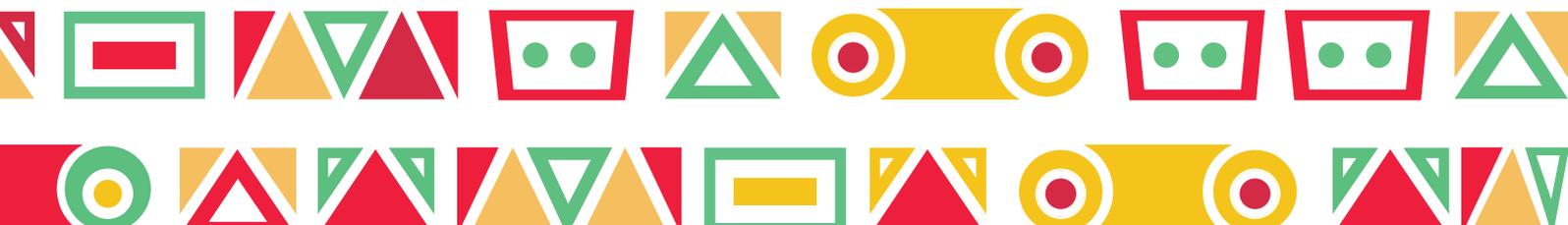
Prof. Benno Werlen

UNESCO Chair on Global Understanding for Sustainability

### 1.3. The Jena Declaration in Unlocking Africa's Youth Potentials

Professor. Benno Werlen, UNESCO Chair on Global Understanding for Sustainability, Friedrich Schiller University, Jena, Germany, underscored the urgency to address global challenges to achieve the Sustainable Development Goals (SDGs) in a timely manner. Professor Werlen stressed that the current top-down strategies by many development models often overlook cultural and regional nuances, resulting in limited public engagement and delayed progress in development programs.

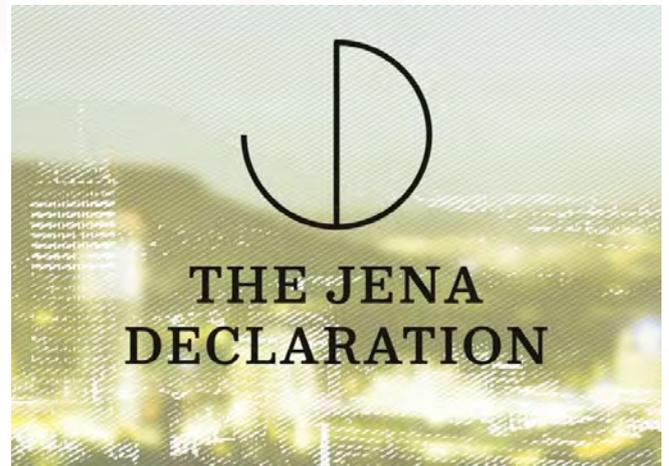
A key focus of the presentation was on mobilizing ordinary citizens as agents of change through new learning strategies that respect cultural and regional diversities worldwide. He emphasized the necessity of developing differentiated pathways toward global sustainability.



The Jena Declaration emerged from a conference organized by the UNESCO Chair on Global Understanding for Sustainability in Jena, Germany. The declaration is supported by esteemed organizations including the World Academy of Art & Science and The Club of Rome. It calls for sustainability efforts that honor cultural and regional diversity, seeking to galvanize global efforts for a profound societal transformation towards sustainable living and fostering broad-based mobilization and unity for change.

Overall, the speaker called for reforms in learning and educational programs to effectively address contemporary challenges. These reforms should include breaking down disciplinary boundaries to create a more integrated approach to knowledge,

emphasizing authentic learning processes that align with modern demands, and promoting inclusivity and culturally sensitive approaches to achieve sustainable development goals.



## SALIENT POINTS AND KEY RECOMMENDATIONS FROM PLENARY SESSION 1

- i. Tackle technological dominance and accountability, improve digital literacy, advocate for transparency in technological advancements, and incorporate critical thinking skills into educational curricula.
- ii. Promote Human-Centric Education, prioritize soft skills such as empathy and communication, foster interdisciplinary learning, and nurture creativity within educational structures.
- iii. Address Complexity and Educational Reform effectively, implement training on understanding complex systems, encourage cross-cultural exchange, and advocate for adaptable educational policies that respond to global challenges.
- iv. African nations must ensure that, youth skilling programs are aligned with national development agendas to effectively influence policy priorities. Given Africa's demographic profile, which positions it as a key future leader in global labor supply by 2050, addressing disparities in educational attainment is crucial. This underscores the necessity for quality education and skills development starting early in life.
- v. Adapt educational systems to meet the evolving demands of the global workforce. This is crucial for preparing youth for meaningful employment amidst rapid technological advancements and shifts in labor markets.

vi. It is recommended to encourage the active involvement of diverse stakeholders, including government agencies, educational institutions, businesses, and civil society, to ensure robust support for youth skilling initiatives. This inclusive approach will enhance the effectiveness and impact of development programs.

vii. Insights from Kenya's Ujana360 program highlight the importance of incorporating holistic development competencies into TVET systems. To achieve successful outcomes, it is crucial to align policies with government priorities, encourage stakeholder participation, and prioritize equity and inclusion in youth skilling initiatives.

viii. Ensure that youth skilling programs prioritize equity and inclusion by aiming to reach marginalized communities and effectively addressing disparities. This involves providing equal access to quality education and training opportunities for all youth, regardless of their background or location.

ix. Implement inclusive and culturally sensitive strategies in designing sustainability initiatives that respect and incorporate cultural and regional diversities. This approach will enhance public engagement and ensure more effective and widely accepted outcomes.

x. Mobilize ordinary citizens as change agents by empowering them with new learning strategies that encourage active participation in achieving the SDGs. Promoting grassroots involvement will drive a broad-based and sustainable societal transformation.

xi. Reform educational programs by updating learning systems to address modern global challenges. This involves removing disciplinary barriers, encouraging authentic and interdisciplinary learning, and aligning education with contemporary needs to better prepare individuals for sustainable living.





## PANEL DISCUSSIONS

### THE PERSPECTIVE OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING (TVET) IN ADDRESSING SKILLS GAPS FOR YOUTH EMPLOYMENT IN AFRICA



Prof. Humphrey Danso  
*Moderator General*

The panel discussions, moderated by Professor Humphrey Danso of the Akyem Appiah Mensa University for Skills training and Entrepreneurship Development (AAMUSTED) in Kumasi, Ghana, explored the perspectives of Technical and Vocational Education and Training (TVET) in addressing skills gaps for youth employment in Africa. These discussions focused on four critical areas: adapting to technological change, addressing skills mismatch and unemployment, promoting equity and inclusion, and encouraging lifelong learning. The panel included experts from policy regulation, academia, industry, and youth TVET practitioners, offering diverse perspectives on effectively tackling these important issues.





## SUMMARIES OF THE DISCUSSIONS

### 1. Adapting to Technological Changes:

i. During the panel discussion on the topic of adapting to technological changes, it was emphasized that TVET institutions must establish strong partnerships with industry leaders and technology firms to stay informed about the latest advancements. These collaborations are essential for regularly updating curricula and investing in advanced training for instructors. By doing so, TVET institutions can ensure that students receive education that is relevant to current industry standards.

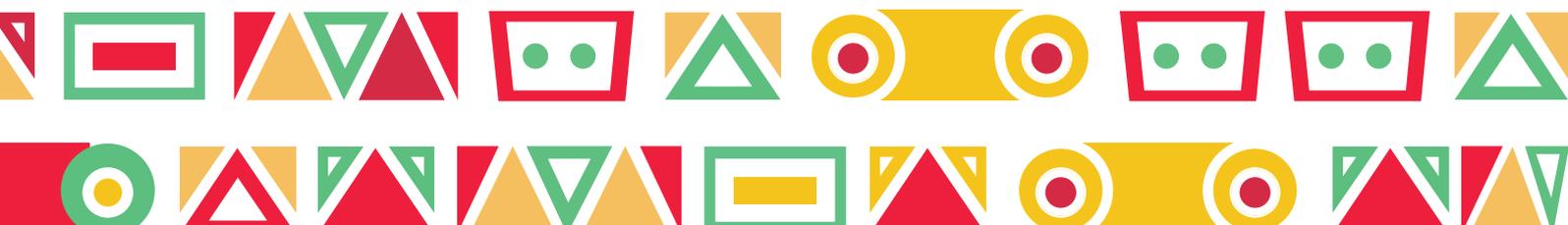
ii. Furthermore, strategies to integrate emerging technologies into TVET curricula were discussed. One key approach is incorporating hands-on training with cutting-edge technology through industry collaborations, internships, and apprenticeships. Developing flexible, modular curricula that can be quickly adjusted to include emerging technologies is crucial.

iii. Additionally, providing continuous professional development for educators to effectively teach these new skills will help bridge the gap between education and industry needs.

### 2. Skills Mismatch and Unemployment:

i. Addressing the skills mismatch and youth unemployment, the panel highlighted the importance of TVET systems conducting regular labor market assessments. These assessments help identify the skills in demand, allowing training programs to be adjusted accordingly. Engaging employers in the curriculum development process and establishing advisory boards comprising industry experts can ensure that the training provided aligns with market needs.

ii. To address youth unemployment, it was recommended that TVET programs implement



competency-based training that focuses on practical, job-ready skills. Building strong relationships with local businesses to facilitate job placements and apprenticeships for students ensures that training is directly linked to employment opportunities. This approach helps bridge the gap between the skills taught and the skills demanded by employers, enhancing the employability of graduates.

### 3. Equity and Inclusivity:

i. Promoting equal access to quality education was a key topic of discussion. TVET institutions were encouraged to develop outreach programs targeting underrepresented groups and provide scholarships or financial aid to those in need. Establishing satellite campuses or online learning options can help reach students in remote areas. Creating supportive environments that encourage participation from all demographics is vital for fostering inclusivity.

ii. Measures to ensure inclusivity and diversity within TVET programs were also discussed. Implementing policies and practices that promote diversity, such as anti-discrimination training and inclusive teaching methods, can create a more welcoming environment. Mentorship programs and ensuring that facilities and resources are accessible to students with disabilities further support inclusivity. By fostering a culture of inclusivity within the institution, TVET programs can attract and retain a diverse student body.

### 4. Lifelong Learning:

i. The panel also addressed the importance of encouraging lifelong learning among graduates. Offering continuing education programs and short courses tailored to the needs of working professionals is essential. Creating flexible learning pathways and providing access to online resources and certifications can help graduates continuously update their skills.

ii. Continuous skill development plays a crucial role in enhancing employability. It ensures that employees remain competitive in the job market and can adapt to new roles as industries evolve. By fostering a culture of lifelong learning, TVET programs can help individuals maintain their employability and advance their careers. This approach not only benefits the individuals but also contributes to the overall development of a skilled workforce that can meet the changing demands of the job market.



## PLENARY SESSION 2

### LEVERAGING EMERGING TECHNOLOGIES AND PATHWAYS TO ADDRESS YOUTH EMPLOYMENT CHALLENGES IN AFRICA



Prof. Fengchun Miao

Chief, Unit for Technology & AI in Education, UNESCO, Paris

#### **2.1. Building AI Competencies for Teachers and Students.**

Professor Fengchun Miao, Chief, Unit for Technology and AI in Education, UNESCO, presented an overview of the human-centered approach to AI, which UNESCO has been championing. This approach emphasizes the importance of placing human needs and values at the forefront of AI development and deployment. The presentation showcased key areas where UNESCO's digital learning program has made significant strides, particularly in integrating AI into educational settings to enhance learning outcomes. Notable achievements included various major publications that explore the implications and applications of AI in education, providing valuable insights and guidelines for educators and policymakers.



The speaker further introduced a human-AI collaboration methodology, designed to assess the suitability of generative AI for educational purposes. This methodology is rooted in UNESCO's Guidance for Generative AI in Education and Research, which addresses fundamental controversies surrounding the use of AI in educational contexts. The methodology emphasizes a balanced approach, ensuring that AI tools complement and enhance human teaching efforts rather than replace them. It also focuses on ethical considerations, data privacy, and the need for transparency in AI applications within the educational sector.



Professor Miao continued with two critical frameworks developed by UNESCO: the UNESCO AI Competency Framework for School Students and the UNESCO AI Competency Framework for Teachers. These frameworks are designed to equip both students and educators with the necessary skills and knowledge to navigate and leverage AI technologies effectively. The AI Competency Framework for School Students aims to foster a foundational understanding of AI among young learners, promoting critical thinking and ethical awareness. It covers various competencies, promoting critical thinking and ethical awareness. It covers various competencies, from basic AI literacy to more advanced topics, ensuring that



students are well-prepared for a future where AI plays a significant role in society.

Similarly, the AI Competency Framework for Teachers focuses on empowering educators to integrate AI into their teaching practices. It provides guidelines on using AI tools to enhance instructional methods, personalize learning experiences, and improve educational outcomes. This framework also emphasizes the importance of continuous professional development, ensuring that teachers stay updated with the latest advancements in AI technology and its applications in education.

The speaker concluded with a comprehensive exploration of UNESCO's efforts to promote a human-centered approach to AI in education. Through its digital learning program, innovative methodologies for human-AI collaboration, and the development of AI competency frameworks, UNESCO aims to ensure that AI technologies are used ethically and effectively in educational settings. The session underscored the importance of equipping both students and educators with the skills and knowledge needed to harness the potential of AI, ultimately fostering a more inclusive and innovative educational landscape.



## 2.2 Leveraging Emerging Technologies for Youth Employment in Africa.

The speaker, Professor. Nnamdi Nwulu, from the University of Johannesburg, South Africa, commenced this session with a poignant exploration of Africa's demographic landscape, emphasizing the unprecedented growth of its youth population and the immense economic potential this presents. However, he highlighted a critical challenge: the substantial gap between available skills and the demands of the job market, which significantly limits youth employment opportunities and overall productivity across the continent.

Central to the session's discussions was the role of emerging technologies as transformative tools in mitigating these challenges. Key technologies such as Blockchain and Artificial Intelligence were underscored for their potential to not only create new job avenues but also enhance existing businesses, thereby empowering young Africans economically. Prof. Nwulu posited that by equipping Africa's youth with the necessary skills and entrepreneurial capacities in these emerging technologies, they can effectively transition into knowledge workers poised to thrive in today's dynamic global economy.

A focal point of the presentation and subsequent was the integration of emerging technologies into educational curricula and training programs. Participants emphasized the importance of aligning these advancements with the needs of critical economic sectors such as manufacturing and agriculture. By doing so, stakeholders can effectively prepare the next generation of African workers to harness these technologies for sustainable economic growth. The session



Prof. Nnamdi Nwulu  
School of Electrical Engineering, University of Johannesburg, South Africa

further delved into practical strategies for collaboration among policymakers, educators, and business leaders. Concrete synergistic approaches were explored to facilitate the widespread adoption of emerging technologies across the continent. These collaborative efforts were seen as pivotal in creating an enabling environment where young Africans can acquire relevant skills and competencies, thereby catalyzing human capacity development on a continental scale.

The session further articulated a compelling vision for leveraging emerging technologies as catalysts for addressing youth unemployment in Africa. By strategically integrating these technologies into education, training, and key economic sectors, stakeholders can unlock the latent potential of Africa's youth, paving the way for inclusive growth and sustainable development across the continent. The discussions underscored the urgent need for concerted action and collaborative partnerships to realize this vision and propel Africa toward a prosperous future driven by innovation and human capital investment.



### **2.3. Embracing Entrepreneurship and Innovation in Public Policy Circles.**

This session emphasized the critical importance of social entrepreneurship and social enterprise in addressing the dual challenges of unemployment and environmental sustainability. As society grapples with these pressing issues, the role of higher education in fostering entrepreneurship and innovation has become increasingly evident. The presentation summarized key findings and discussions from existing work by Dr. Jamie Halsall of the University of Huddersfield, United Kingdom, focusing on the potential of social enterprises to drive societal sustainability and the necessary frameworks for their success. He argued for an international partnership policy brief

that offers realistic solutions for African countries within the framework of entrepreneurship education, drawing from an evidence-informed policy brief co-authored for the Ministry of Trade, Government of Ghana.

Dr. Halsall indicated that higher education institutions have been instrumental in promoting entrepreneurship and innovation across various contexts. These institutions serve as incubators for new ideas and solutions, equipping students with the skills and knowledge needed to address contemporary challenges. The classification and regulation of social enterprises are vital for optimizing their performance and delineating their relationships with other entities such as not-for-profit organizations and businesses.

He emphasized the importance of a supportive legal framework and targeted skills development for young people. The policy brief underscores the necessity of establishing a clear legal structure that defines and regulates social enterprises, ensuring they can operate efficiently and achieve their social missions. Additionally, the brief



Dr. Jamie P. Halsall  
*University of Huddersfield, United Kingdom*

advocates for embedding social enterprise skills within the higher education curriculum to enhance graduate employability and foster a culture of innovation and entrepreneurship among the youth.

A robust legal framework is essential for the success of social enterprises. Such a framework can provide clear guidelines for the formation, operation, and governance of social enterprises, distinguishing them from traditional businesses and not-for-profit organizations. This clarity will help in attracting investment and support from various stakeholders, including government, the private sector, and international partners.

Moreover, skills development is crucial for empowering young people to engage in social entrepreneurship. Educational programs should focus on practical skills and competencies needed to start and sustain social enterprises. These programs should include training in business management, financial literacy, marketing, and the use of technology and innovation to solve social and environmental problems.



In conclusion, Dr. Jamie Halsall underscored the significant potential of social enterprises in addressing unemployment and environmental challenges in Africa. By leveraging the role of higher education in promoting entrepreneurship and innovation, and by establishing supportive legal frameworks and skills development programs, social enterprises can become powerful tools for societal sustainability. The presentation further highlighted the need for international partnerships and collaborative efforts to create an enabling environment for social enterprises to thrive. He called for concerted action from policymakers, educators, and business leaders to harness the potential of social entrepreneurship in driving socio-economic progress in Africa.

## SALIENT POINTS AND KEY RECOMMENDATIONS FROM PLENARY SESSION 2

- i. Adopt a human-centered approach to AI, as advocated by UNESCO. This strategy prioritizes human needs and values in AI development and deployment, ensuring that AI tools enhance rather than replace human teaching efforts. Emphasizing ethical considerations, data privacy, and transparency, this approach can guide the ethical and effective integration of AI technologies in education.
- ii. Equip students and educators with essential AI skills by implementing comprehensive AI competency frameworks. UNESCO's frameworks for students and teachers foster a foundational understanding of AI, promoting critical thinking and ethical awareness among learners and empowering educators to incorporate AI into their teaching practices. These frameworks ensure that both groups are well-prepared to navigate and leverage AI technologies effectively.
- iii. Emphasize continuous professional development for educators to keep them updated with the latest advancements in AI technology and its educational applications. By providing ongoing training and support, governments can help educators enhance instructional methods, personalize learning experiences, and improve educational outcomes through AI. This commitment to professional growth will contribute to a more inclusive and innovative educational landscape.
- iv. Prioritize the alignment of education with market demands to bridge Africa's skills gap, focusing on emerging technologies like Blockchain and AI. Integration of these technologies into curricula will prepare youth for global economic roles. Collaborative partnerships among policymakers, educators, and business leaders are crucial for widespread adoption and skill application, driving inclusive growth and development across the continent.
- v. Governments need to establish a clear and supportive legal framework tailored to regulate social enterprises. This framework should define their operational boundaries, governance



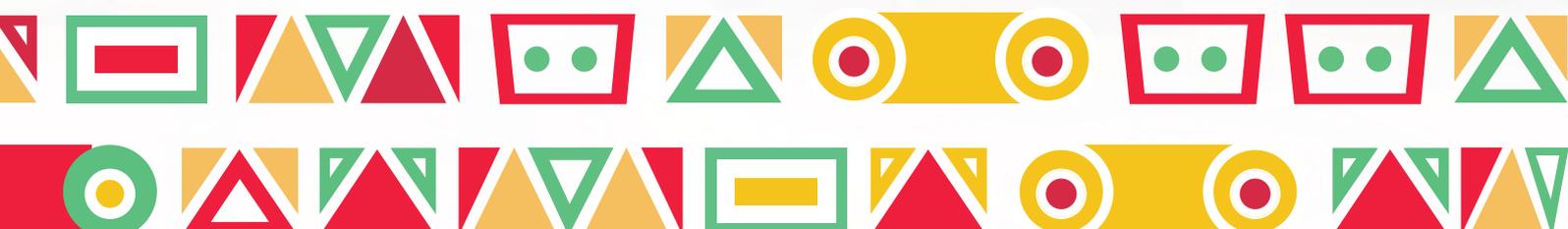
structures, and interactions with other entities. Such clarity will encourage investment and collaboration, essential for scaling the impact of social enterprises across the continent.

vi. Higher education institutions should enhance their educational focus on entrepreneurship and innovation. By integrating practical skills like business management, financial literacy, marketing, and technological innovation into their curricula, universities can cultivate an environment conducive to fostering innovative social enterprises. This prepares graduates to effectively lead and sustain ventures that address societal challenges.

vii. Fostering international partnerships is crucial. Policymakers, educators, and business leaders should collaborate to develop evidence-based policies and educational programs that support the growth of social enterprises in Africa. These partnerships leverage global expertise and resources to create a supportive ecosystem where social entrepreneurship can thrive, contributing significantly to socio-economic advancement and environmental sustainability across the continent.



## PART 3 EXHIBITION OF INNOVATIVE PROJECTS





## INTRODUCTION

The 2024 Africa Regional Conference & Exhibition on Education and Skills Development (ARC-EDS) marked a significant milestone as the first of its kind. This extraordinary event invited technical universities, faculty members, and students to celebrate academic achievements, promote knowledge sharing, and inspire innovation.

The exhibition segment of the conference aimed to recognize accomplishments in education and skills development while showcasing cutting-edge research projects. Technical universities were invited to submit proposals for exhibits demonstrating their achievements in innovative research projects, technological solutions for real-world challenges, collaborative industry partnerships, sustainable and eco-friendly technologies, and cutting-edge developments in engineering and technology.



## EXHIBIT SUBMISSION AND EVALUATION PROCESS

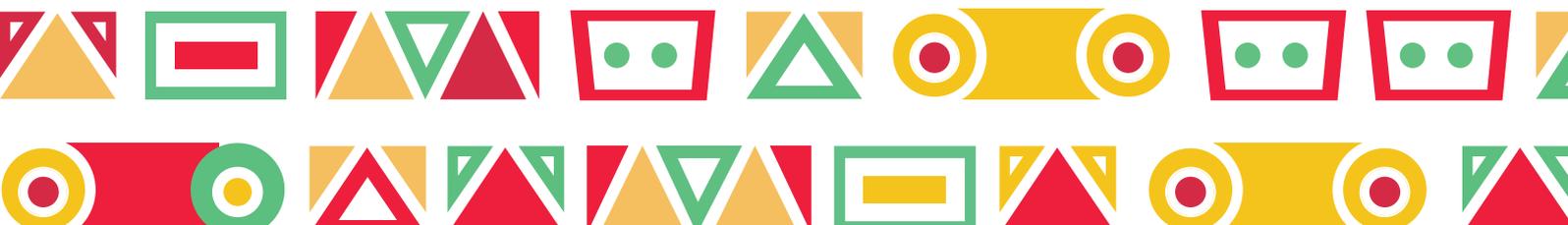
The eligibility for exhibit submissions was open to all technical universities and allied institutions interested in showcasing their research, projects, and innovations. The submission deadline was set for May 27, 2024. Exhibitors were required to submit a brief description of their exhibit, highlighting its relevance and significance, along with supporting visuals, prototypes, or demonstrations. They also needed to specify any special requirements for their exhibit space. Submissions were processed through the ARC-EDS portal, with additional support available via email or phone for any submission challenges.



## JUDGING PROCESS

The judges' panel was constituted on May 28th, with the first meeting held online on June 2nd. This meeting allowed judges to meet each other, confirm access to all submissions, and agree on a scoring sheet for phase one of the evaluation. A subsequent meeting on June 5th saw judges sharing their scoring of the submitted exhibits, highlighting their top 10 for discussion. A ranking of the top 10 submissions was compiled, and all judges confirmed this ranking via by voting.

The top 10 exhibits were offered space in the exhibition to present their entries at stands with posters. A new score sheet for Phase two was devised to account for the way exhibits were presented at the conference.





## AWARDS AND JUDGING CRITERIA

The 2024 ARC-EDS aimed to recognize and celebrate excellence through awards for the top three exhibits based on innovation, impact, and presentation. The award categories included a first prize of GHS 15,000, a second prize of GHS 10,000, and a third prize of GHS 5,000. Each prize also included a certificate of excellence, achievement and recognition respectively including a further support to enhance the skills of the investigators.

A distinguished panel of judges, chaired by Dr. Sara Jones and including Ing. Dr. Emmanuel Amankwah, Mr. Christian Akwasi Agyei and Prof.





Uriah Stonewell Tetteh brought a combination of national and international perspectives, academic and industry insights, and cross-generational contributions. Their responsibilities, outlined in a detailed Terms of Reference document, included evaluating exhibits submitted by students and faculty members and selecting the top entries for showcasing and final awards.





Judges met again online on June 10th to discuss this scoresheet and the process for identifying competition winners on the day of the conference. A final in-person meeting on the evening of June 11th produced a revised phase two scoresheet, incorporating details of all exhibitors for efficiency.

During the conference, all four judges spoke with all 10 exhibitors, scoring their exhibits using the phase two score sheet. They aimed to select five exhibitors for a final opportunity to pitch their innovations to the audience. A tie for fifth place was resolved by the chair's casting vote. Based on their assessments of the five pitches, the judges agreed on the recipients of the first, second, and third prizes.

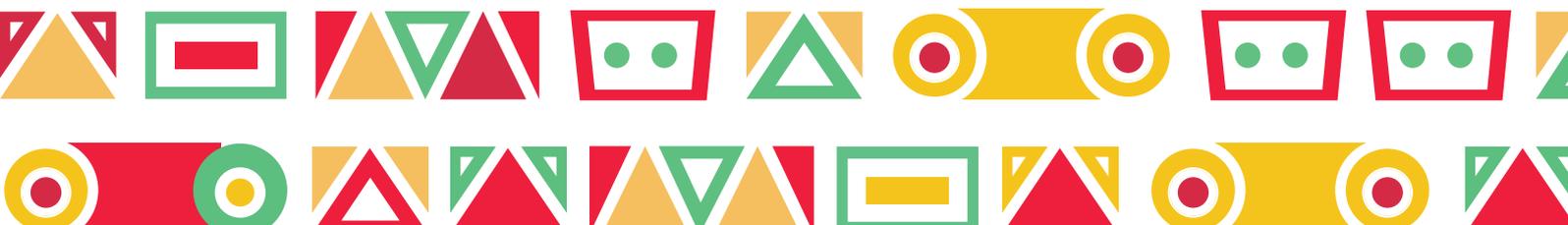


## EXHIBITION AWARDS

First place was awarded to Dr. King Solomon Akorli from Koforidua Technical University for his exhibit on Roof Tile. The Second place went to Dr. Simon Asakipaam from Tamale Technical University for his Portable Solar Generator exhibit. Third place was awarded to Dr. Mensah-Brako Bismark from the Ho Technical University for his Plastic Mulch Layer Implement Hitch to a Tractor.



The 2024 ARC-EDS successfully highlighted the innovative spirit and academic excellence within technical universities and allied institutions in Ghana. The event fostered knowledge sharing, celebrated achievements in education and skills development, and inspired future innovations. The awards presented recognized outstanding contributions, and the collaborative efforts of the judges ensured a fair and comprehensive evaluation process. This 2024 ARC-EDS set a precedent for future ARC-EDS events, promoting continuous improvement and innovation in education and skills development across the continent.





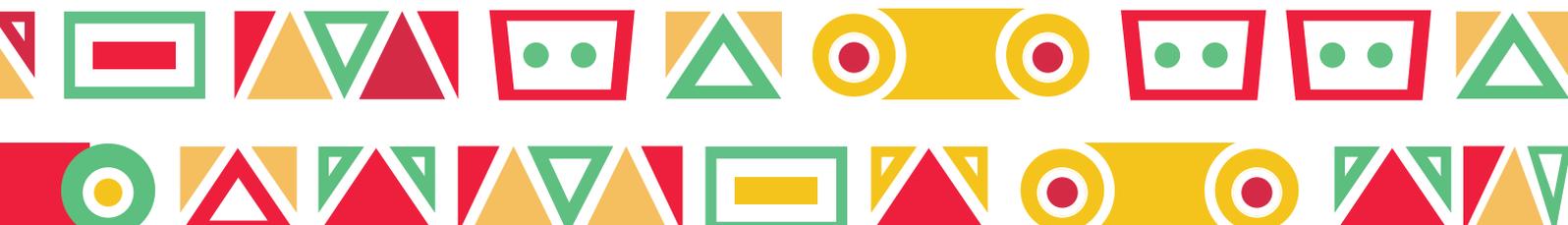
## CONCLUSION AND WAY FORWARD

The 2024 Africa Regional Conference and Exhibition on Education and Skills Development marked a significant milestone in addressing the critical issues of quality education, skill development, and innovative research in Africa. The conference underscored the urgent need for collective action to tackle unemployment and enhance employability among Africa's youth, through robust Technical and Vocational Education and Training (TVET). The collaboration with Accra Technical University provided a pivotal platform for stakeholders to engage in meaningful dialogue, setting the stage for transformative change.

The conference sessions highlighted various strategic approaches to redefine education,

leverage emerging technologies, and foster entrepreneurship to address youth employment challenges. Key presentations and discussions emphasized the importance of integrating human-centric values in education, aligning educational systems with global workforce demands, and promoting inclusive and culturally sensitive strategies. The insights from the Kenya Ujana360 program and the call for differentiated pathways towards sustainability further enriched the discourse, providing actionable priorities for policy, research, and practice.

The technical sessions and exhibitions showcased the innovative potential within Africa's technical universities, celebrating academic achievements and inspiring future innovations. The awards for





outstanding exhibits highlighted the excellence and creativity of the continent's researchers and educators. The collaborative efforts of the judges ensured a fair and comprehensive evaluation process, reinforcing the importance of recognition and support for innovative projects.

Looking ahead, the ARC-EDS initiative will continue to foster partnerships among governments, educational institutions, businesses, and civil society to enhance the quality and reach of education across Africa. Embracing emerging technologies, promoting entrepreneurship, and integrating lifelong learning opportunities will be crucial in equipping Africa's youth with the skills needed for meaningful employment and socio-economic transformation. The momentum generated by the 2024 inaugural conference shall be sustained through continuous engagement, policy interventions, and collaborative efforts to create an enabling environment for education and skills development across Africa. By building on the successes of the 2024 ARC-EDS, future conferences can further drive innovation and progress, ultimately contributing to Africa's socio-economic growth and sustainability.







# UNLOCKING AFRICA'S YOUTH POTENTIAL FOR SOCIO-ECONOMIC TRANSFORMATION

2024 Africa Regional Conference  
& Exhibition on Education and  
Skills Development (ARC-EDS)

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