17th Ministerial Round Table

"Reimagining Human Capital Development in Africa: Developing Skills for the Digital Workplace, Building AI Readiness for Africa and the Centrality of Data"

Dar es Salaam
Tanzania
May 7
2025

Communiqué

Hosted by

eLearning Africa

Co Hosted by

Ministry of Education, Science and Technology, Tanzania

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The 2025 Ministerial Roundtable was attended by 26 Ministers from across Africa. There was a total of 85 participants from 27 countries. The Roundtable focused on strategic and timely topics relating to education and IT policy for Africa: skills for the digital workplace, AI readiness for Africa, and the centrality of data in all digital strategies and policies. The programme was fast-paced and included wide-ranging discussion. Participants expressed their appreciation for having taken part in such a rich and thought-provoking exchange.

The Ministerial Roundtable was ably Chaired by Dr Aida Opoku-Mensah. She welcomed the Ministers attending from across Africa, and highlighted the importance of creating spaces like this Roundtable, in which senior policymakers can have candid discussions amongst peers.

The Minister of Education, Science and Technology of Tanzania, Hon Professor Adolf Mkenda, gave the opening keynote address. He explained how digital technologies can help build Africa's road to sustainable development. Appropriate policies provide the foundation for sustainable digital growth and accountability, together with ensuring universal access to content and connectivity. Countries need to share experiences and work on national and continental goals for development: STEM education, digital literacy. and technical and vocational skills. The Minister reminded participants of the importance of research, innovation and the promotion of local digital solutions. He recommended promotion of Africa's digital sovereignty and driving EdTech solutions for our own countries and for Africa as a whole, including public-private partnerships. Africans needs to rapidly become creators, not only consumers, in the digital age.

The second keynote, from the Head of the UNESCO Office in Tanzania, Mr Michel Toto, addressed the challenges of integrating digital solutions and AI into education systems. Technology is a set of tools to assist teachers, not replace them, he said. Africa faces a range of challenges in education: while many more children attend school than before, there are still millions who do not. He noted that education quality is still a challenge, and Africa needs millions more teachers to achieve SDG4. He emphasised that education remains the best investment a nation can make in its development. This includes greater investment in technology for connectivity, capacity, and content. While connectivity and capacity are being addressed, he noted that content is equally important, and UNESCO's Gateways to Learning programme aims to address this gap. He recommended that African countries join this initiative, which provide opportunities to learn from other countries.

Key issues for the 17th eLearning Africa Ministerial Round Table included:

1. Developing Skills for The Digital Workplace
2. Artificial Intelligence (AI) Readiness for Africa
3. The Centrality of Data

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Session one: Developing Skills for The Digital Workplace

The Chair, Dr Opoku-Mensah, introduced this session by noting that 65% of jobs in Africa now require digital skills, but digital literacy and skills remain very low in most of Africa. Only 50% of countries in Africa are integrating digital learning into schools, compared with 85% globally. Africa's digital future demands urgent investment in digital skills, modernised curricula, and inclusive learning ecosystems.

This session, led by The Digital School, explored how digital skills development, capacity building, and infrastructure, can transform education systems, prepare young people for future work, and drive sustainable growth.

Dr Waleed Al Ali, Secretary General of The Digital School, UAE SkillEd Academies: The Digital School Africa Skilling Programme

Today in Africa a generation of youth is ready to meet 21st century challenges, but is held back by lack of access to appropriate education and skills. He noted that digital technologies allow us to address these challenges more effectively. The Digital School is now active in 20 countries across the world, but access to education and training is just the beginning. The Digital School is working with governments across Africa, and with employers, to understand skills requirements, and design specific training for the country's skill needs. He noted that the Digital School undertakes this work in the context of UAE's broader relationship with Africa - shared prosperity.

Ms Hind Khamis Al Mehairbi, Director of the Ataya Project, UAE SkillEd Academies: The Digital School Africa Skilling Programme

The SkillEd programme aims to significantly increase access to education, training and employment across Africa. Ms Hind was pleased to announce the launch of a new initiative: the Ataya project, working in partnership with The Digital School, and African governments and employers. Youth drives change, and SkillEd academies and digital innovation can accelerate positive change. She showed a short video of the UAE-Africa relationship.

Dr Menghestab Haile, Senior Advisor of The Digital School, UAE SkillEd Academies: The Digital School Africa Skilling Programme

Africa, the world's youngest continent , has promise, Dr Menghestab noted, but needs more investment in human capacity to reach its potential. The unique Digital School approach is based on demand - delivering internationally certified programmes: meeting local skills needs while upholding global standards. Skilling is based on national priorities, leading to meaningful employment, and a meaningful skills eco-system. Skills are at the heart of national development, and this means co-operation across ministries, and commitment to long term impact. Dr Menghestab emphasised that education is a lifelong process. By acting now, millions can be equipped with new skills, and Africa can build societies that are inclusive and resilient, and that foster real innovation.

H.E. Amb. Rudo Mabel Chitiga, Permanent Secretary of the Ministry of Skills Audit and Development, Zimbabwe

Ambassador Chitiga emphasised the need to focus on skills development within government policy. Skills are not yet integrated into education. In Africa, the focus is on qualifications, she said, what we know, rather than what we can do. The world has changed, she noted – and Africa needs to identify, and measure, specific new competencies. University degrees do not specify any specific skills and competencies that graduates will have. Until African countries, and people, change mindsets, she noted, they will remain 'a step behind' in meeting the skills demands of the digital present, and future. She asked three questions: Are we nurturing talent for our future? Are we prepared to be disrupted? We can now change curricula in weeks, not years, are we doing this?

Skills development is not only about youth, she continued, we all need to see ourselves as life-long learners. We are all learning: to adapt, to learn new skills, and use new tools. In Zimbabwe, villages can have solar power, and can access the internet through Starlink. We need to ensure this opportunity is used for learning new skills. Digital literacy and an understanding of the uses of AI should start at the primary school level, and continue throughout life.

She concluded that Africa needs to attract talented people, particularly from the diaspora, to work on the continent. Africa needs to develop different ways of planning and organising education and skill training. Countries need to work together to benchmark the progress of all of us. Africa cannot wait.

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Session two: Artificial Intelligence (AI) Readiness for Africa

AI is transforming education, governance and the future of work. African leadership is essential to ensure AI strengthens local skills, preserves cultural contexts, and drives inclusive growth.

Mr Poncelet O. Ileleji, CEO of Jokkolabs Banjul, The Gambia AI Readiness and The Africa We Want - Aligning with the African Union Agenda 2063

Mr Ileleji opened with a proposition, and challenges. We must focus on the Africa we want to pass on to our children. Our mindsets should reflect our aspirations for the future. We all want a prosperous Africa in 2063 - this is tied to education for the digital future, particularly AI. Africa is at a critical moment.

The African Union has an AI strategy for Africa - and several countries have national AI strategies (Egypt, Mauritius, Rwanda, Kenya, Nigeria). This year Africa hosted the first AI global summit in Africa, in Kigali. To move forward Africa needs AI that is fit for purpose. As an African, Mr Ileleji's first concern is data - Africa does not have enough data, and needs to own, and grow, its own data. This applies particularly to education systems. Broadband connectivity is still low in Africa, though Starlink may become a game-changer. Imagine when every village can connect - then our children can compete with any child in the world. AI can support better learning outcomes, not just in education but in sectors like healthcare, agriculture, finance and public services. But we cannot promote AI readiness effectively when our children still do not have access to the internet.

Africans need to strengthen government capacity in using data. There are young people trying to innovate across the continent, but African countries need to promote freedom of movement to better enable this. Africa has to develop localised AI models, scale human capital development and economic infrastructure, and promote collaboration and inclusion. Africans need to pursue our digital destinies, and invest in ethical AI. The UN Global Digital Compact, he concluded, focuses on these topics: the essence of what it means to live in a technological world.

Ms Nancy Abraham Sumari, Founder & Executive Director of The Jenga Hub, Tanzania Inclusive AI for Education: Centering Africa's Learners in the Digital Age

Ms Sumari agreed with Mr Ilileji that it will be our choices that will determine the impact of AI in Africa. Africa is the youngest continent in the world. We learn in more than 2000 languages. When we speak about AI in education, inclusion needs to be central.. AI development in Africa must reflect African reality, with inclusion by design and inbuilt ethical standards. Africa must act with intention.

She noted that, In Tanzania, her team has developed an AI tool to translate text and speech into Tanzanian sign language. They worked with girls in underserved areas, training them in machine learning, so that they can shape AI for their needs. But there are challenges - too many AI models do not understand African languages and our accents - we risk building tools that reflect someone else's ideas, not our own. And who owns and protects African data?

Africa, she concluded, needs to adopt three principles in dealing with AI. Firstly, localisation - AI should be trained on our languages and aligned with our curriculum. Secondly, Inclusion by design - let children with disabilities and girls test and help design these tools. Ethical ownership - governments should be users but also shapers of AI. Africans need to build trust and long-term value - it will not happen unless we make it so. We want an AI future shaped by African values and based on African education.

Dr Heba Saleh, Chairwoman of the Information Technology Institute at the Ministry of Communications and Information Technology, Egypt Digital Skills for Economic Empowerment: ITI Scalable Model in Egypt

Dr Saleh posed a question: How do we empower a new generation for a new kind of learning journey? Her institute aims to do two things: provide "Digital skills for economic empowerment", under the belief that "People develop countries – we develop people".

Egypt's Information Technology Institute (ITI) helps thousands of students graduate with better employment prospects: 85% employment 12 months after graduation. In Egypt there are 700,000 graduates every year. How can this talent be effectively used? We know that talent attracts international employers, and there is a strong market demand for technically skilled people.

ITI pays attention to market demand, she noted, and this is reflected in the skills provided. ITI provides fully government-funded scholarships for 5-9 months, which have very stringent performance indicators, in terms of graduate employment. A few years ago, ITI began to embrace AI and built the 'ITI Artificial Intelligence Academy'.

AI requires different skills, and all were incorporated in curricula. There are hundreds of thousands of graduates in Egypt - ITI needs to help at scale. ITI therefore provides training content at all levels of education, including a wide range of video content, aligned with needs and required skills. In a few years, ITI moved from having 8000 students on campus to 600,000 students online, providing mass learning supported by AI.

The world is talking about demographic changes. We all know that Africa is rich in young people, and we need to embrace the challenges this poses. We need to mobilise now with AI – but Africa does not need to start from scratch, she noted, ITI can adapt their learning curricula to different local contexts.

Dorica Andrew, Ai for Education

Ai for Education is a global initiative to ensure that AI improves education, working in low-income countries, by contextualising AI for different environments. For example, finding ways to adapt to offline settings, testing and doing quality assurance on AI products. There are a lot of AI products reaching millions of learners - but with no evidence of impact - and this needs to be addressed ,

AI for Education works with the government of Kenya on quality assurance of AI products. They are building a chatbot with the government of Sierra Leone, to help teachers and inspectors communicate - obviating the need to visit schools in-person. In Tanzania they are in the preparation phase for Voice AI - an early grade reading assessment tool to help reduce the costs of assessments. Teachers can now assess the reading level of students in Swahili on a daily basis.

Questions and contributions from the floor:

Comments from Ministers included,

- Identifying the need to build a fully inclusive system, including AI, to reach underserved communities.
- he issue of cost, and greater sharing of resources, across countries, and within governments.
- Addressing the fears of teachers and others in education who see technology and AI as a threat to their jobs. Their jobs are not threatened, but their jobs are changing, and Africans must embrace change if we are to fulfil our potential.

Mr Poncelet O. Ileleji responded to some of the comments, noting that regulatory environments need to change to address the different needs of a technologically based education and training system. AI is a tool, which can be adapted to needs, it will not replace human intelligence. We can train AI for many different purposes. We need to recognise that we need to build data and AI in African contexts, and African languages. This is vital.

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Session three: The Centrality of Data

Strengthening data management and fluency is key to improving student success and advancing national goals.

The Chair, Dr Opoku-Mensah, introduced the speakers by noting that Africa has 15% of the world's population, but only 1% of the world's data. Data underpins the digital economy. The only way to effectively utilise AI is to base it on our own data, for our own needs.

Dr Ellen Wagner, Managing Partner of North Coast Eduvisory LLC, USA. Data Fluency for Improving Student Success

Dr Wagner started by noting that effective use of AI is predicated on the availability of relevant data. Data is everywhere. We do not really have a data problem, we have a people problem. Because most of us do not know what to do with data. And with the advent of AI, there is no place to hide any more. We must stand up and recognise the centrality of data.

She noted that she had prepared a paper for the Roundtable, about how, in all organisations, we will have to become far more data-literate than we are now, with each of us taking responsibility for it. In addition to everyone in an organisation achieving data literacy, we, as leaders, need data proficiency – the ability to take information and turn it into a plan, a policy, a curriculum. To translate data into something you can use in your organisation. So how do we do that? We all need to find specialists - to help us know what data we need and how to collect it. Yes, we all need more data, but more important is that we need better and more targeted data, and then know what to do with it.

She then gave an example from her own experience. She, and colleagues, built an anonymised data-set of about 600,000 students, and built algorithms that would help identify students at risk of dropping out. This enabled the team to identify 10 factors that indicated children were likely to drop-out. When it was presented to the funding organisation, they asked 'So what are you going to do about it?'. The team then realised that the data was not an end , but instead a means to prevent students dropping out.The ten factors identified were very helpful, but the real issue was building strategies to prevent students from dropping out: making decisions that will help them to continue, on the basis of reliable data. More reliable data leads to better, and more targeted, decision making.

Dr Wagner concluded that we each need to take on the responsibility to act. Keep experimenting with a Generative AI tool, and explore the possibilities for yourself.

Hon. Nomalungelo Gina, Deputy Minister of the Ministry of Science Technology and Innovation, South Africa

Hon, Gina opened strongly: Are we ready? We are more than ready, we have to be ready, our gathering here is for us to say we are ready. The paradigm shift is already happening. We might not be where we want to be - but we have to be globally competitive, so how do we address the challenges we face?

In South Africa, she noted, the 2004 white paper on eEducation, provided an early policy on promoting eLearning in South Africa, to equip schools with ICT infrastructure, equip teachers with skills, and integrate eLearning into the curriculum. But implementation has been slow. The government provide zero-rate access to certain education websites - this has increased access to online educational resources

The government is working to build capacity in multiple strategic priorities . they aim to have better knowledge, through better research, on how these new technologies can be applied in practice: research and development that others can build on. We are building our country's capabilities in new technologies, to then help build the capacities of Africa as a whole. In the Department of Science, Technology and Innovation, they work to connect the key players, and resource them so they can best use the new technologies in their work.

A practical example of the power of data in education is the Data-Driven-Districts programme, launched in 2012. The 'Triple-D' programme aims to improve student performance through improving use of data. Collecting school-level data, presenting it on a web-based dashboard. It provides real time attendance and progress data from all across the 22 government schools in that district. It improves decision-making, and demonstrates the criticality and centrality of data in overcoming education challenges.

The Centre for Artificial Intelligence Research works across the universities of South Africa. This is asking, how do we build our country better? It helps us collaborate and build our muscles as a country - and as a continent.

South Africa has a policy on data and the cloud. The key principles are to accelerate the roll out of infrastructure, adopting a cloud-first approach, and promoting data sharing. South Africa has several policies related to data – a key one is the National Cybersecurity framework policy. This is working to promote high-skills connectivity, networking capacity, and data-intensive research.

African governments should make international companies like Microsoft adopt equivalent policies, to ensure they invest in research and policies that are specific for our countries, she concluded. There is a lot of potential, and we will, together, take our continent to the next level.

↓ Conclusions and recommendations

The Ministerial Roundtable brought together a diverse range of expertise and examples of good practice from Africa and beyond. The presentations and discussions were stimulating, and engaged all the participants. The outputs from this very dynamic and thought-provoking Ministerial Roundtable, included recognising the importance of African generated data, in African languages, to inform an Afro-centric approach to AI, which addresses Africa's needs, while enabling Africa to contribute to global issues. In order to achieve this, we need a focus on developing skills at all levels, and work collaboratively across countries and with regional and continental bodies.

The Chair, Dr Aida Opoku-Mensah noted seven principles and action points from this Ministerial Roundtable that participants should focus on, in taking forward the lessons of this Ministerial Roundtable:

1. Expand connectivity infrastructure
2. Promote regional, and continental, alignment in AI strategies
3. Integrate global benchmarks into national planning and monitoring
4. Integrate data skills into national education agendas
5. Policies are needed for AI readiness - with coherent national approaches
6. Strengthen public private academia partnerships - universities are crucial in this work.
7. Support innovation ecosystems to promote local knowledge and innovation

MRT Programme

Wednesday 7th May

09:00 – 09:15 Refreshments

09:15 – 09:30 Opening and Introductions

Dr Aida Opoku-Mensah,
Co-founder of the Fourth Industrial Revolution Consortium for Africa's Development (FIRCAD), Ghana

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09:30 – 10:00 Welcome Keynotes

Hon. Professor Adolf Mkenda,
Minister of Education, Science and Technology, Tanzania
Mr Michel Toto,
Head of Office and Representative, UNESCO, Tanzania

10:00 – 11:00 Developing Skills for The Digital Workplace

Building Africa's digital future demands urgent investment in digital skills, modernised curricula, and inclusive learning ecosystems. Drawing on real-world case studies from The Digital School, this session invites ministers and senior leaders to explore how digital skills development, capacity building, and infrastructure can transform education systems, prepare young people for the future of work, and drive sustainable growth.

Speakers:

Dr Waleed Al Ali,
Secretary General of The Digital School, UAE
SkillEd Academies: The Digital School Africa Skilling Programme

Dr Menghestab Haile,
Senior Advisor of The Digital School, UAE
SkillEd Academies: The Digital School Africa Skilling Programme

Ms Hind Khamis Al Mehairbi,
Director of the Ataya Project, UAE
SkillEd Academies: The Digital School Africa Skilling Programme

H.E. Amb. Rudo Mabel Chitiga,
Permanent Secretary of the Ministry of Skills Audit and Development, Zimbabwe
Reimagining Education in Africa: Developing Skills for the Digital Workplace and Building AI Readiness for Africa

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11:00 – 11:15 Refreshments

11:15 – 12:00 Artificial Intelligence (AI) Readiness for Africa

AI is transforming education, governance and the future of work. African leadership is essential to ensure AI strengthens local skills, preserves cultural contexts, and drives inclusive growth. This session will explore national strategies, inclusive AI models, and capacity-building initiatives aligned with Africa's development goals.

Speakers:

Mr Poncelet O. Ileleji,
CEO of Jokkolabs Banjul, The Gambia
AI Readiness and The Africa We Want - Aligning with the African Union Agenda 2063

Ms Nancy Abraham Sumari,
Founder & Executive Director of The Jenga Hub, Tanzania
Inclusive AI for Education: Centering Africa's Learners in the Digital Age

Dr Heba Saleh,
Chairwoman of the Information Technology Institute at the Ministry of Communications and Information Technology, Egypt
Digital Skills for Economic Empowerment: ITI Scalable Model in Egypt

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12:00 – 12:45 The Centrality of Data

Strengthening data management and fluency is key to improving student success and advancing national goals. This session will highlight how African countries are shaping data strategies to enhance learning outcomes, protect digital rights, and build digital sovereignty, ensuring that education data drives meaningful impact.

Speaker:

Dr Ellen Wagner,
Managing Partner of North Coast Eduvisory LLC, USA
Data Fluency for Improving Student Success

Respondent:

Hon. Nomalungelo Gina,
Deputy Minister of the Ministry of Science Technology and Innovation, South Africa

MRT Programme

12:45 – 13:15	Conclusions and Recommendations
	Dr Aida Opoku-Mensah and invited respondents
13:15 – 13:30	Photo Session
13:30 – 14:20	VIP Lunch
14:30 – 17:00	Bilateral Meetings
	Bilateral Meetings with Pan-African and International Stakeholders
19:30	Ministerial Round Table Dinner

Annex One:

The UAE Digital Education & Global Skilling Academies (GSA) Engagement Strategy for Empowering Africa's Workforce

11th of March, 2025

1. Introduction

This document provides a strategic framework to facilitate engagement, collaboration, ownership, innovation, and private sector involvement between the UAE Digital Education Initiative and Global Skilling Academies (GSA) with African Ministers of Education, the African Union (AU), NEPAD, the African Development Bank (AfDB), the Economic Commission for Africa (ECA), development partners, relevant ministries, the private sector, industry leaders, universities, financial institutions, and innovative financing stakeholders.

The strategy aims to establish a structured and results-driven approach to cooperation, ensuring that all stakeholders align their efforts towards transforming Africa's workforce by leveraging successful skilling initiatives, fostering South-South collaboration, facilitating knowledge sharing, and mobilizing private sector investment, university research, and financial innovation. This will enhance employment outcomes through innovative skilling models, digital education, and industry-driven employment pathways.

2. Context and Background

Africa is home to a rapidly growing and youthful population, presenting both an opportunity and a challenge. The continent's human capital is one of its greatest assets, but for this potential to be fully realized, strategic investments in education, skills development, and workforce integration are required. With over 12 million young people entering the labor market annually, yet only 3 million formal jobs created, addressing unemployment and underemployment is critical.

Despite significant economic growth in many African countries, there remains a mismatch between the skills being taught and the demands of the labor market. Many education systems focus heavily on theoretical knowledge while failing to provide practical, job-relevant training. This gap has contributed to high youth unemployment rates, particularly among those in rural areas and underserved communities.

At the same time, technological advancements, digital transformation, and the green economy are creating new employment opportunities in sectors such as ICT, renewable energy, logistics, and agribusiness. Leveraging these emerging opportunities requires a coordinated and demand-driven skilling approach that aligns education, private sector needs, and government policies to create sustainable pathways for employment.

Recognizing this need, the UAE Digital Education Initiative and Global Skilling Academies (GSA) were established to provide a transformative, job-oriented training model that equips learners with market-relevant skills, digital competencies, and entrepreneurship capabilities. This initiative builds upon lessons from successful workforce development projects across Africa, ensuring that participants not only receive training but are also linked to real job opportunities through industry partnerships.

The UAE, through The Digital School (TDS) and GSA, is leveraging technology-enabled learning, strategic partnerships, and innovative skilling programs to bridge the gap between education and employment. This initiative aligns with the priorities of the African Union (AU), NEPAD, AfDB, and ECA, making it a pivotal intervention for regional economic growth, digital transformation, and workforce sustainability.

A key strength of GSA is its direct connection between industry job requirements and training programs. Several UAE companies and African employers are already engaged in partnerships to facilitate job placements, internships, and entrepreneurial support. This demand-driven model ensures that participants gain the skills required by high-growth industries, enhancing their employability and fostering inclusive economic growth.

By building stronger links between skilling programs, labor markets, and investment in priority sectors, the GSA approach ensures that workforce development is not only about training but also about creating direct employment pathways. This initiative seeks to unlock Africa's human capital potential, supporting the transition towards a knowledge-driven, digitally enabled, and sustainable economic future.

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3. Key Areas of Focus for Implementation

Expanding Digital and Vocational Skills Training

· Leveraging The Digital School (TDS) and GSA platforms to provide scalable, localized digital learning tailored to sector-specific workforce needs.
· Aligning with industry-recognized certifications through partnerships with Arizona State University, Pearson, and global education leaders.
· Developing sector-specific training programs in ICT, renewable energy, healthcare, agriculture, logistics, and e-commerce.
· Incorporating AI-driven learning models that ensure adaptive skill development and career alignment.
· Integrating financial literacy and entrepreneurship training into skilling programs to equip learners with money management, investment, and business development skills.

· Ensuring that training programs are co-designed with UAE and African industries to provide learners with directly applicable, high-demand skills.

Strengthening Employment Linkages

· Creating job placement programs through public-private partnerships that facilitate direct hiring pathways, internships, and apprenticeships.
· Engaging UAE-based companies in industry-led hiring initiatives to ensure a direct transition from training to employment.
· Providing entrepreneurial support through business incubation hubs, financial literacy training, and access to startup capital.
· Expanding work-based learning opportunities by partnering with African employers to ensure practical, real-world industry experience for graduates.

Mobilizing Investment and Financing

· Encouraging private sector engagement by promoting investment in workforce training and job creation initiatives.
· Partnering with development finance institutions such as AfDB, ECA, and NEPAD to mobilize blended financing for skills development programs.
· Implementing outcome-based funding models, where investment is tied to measurable employment and economic impact.

4. Partnerships, Coordination, and Harmonization

A key component of the UAE Digital Education & Global Skilling Academies (GSA) strategy is strong partnerships, effective coordination, and harmonization of skilling efforts across Africa. The initiative will foster meaningful collaboration with governments, the private sector, universities, financial institutions, and development organizations to maximize impact and scalability.

Public-Private Partnerships for Skills Development

· Establishing long-term agreements with African governments to integrate GSA training models into national education and employment frameworks.
· Strengthening engagement with UAE-based employers, African industries, and multinational corporations to ensure direct hiring pipelines for skilled graduates.
· Coordinating with development partners such as the African Union, NEPAD, AfDB, ECA, and the World Bank to align GSA's efforts with existing workforce development initiatives.

Harmonization of Skills Development Initiatives

· Mapping existing skilling programs across Africa to align GSA initiatives with ongoing efforts and avoid duplication.
· Collaborating with regional economic communities (RECs) and national governments to develop standardized frameworks for skills certification.
· Promoting mutual recognition of skills and qualifications to facilitate regional labor mobility and employment across borders.

South-South Collaboration and Knowledge Sharing

· Facilitating peer learning exchanges between African nations to share best practices in digital education, vocational training, and workforce development.
· Leveraging partnerships with UAE institutions, African universities, and vocational training centers to co-develop curricula and training methodologies.
· Encouraging collaboration with emerging economies in Asia, Latin America, and the Middle East to explore innovative financing and job-creation strategies.

5. Conclusion & Call to Action

The UAE is committed to demonstrating measurable impact through the Digital Education Initiative and Global Skilling Academies (GSA). To ensure accountability and success, the following key outcome indicators will be used to assess the effectiveness of this engagement:

Employment and Workforce Readiness

· Percentage of graduates placed in jobs within six months of completing training.
· Number of internships and apprenticeships facilitated through public-private partnerships.
· Increase in employability skills as measured by employer satisfaction surveys.

Industry and Private Sector Engagement

· Number of private sector partners engaged in skilling and job placement.
· Level of employer participation in curriculum co-design and mentorship programs.
· Commitments from industries to hire graduates from GSA programs.

Education and Skills Development

· Number of learners enrolled in digital skilling and vocational training programs.
· Completion rate of training programs.
· Increase in certifications issued, including industry-recognized qualifications.
· Number of training programs launched in priority sectors such as ICT, renewable energy, and agribusiness.

Innovation and Digital Transformation

· Adoption of AI-powered learning tools and personalized digital education models.
· Integration of financial literacy and entrepreneurship training into education programs.
· Expansion of digital skilling partnerships with universities and tech companies.

Investment and Financial Sustainability

· Amount of funding mobilized from development finance institutions, private investors, and government partnerships.
· Percentage of GSA programs supported through innovative financing models.
· Sustainability plans established to ensure long-term impact beyond initial funding.

Policy and Government Engagement

· Number of national education policies influenced by UAE-GSA engagement.
· Adoption of demand-driven skilling frameworks in partner countries.
· South-South collaboration agreements established between African nations.
These outcome indicators will help track progress, measure impact, and ensure that the UAE's investment in skills development and workforce transformation in Africa leads to tangible, long-lasting results.

Annex Two:

Navigating the Data Capabilities Spectrum: From Literacy to Proficiency to Fluency

Ellen Wagner
North Coast EduVisory LLC, USA

The relationship between individuals and their ability to leverage data for institutional decision-making exists on a spectrum of increasing sophistication and integration. This briefing document summarizes three distinct levels of data capability—literacy, proficiency, and fluency—that are emerging within and among contemporary enterprises. Levels build upon the preceding level of capability, with each level serving different organizational support requirements.

Data Literacy for All

Data literacy encompasses the fundamental skills needed by everyone in a data-informed organization. It encompasses the basic ability to read, work with, analyze, and communicate with data in context.

Core Components of Data Literacy

Conceptual Understanding: Conceptual understanding describes the cognitive foundations of data literacy. It includes comprehension of basic statistical concepts like averages, percentages, and rates. It also addresses recognition of different data types and their appropriate applications as well as knowing how various data collection methods and their inherent limitations work. It deals with awareness of common data quality issues and their potential implications for analysis and decision-making.

Basic Technical Skills: Basic technical skills provide the practical foundation for data literacy, enabling individuals to read and interpret standard charts, graphs, and tables with confidence. It includes use of spreadsheet software for fundamental calculations and data sorting. It means knowing how to follow established procedures for proper data handling and management and to perform simple data organization tasks that support basic analysis and presentation needs.

Critical Awareness: Critical awareness encompasses the evaluative aspects of data literacy, including the ability to identify reliable data sources and distinguish them from questionable ones. It means recognizing obvious biases in data collection, analysis, and presentation and understanding the fundamental distinction between correlation and causation when interpreting relationships. It involves questioning whether conclusions drawn from data are actually supported by the evidence presented rather than reflecting preconceived notions or desired outcomes.

Communication: Communication skills complete the data literacy profile, allowing individuals to interpret what data shows and translate it into everyday language that non-specialists can understand. They use relevant data points to support basic arguments and decision rationales, following data-based explanations provided by others without requiring extensive translation. They recognize situations where data is being misrepresented or deployed in misleading ways to advance particular agendas.

Data literacy enables individuals to participate meaningfully in data discussions without necessarily being able to conduct complex analyses independently. It represents a baseline capability needed in contemporary organizations where data informs daily operations.

Data Proficiency: The Leadership Imperative

Data proficiency builds upon literacy but extends further into application, evaluation, and decision-making. This tier is particularly crucial for leaders from government, education and industry who must translate data insights into organizational action without necessarily being data specialists themselves.

Core Components of Data Proficiency

Strategic Application: Strategic application represents a core component of data proficiency. This is where leaders connect data insights directly to business objectives and strategic priorities. This is where they select appropriate metrics and indicators that meaningfully address specific business questions. They must understand how different data points interact and complement each other to create a comprehensive picture of organizational performance. They need to apply data insights systematically to resource allocation, priority-setting, and strategic planning processes that drive organizational direction.

Evaluative Judgment: Evaluative judgment distinguishes data proficiency from basic literacy. It enables leaders to assess the quality, relevance, and limitations of analyses provided by specialists. It recognizes methodological constraints and their implications for decision confidence, and thoughtfully weighs data-driven insights against other important decision factors including experience, organizational values, and operational constraints. It also identifies situations where additional data collection or different analytical approaches may be needed before proceeding with high-stakes decisions.

Cross-functional Communication: Data-proficient leaders must be able to bridge technical analytics conversations with practical business implications. They need to articulate business questions and challenges in ways that analytics teams can effectively address through appropriate data approaches. Furthermore, data-proficient leaders will translate complex statistical findings into actionable insights accessible to various organizational stakeholders. They facilitate productive data-informed discussions across departments with varying levels of data sophistication to build organizational consensus and alignment.

Implementation: Proficient data users consistently move from insights to concrete action plans based on data findings, establishing robust mechanisms for monitoring the impact of data-informed decisions after implementation. They know how to adjust strategic and

operational approaches when monitoring data indicates underperformance or unexpected outcomes. They foster systematic feedback loops between implementation experiences and continued data collection that enrich organizational learning and future decision quality.
Data proficiency enables leaders to make informed decisions without becoming technical specialists. It represents a practical, application-focused relationship with data that supports effective leadership in data-rich environments.

Data Fluency: The Specialist Domain

Data fluency represents the highest level of data capability, where working with data becomes second nature. While data literacy provides foundational understanding and data proficiency enables application, data fluency allows for creation, innovation, and mastery within the data domain itself.

Core Components of Data Fluency

Statistical Reasoning: Fluent statistical reasoning involves sophisticated capabilities like selecting appropriate statistical methods based on the specific contexts and questions being investigated. Fluent data professionals thoroughly understand statistical assumptions and their implications for proper interpretation of results. They integrate multiple statistical approaches simultaneously to address multi-faceted questions that resist simpler analysis. They know how to identify subtle statistical fallacies and methodological flaws that might undermine the validity of conclusions drawn from quantitative analysis.

Analytical Synthesis: Analytical synthesis represents a hallmark of data fluency, enabling practitioners to synthesize diverse insights across multiple datasets, methodologies, and data types into coherent understanding. Fluent data professionals can identify non-obvious patterns and relationships that remain hidden to more basic analysis techniques. They know how to generate testable hypotheses based on nuanced data observations that drive further investigation and can construct comprehensive data narratives that explain complex phenomena and their interrelationships in ways that illuminate both causes and potential interventions.

Technical Mastery: Technical mastery at the fluency level encompasses advanced capabilities including customizing and integrating diverse data tools to create tailored solutions for specific analytical challenges. It means writing sophisticated queries and algorithms to extract precisely defined information from complex data ecosystems. It also means being able to create advanced, purpose-built data visualizations that reveal insights not apparent in standard presentations. Data fluent professionals know how to adapt technical approaches when conventional methods prove inadequate for novel data problems or unique organizational contexts.

Methodological Innovation: Methodological innovation distinguishes truly fluent data practitioners, as they develop novel analytical approaches for previously intractable problems or emerging business challenges. They create original data collection

frameworks and techniques to explore previously unmeasured questions; they design rigorous experiments and quasi-experiments to test causal relationships in complex systems. Finally, they know how to establish new metrics, measurement approaches, and evaluation frameworks that better capture organizational realities than existing methodologies allow.

Data fluency typically resides with dedicated data professionals—data scientists, analysts, and specialists whose primary function revolves around data work. These individuals serve as organizational resources, supporting both general data literacy development and the data proficiency needs of leadership.

Implications for Organizations

This three-tier model of data capabilities has significant implications for how organizations develop their data culture:

Training and Development: Organizations may wish to consider establishing comprehensive training ecosystems that provide universal data literacy training for all employees regardless of role, ensuring a common foundation of understanding. They may find value in developing targeted leadership programs that emphasize data proficiency skills for decision-makers who must translate insights into action. Organizations should also support specialized technical training opportunities that foster data fluency for appropriate analytical roles. This creates a multi-tiered approach that builds the right capabilities at each organizational level.

Structural Considerations: Structural considerations for data-capable organizations may include positioning data fluent specialists to directly support decision-makers, ensuring technical expertise informs key strategic choices. Designing cross-functional teams that intentionally combine individuals with complementary data capability levels to maximize both technical depth and practical application may enable better organizational capability. Organizations may find value in establishing communications that explicitly facilitate translation between technical analytical language and business-focused application terminology across organizational boundaries.

Cultural Elements: Cultural elements that reinforce data capabilities will benefit from establishing shared data vocabularies and frameworks that enable consistent communication across the organization. Leadership should model data-informed (not data-dictated) decision processes at leadership levels that demonstrate the proper integration of quantitative insights with other strategic considerations. Organizations should implement recognition systems that explicitly value and reward appropriate data capabilities at all levels, from foundational literacy to specialized fluency, according to role requirements and organizational contributions.

Conclusion

The progression from data literacy through proficiency to fluency represents not just an accumulation of technical skills but a transformation in how individuals relate to data, and of how to put individual insights to work in service of the enterprise. Data literacy enables participation in

data conversations, data proficiency supports informed leadership decisions, and data fluency drives innovation in data practices themselves.

By recognizing these distinct capabilities and their appropriate organizational roles, leaders can develop more effective strategies for building truly data-informed organizations—where everyone possesses the necessary literacy, leaders demonstrate consistent proficiency, and specialists achieve the fluency needed to advance organizational capabilities.

Sources

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