

The AI Cairo Convening

25 May 2026

Event Report

Executive Summary.....	2
I. Session 1: The Infrastructure.....	5
1. Structural Limitations of Egypt’s AI Infrastructure.....	5
2. Data Readiness, Regulatory Gaps, and the Question of Digital Sovereignty.....	6
3. Economic Feasibility, Market Alignment, and Strategic Positioning of AI Investments.....	6
4. Human Capital, Societal Impact, and Risk-Oriented AI Governance.....	7
II. Session 2: The Regulatory Frameworks.....	8
1. AI Law Now vs. AI Law Later: Timing as the Core Divide.....	8
2. Overarching AI Law vs. Sector-Specific Regulation.....	9
3. Regulation as Enabler of Innovation vs. Barrier to Innovation.....	10
4. Legal Text vs. Governance Ecosystem.....	10
III. Session 3: The Social and Economical Impacts.....	11
1. Restructuring Labor Markets and the Future of Work in the Age of AI.....	11
2. Inequality, Power Concentration, and the Global AI Divide.....	12
3. Governance, Ethics, and the Need for Human-Centered AI.....	13
4. Policy, Resources, and Strategic Positioning in an AI-Driven Economy.....	14
IV. Session 4: Innovation and Education.....	15
1. Rethinking the Purpose of Education in the Age of AI.....	15
2. Structural Reform of Educational Systems and Curriculum Design.....	16
3. Inequality, Access, and Gaps in AI-Driven Education.....	17
4. Governance, Ethics, and Capacity Building in AI Education.....	18

Executive Summary

On April 27, 2026, The AI-Khwarizmi Initiative for Artificial Intelligence, in collaboration with the MENA Observatory on Responsible AI housed at the Access to Knowledge for Development Center (A2K4D) and GAPP Exed, brought together a plethora of policymakers, academics, and industry experts to assess Egypt's readiness to participate in the global AI transformation and the means and ways by which this can take place to better respond to the developmental needs of the country. Discussions ranged across four core themes: infrastructure, regulation, socio-economic impact, and education/innovation. The central message that experts highlighted was that Egypt's AI strategy must be localized, human-centered, and grounded in economic and institutional realities rather than replicating global models.

Key Conclusions:

1. Infrastructure Must Follow AI Development Not Lead It

Egypt currently faces structural constraints in AI infrastructure, including limited access to advanced computing hardware, high energy costs, and insufficient AI-ready data centers. Hence, attempting to compete with global hyperscalers is not viable, Egypt needs to have targeted, sector-specific AI solutions driven by market demand and national priorities while being cognizant of the risks and working to mitigate them.

2. Data Readiness is the Critical Bottleneck

The challenge lies not in data availability but in data quality, structure, and governance, alongside regulatory ambiguity that limits data sharing and investor confidence.

3. Economic Feasibility and Strategic Focus are Essential

AI initiatives should be aligned with clear business cases and national priorities, leveraging strengths in sectors such as healthcare, logistics, and agriculture rather than pursuing costly foundation models.

4. Human Capital is the Decisive Factor

Even though Egypt has strong talent potential, gaps in applied AI skills persist. Without

reskilling and workforce transition measures, AI risks increasing unemployment and inequality, making risk-based governance essential.

5. Regulation Should Evolve Gradually and Enable Innovation

While views differed on immediate AI legislation, there was alignment around a hybrid, flexible regulatory approach that reduces uncertainty without stifling innovation.

6. AI Could Reshape Labor Markets and Deepen Inequalities

AI Automation will heavily impact routine jobs while increasing demand for advanced skills, reinforcing the need for inclusive policies and social protections. The job loss would fast outpace the new opportunities, deepening inequalities in the labour market and raising a pressing need for retraining and reskilling.

7. Education Systems Require Systemic Transformation

Education must shift from rote learning to critical thinking, creativity, and lifelong learning, all while integrating AI across disciplines.

Recommended Follow-Up Measures

- **Strategic and Economic:** Focus on high-impact sectoral AI pilots, develop full-stack investment models, and align AI adoption while considering resource constraints in energy and water
- **Data and Infrastructure:** Launch a national data readiness initiative, enable secure cross-sector data sharing, and invest in mid-scale, specialized AI infrastructure.
- **Regulation and Governance:** Begin with soft tools such as guidelines, sector-specific statutes, and sandboxes, establish a central coordination body, and implement risk-based, sector-specific frameworks.
- **Human Capital and Labor:** Scale reskilling programs, strengthen industry-academia collaboration, and introduce social safety nets for displaced workers.



- **Education and Inclusion:** Integrate AI into curricula from early stages, expand access to tools and infrastructure, and invest in teacher training and capacity building.
- **International Cooperation:** Expand partnerships for knowledge transfer, investment, and coordinated AI governance at regional and global levels.

I. Session 1: The Infrastructure

Moderated by Mr. Khaled Mansour

1. Structural Limitations of Egypt's AI Infrastructure

Egypt's current AI infrastructure reveals a structural gap between requirements to compete in the global AI market and national capabilities. Although the country hosts a few data centers, they are predominantly designed for enterprise or internet services rather than AI-intensive workloads. Modern AI development, especially large-scale model training, requires **specialized AI data centers** equipped with high-density GPUs, advanced cooling systems, and continuous, adequately-priced energy supplies. These requirements are not yet available at scale in Egypt. Energy scarcity, comparatively high electricity prices, and water constraints significantly limit the feasibility of hyperscale or GPU-heavy infrastructure, especially when compared to countries that provide much cheaper energy for AI development.

Another major constraint is **limited access to advanced computing hardware**. Restrictions on GPU imports and insufficient availability of accelerators have reduced Egypt's ability to experiment, train, or even host sophisticated AI models. Meanwhile, global trends show a shift toward AI factories, data centers built specifically for model training and inference, while Egypt continues to follow traditional data center paradigms. Financial institutions further compound the challenge by **categorizing AI data centers as high-risk investments**, favoring safer infrastructure projects instead.

These challenges suggest that directly competing with global hyperscalers is neither economically nor strategically viable. Instead, Egypt faces a critical choice: either significantly restructure its infrastructure strategy or reorient toward smaller, specialized, and sector-focused compute environments. Without addressing energy economics, compute power access, and infrastructure design, AI ambitions will remain aspirational rather than operational.

Some attendees argued that there's no need for Egypt to do hyperscaling now and that building infrastructure without a clear economic purpose is strategically misguided. They stressed that AI should begin with identifying market needs, viable business models, and sector-specific demand and argued that **Egypt should not imitate global hyperscalers but instead design targeted AI solutions aligned with its economic conditions, geography, and societal needs**. For them, infrastructure is an outcome of value creation; not the starting point.

2. Data Readiness, Regulatory Gaps, and the Question of Digital Sovereignty

Across the discussion, data emerged as the real foundation, and the real weakness, of Egypt's AI ecosystem. The issue is not only data availability, but data readiness and access to data. Much of the existing data is fragmented, unstructured, poorly labeled, or inaccessible for AI training. Without systematic data cleaning, standardization, and governance, even the most advanced infrastructure would produce limited value. AI systems are only as effective as the data they are trained on, making data quality a strategic concern rather than a technical afterthought.

Regulatory gaps further complicate the landscape. While personal data protection laws exist, there is no comprehensive legal framework governing data used for AI training, synthetic data generation, or cross-sector data sharing. Highly regulated sectors, such as finance and critical infrastructure, are reluctant or prohibited from sharing data which limits the creation of high-value AI use cases. This regulatory ambiguity undermines trust between public institutions, private companies, and potential investors.

Within this context, digital sovereignty becomes central. True sovereignty is not about hosting servers locally, but about controlling data flows, access rights, and decision-making authority. Several countries operate powerful AI systems with minimal regulation, yet maintain strong control through ownership, enforcement, and strategic alignment. Egypt's challenge is to balance ethical governance with strategic flexibility to ensure national interests, security, and cultural context are preserved without stifling innovation.

3. Economic Feasibility, Market Alignment, and Strategic Positioning of AI Investments

A key insight from the session was the need to reverse the typical approach to AI projects. Rather than starting with infrastructure or technology, AI initiatives should begin with economic logic and market demand. Building data centers or deploying AI models without a clear business case risks wasting scarce resources. We need to assess the purpose, scale, and direction of AI investments.

Egypt's macroeconomic realities require a selective AI strategy. Competing in foundation models or global LLMs demands billions of dollars, sustained compute access, and massive datasets all of which are rather untenable requirements.. However, this does not eliminate the possibility and

the opportunity. Egypt holds strategic advantages in geography, population size, and the variance in existing sectors. Sector-specific AI solutions, targeting areas such as logistics, healthcare, finance, agriculture, or public services, offer far higher returns on investment with significantly lower infrastructure requirements.

Funding remains a central obstacle. Financial institutions tend to avoid AI infrastructure which they view as a high-risk sector that requires large investments. . This reinforces the importance of “full-stack” AI projects that integrate data, models, applications, and revenue pathways into a coherent proposal. Feasibility studies, clear economic outcomes, and alignment with national priorities are essential to unlock funding.

Ultimately, Egypt’s AI success depends less on replicating global models and more on locally-driven strategic focus; identifying local needs, building economically viable solutions, and leveraging AI as an enabler of productivity. Several participants supported an approach that relies on developing Small Language Models (SLMs) for specific sectors such as in finance and government services.

4. Human Capital, Societal Impact, and Risk-Oriented AI Governance

The human dimension is the defining factor in the success or failure of AI adoption. While Egypt possesses a large and growing talent pool, there is a clear skills gap between theoretical knowledge and practical implementation. Many graduates understand AI concepts but lack the ability to deploy systems, manage production environments, or translate insights into real-world impact. Closing this gap requires rethinking education, training, and industry collaboration with a strong emphasis on applied skills and execution.

Beyond skills, AI presents profound societal risks. Automation is expected to eliminate millions of jobs while creating far fewer new ones, making workforce displacement a central policy challenge. Without structured reskilling and transition programs, AI could exacerbate inequality rather than drive growth. Additionally, AI systems increasingly shape cognition, narratives, and decision-making. Bias in language models, misinformation, and “cognitive warfare” pose threats to social stability, historical narratives, and national security.

Governance must therefore be risk-driven rather than reactive. Identifying harms, such as bias, surveillance misuse, cybersecurity vulnerabilities, should precede large-scale deployment.

Ethical and responsible AI is not just a compliance issue, but a strategic defense mechanism. Data protection, security-by-design, and transparency must be built into systems from the outset. Ultimately, AI governance is not about restricting innovation, but about enabling it safely. If managed correctly, Egypt’s population can be transformed from a perceived burden into a powerful engine of AI-driven development, provided that people, not infrastructure alone, remain at the center of the strategy.

II. Session 2: The Regulatory Frameworks

Moderated by Dr. Nagla Rizk

1. AI Law Now vs. AI Law Later: Timing as the Core Divide

The most visible split in the discussion concerned whether Egypt needs an AI law now, later, or not at all.

One group argued strongly that introducing a dedicated AI law at this stage would be premature. Their position was rooted in institutional realism as implementation bodies are not ready, public-sector digital maturity remains limited, enforcement capacity is weak, and AI itself is not yet clearly defined in practice. From this perspective, rushing legislation risks creating symbolic laws that exist on paper but fail in execution and may quickly become obsolete as the technology evolves.

In contrast, other people accepted the inevitability of AI regulation, but emphasized preparation rather than delay. A key perspective emphasized the need to move beyond the assumption that legislation must wait for technological maturity. From this view, postponing regulation on the grounds of rapid technological change risks creating governance vacuums, while modern legislative approaches are inherently designed to evolve alongside innovation. Rather than reacting to fully materialized harms, legal frameworks should play a proactive role in anticipating emerging risks and shaping technological trajectories from an early stage.

They supported beginning with soft laws, directives, frameworks, and capacity-building efforts mainly laying the philosophical and institutional groundwork before formal legislation. There was recognition of the importance of comparative regulatory models, particularly the European Union’s AI Act, as a useful reference point for governance design. However, it was stressed that

such models should not be replicated wholesale. Instead, they should be critically assessed and selectively adapted to national legal, institutional, and socioeconomic contexts, ensuring alignment with domestic priorities and constraints.

The disagreement is not about whether AI should be regulated, but about sequencing. Both sides converge on the idea that capability must precede enforcement, though they differ on how proactive the legal system should be during this transitional phase.

2. Overarching AI Law vs. Sector-Specific Regulation

One school of thought rejected the idea of a single, overarching AI law, arguing that AI risks and use cases vary dramatically across sectors. From this view, sector-specific regulation allows for precision, flexibility, and relevance, particularly in high-risk areas such as finance, security, healthcare, and defense. Blanket laws were seen as blunt instruments that could stifle innovation or misjudge sectoral realities.

Others warned that excessive fragmentation could create regulatory confusion, conflict between authorities, and uneven enforcement. It was also highlighted that the absence of a clear AI legal framework does not necessarily encourage innovation, as sometimes assumed, but may instead generate regulatory uncertainty that undermines investor confidence. In high-technology sectors, particularly those involving data governance and advanced digital infrastructure, investors often prioritize predictable legal environments with clearly defined rights, obligations, and liability frameworks. Without such clarity, both domestic and foreign investment decisions may be adversely affected.

They argued that a general framework law, supported by sector-level operational guidelines, may offer a balanced approach helping establish common principles such as accountability, transparency, and risk categorization, while allowing contextual application.

This debate reflects a classic legal trade-off: uniformity versus adaptability. While participants disagreed on form, they broadly agreed that regulation must be risk-based and context-sensitive rather than purely technology-driven.

3. Regulation as Enabler of Innovation vs. Barrier to Innovation

A recurring concern was the potential for regulation to unintentionally suppress innovation, drawing lessons from strict drone laws that limited technological experimentation. Some people argued that hard laws, penalties, and restrictive rules, when introduced too early, can freeze emerging ecosystems, discourage SMEs, and push innovation underground or abroad.

Opposing this view, others argued that regulation is not the enemy of innovation, but its prerequisite. Clear rules on responsibility, liability, data usage, and ownership can reduce uncertainty, protect users, and enable responsible scaling. The issue, they argued, is not regulation itself but poorly designed regulation that ignores implementation realities and market dynamics.

The disagreement centers on regulatory design, not regulatory intent. Most participants agreed that laws should regulate innovation, not regulate against it, it should also favor flexible, updateable frameworks over rigid statutes.

4. Legal Text vs. Governance Ecosystem

A strong point of convergence emerged around the idea that law alone is insufficient. Several participants emphasized that AI governance includes ethics, data governance, institutional coordination, education, technical standards, and public awareness. In this view, legislation is merely one tool within a much larger governance ecosystem.

Egypt has several laws, regulations and institutions that are involved in this field. They include the Higher Council for AI, the center for protecting Personal Data, the Egyptian Center for Responsible AI, an AI charter, the Personal Data Protection Law, a Cybercrime law, etc.

There was broad concern about unclear accountability: who bears responsibility for AI harm; the developer, deployer, user, or the state? Similarly, unresolved questions around data ownership, AI-generated outputs, and transparency metrics signal gaps that law alone cannot fill without supporting institutions, skilled labor, and technical benchmarks.

While participants differed on how urgent the need for regulation is, they agreed on a critical conclusion: without institutional capacity, skilled implementers, and societal readiness, even well-written AI laws will fail.

III. Session 3: The Social and Economical Impacts

Moderated by Mr. Khaled Mansour

1. Restructuring Labor Markets and the Future of Work in the Age of AI

A central theme across the session was the transformation of labor markets driven by AI adoption. AI is already automating a significant share of routine and repetitive tasks, particularly affecting low- and medium-skilled jobs, while simultaneously **creating demand for high-skilled roles**. This dual dynamic is widening the gap between those who can adapt to AI and those who cannot. The discussion highlighted that while some view AI as a creator of new opportunities, others see it as a force of displacement, yet there is still no clear consensus on which effect will dominate. What is evident, however, is that the transition is uneven and disruptive.

A critical structural challenge lies in the changing nature of workforce hierarchies. Organizations are increasingly **relying on experienced professionals to oversee and validate AI outputs**, while opportunities for junior employees to gain hands-on experience are shrinking. This creates a bottleneck in skill development, raising **concerns about future talent shortages** when current senior experts exit the workforce. At the same time, AI is reshaping work itself, **reducing task loads but not necessarily improving working conditions**, as reduced workloads do not always translate into shorter working hours or better wages.

The discussion also emphasized the emergence of new forms of work, or the so-called gig economy, such as platform-based and AI-assisted roles, which require continuous reskilling and adaptability. However, **existing education and training systems are not evolving fast enough to meet these needs**, leaving many workers without clear pathways for transition. In developing economies, the challenge is even more acute, as job displacement often occurs **without adequate social protection or retraining programs**.

Ultimately, the future of work under AI is not just about job numbers, but about job quality, access, and sustainability. The need to move beyond job creation toward creating meaningful,

well-compensated, and secure employment was strongly emphasized. Without deliberate intervention, AI risks deepening structural unemployment and reinforcing existing labor inequalities rather than resolving them.

2. Inequality, Power Concentration, and the Global AI Divide

Another dominant theme was the role of AI in reshaping economic power structures and exacerbating inequalities at multiple levels. The session highlighted a shift away from traditional models of **competitive capitalism toward a more concentrated quasi-monopolistic system where a small number of large technology corporates hold disproportionate influence**. These entities control critical resources such as data, infrastructure, models, applications and computational capacity, allowing them to dominate AI development and deployment. This concentration of power raises concerns about market fairness, limits opportunities for smaller players, and weakens the ability of governments, particularly in developing countries, to regulate effectively.

AI is also intensifying global inequalities. Advanced economies are leveraging AI to address structural challenges such as aging populations and labor shortages, treating it as a **tool for economic sustainability**. In contrast, many developing countries are experiencing AI primarily as a **disruptive force that displaces jobs without delivering equivalent benefits**. This imbalance reinforces existing global disparities, with economic gains concentrated in already advanced regions and among multinational corporations. One participant pointed out how Europe is looking at AI as part of a solution for the demographic challenges and also the immigration policy challenges. She called for collaboration on AI governance between Europe and Arab countries, as part of a regional Arab, African and like-minded global south collaboration in this regard. A global challenge is seen to require a multilateral response.

At the societal level, AI is contributing to the erosion of the middle class and widening income gaps. **Access to advanced AI tools is often limited to those who can afford them**, creating a divide between digitally empowered individuals and those left behind. Vulnerable groups, including **women and low-skilled workers**, face compounded challenges, as they are more exposed to job displacement and less likely to benefit from new opportunities.

The discussion also introduced the concept of a shifting governance landscape, where economic and political power becomes increasingly centralized, potentially weakening democratic

processes. Decision-making risks becoming more aligned with the interests of a small elite rather than the broader population. This has led to calls for stronger regulatory frameworks, including updated antitrust policies and more inclusive governance models.

Overall, the theme underscores that AI is not a neutral technology, it reflects and amplifies existing inequalities. Addressing these imbalances requires intentional policies that ensure fair access, equitable distribution of benefits, and stronger institutional oversight.

3. Governance, Ethics, and the Need for Human-Centered AI

The session strongly emphasized the importance of governance and ethical considerations in AI deployment. While **terms such as “responsible” and “ethical” AI are widely used, there is often a gap between rhetoric and actual practice.** This has led to what can be described as “ethics washing,” where organizations promote ethical narratives without fully adhering to them. The lack of clear standards and accountability mechanisms makes it difficult for the public to distinguish between genuine responsibility and superficial claims.

A major concern is the rapid deployment of AI systems in high-stakes domains, such as hiring, legal decision-making, and healthcare, **without sufficient human oversight.** The absence of a “human element” in these processes can lead to biased, opaque, or harmful outcomes. This reinforces the need for governance frameworks that prioritize transparency, accountability, and fairness, ensuring that AI systems remain aligned with societal values.

The discussion also highlighted broader societal risks associated with AI, particularly in the spread of misinformation and manipulation. **AI-generated content is increasingly difficult to distinguish from real fact-based information, posing threats to public trust, political stability, and social cohesion.** Beyond misinformation, there are deeper concerns about the psychological and cultural impacts of AI. Concepts such as “liquid identity” point to the potential erosion of stable personal and cultural identities in a highly digital and AI-mediated world. Additionally, emotional dependency on AI systems raises serious mental health considerations.

These challenges point to the need for a human-centered approach to AI, where technological advancement is balanced with the protection of human rights, dignity, and well-being. This

includes recognizing emerging rights, such as the right to cognitive autonomy, and ensuring that individuals are not reduced to passive subjects of algorithmic systems.

Ultimately, governance must evolve alongside technology. Effective AI governance requires not only regulations, but also public awareness, ethical education, and international cooperation to address cross-border challenges. Without this, the risks of misuse and harm may outweigh the potential benefits.

4. Policy, Resources, and Strategic Positioning in an AI-Driven Economy

The final theme focused on the role of public policy in shaping how countries respond to AI-driven transformations, particularly in relation to resources, investment, and strategic positioning. AI is not only a technological issue but also an economic and policy challenge that intersects with resource management, industrial strategy, and national development priorities.

One key issue discussed was the **pressure AI places on natural resources, especially energy and water**. As AI systems require significant computational power, their environmental and economic costs must be carefully evaluated. This raises important questions about efficiency and return on investment (ROI), as well as the need for **better pricing mechanisms that reflect resource scarcity**. Policies must ensure that technological adoption does not come at the expense of sustainable resource use.

At the same time, countries must rethink their economic positioning in the global AI landscape. For economies, like Egypt, with **strong human capital but limited financial resources, the focus should shift toward leveraging talent and education as competitive advantages**. This involves investing in education systems, fostering innovation ecosystems, and attracting AI-related investments based on value creation rather than low labor costs.

The discussion also highlighted the importance of **regional and international collaboration**. Partnerships with advanced economies like the European countries can support knowledge transfer and governance development, while regional and Arab cooperation can help address shared challenges related to employment, energy, and technological infrastructure. A multilateral approach is essential to ensure that AI development is inclusive and coordinated rather than fragmented.

Finally, the need for proactive and forward-looking policy frameworks was emphasized. **Governments must not only respond to current disruptions but also anticipate future changes across different time horizons.** This includes building safety nets for displaced workers, supporting new industries, and ensuring that investments are directed toward sustainable and inclusive growth.

In essence, effective policy is the bridge between AI's potential and its real-world outcomes. Without strategic planning and coordinated action, countries risk falling behind or exacerbating existing challenges.

IV. Session 4: Innovation and Education

Moderated by Dr. Mohamed Fahmy Menza

1. Rethinking the Purpose of Education in the Age of AI

A central theme throughout the session was the need to fundamentally redefine the purpose of education in response to AI. Traditionally, educational systems have been designed primarily to prepare students for employment. However, this narrow focus is increasingly being questioned, as AI begins to automate many of the routine and “conforming” roles that education has historically prepared students for. This raises a critical question: if AI can perform many of these functions, what should education aim to achieve? Meanwhile, the exponential development of AI modalities also poses several questions pertinent to the educational process as a whole. How could we utilize AI to better inform and enhance our educational systems? And, in doing so, what are the tools and mechanisms that can be employed to equip educators and learners alike to become more savvy users and beneficiaries of AI models? Answering the abovementioned questions also entails more scrutiny and a continuous reassessment of the challenges and risks involved in the increasing reliance on AI in the educational process.

The discussion emphasized a general precursor that education should move beyond being a pipeline to jobs and instead focus on developing **well-rounded individuals capable of critical thinking, creativity, and lifelong learning.** There is a growing need to shift from memorization-based systems toward approaches that challenge students to think, question, and understand the purpose behind what they learn. Encouraging students to ask “why am I doing

this?” reflects a deeper transformation toward purpose-driven education rather than task-based learning.

AI is also reshaping the role of educators. Instead of being the primary source of knowledge, they are increasingly becoming **facilitators of learning**, guiding students in navigating information, interpreting knowledge, and applying it meaningfully. This shift requires a rethinking of pedagogical approaches, assessment methods, and classroom dynamics.

At the same time, education must prepare learners for a “post-AI” world, similar to how it adapted to past technological shifts such as computers and calculators. This involves identifying which skills remain uniquely human and ensuring that students develop capabilities that complement, rather than compete with, AI. Ultimately, the goal is not only to prepare individuals for the labor market, but also to cultivate curiosity, innovation, and a broader understanding of the world, ensuring that education remains relevant, meaningful, and future-oriented.

2. Structural Reform of Educational Systems and Curriculum Design

Another major theme was the urgent need for **system-wide reform of educational structures and curricula** to effectively integrate AI into their various phases of development. Most of the current educational systems in our region are often fragmented, reactive, and slow to adapt, lacking a clear long-term vision. There is a strong need for a **coherent national strategy** that defines what should be taught, how it should be taught, and what outcomes are expected from learners.

A key issue identified is that most reforms tend to focus on **secondary and higher education**, while **primary education remains neglected**, despite being the foundation for cognitive and skill development. Early education plays a crucial role in shaping critical thinking, adaptability, and problem-solving abilities, and therefore should be the starting point for reform.

The session also highlighted the importance of **integrating AI into curricula as a cross-disciplinary skill**, rather than treating it as a standalone subject. In fields such as medicine, engineering, and business, AI should be embedded within existing courses to enhance practical application. This approach ensures that students develop the ability to use AI tools effectively within their respective domains, rather than learning about AI in isolation.

Additionally, there is a need to continuously update curricula to reflect rapid technological changes, particularly in fields like IT and computer science. However, this process should not be carried out in isolation. Collaboration between **educational authorities, industry experts, and AI specialists** is essential to ensure that curricula remain relevant and aligned with real-world needs.

Overall, the theme highlights that education reform must be **systemic, forward-looking, and collaborative**, addressing both content and structure to create a flexible and adaptive learning environment.

3. Inequality, Access, and Gaps in AI-Driven Education

The session also underscored the risk of **deepening inequalities within education systems** as AI becomes more integrated. Access to AI tools, technologies, and quality education is uneven, creating divides between students based on socioeconomic status, geography, and institutional support.

One dimension of inequality is **access to AI tools**, many of which are paid services. Students who can afford these tools gain advantages in learning and productivity, while others are left behind. This creates an imbalance not only among students, but also between students and teachers, as some learners may have access to more advanced knowledge through AI than their instructors.

Another significant gap exists between **urban and rural areas**, where access to quality education, technological infrastructure, and specialized programs differs widely. While technical and AI-focused schools have shown strong results, especially in underserved areas, their reach remains limited. Expanding such initiatives is critical to bridging the knowledge gap and ensuring more equitable access to opportunities.

The discussion also highlighted issues related to **talent development and retention**. Limited support for competitions, research initiatives, and advanced learning opportunities pushes many talented students to seek opportunities abroad. This contributes to a loss of local talent and weakens national innovation capacity.

Furthermore, inequality is not only about access but also about **inclusion**. Certain groups, particularly women and vulnerable populations, face additional barriers in accessing AI

education and career opportunities. Addressing these disparities requires targeted interventions, including inclusive policies, awareness programs, and support systems.

Overall, the integration of AI in education must be accompanied by deliberate efforts to ensure **equity, accessibility, and inclusion**, otherwise it risks reinforcing existing social and educational divides.

4. Governance, Ethics, and Capacity Building in AI Education

The final theme focused on the importance of **governance, ethical awareness, and capacity building** in shaping how AI is integrated into education. While there is significant emphasis on adopting AI tools, less attention is often given to how these tools are used, their risks, and their broader societal implications.

A key priority identified is the need for **awareness and education around responsible and ethical AI**. This includes not only teaching students about AI technologies, but also helping them understand issues such as bias, misuse, misinformation, and ethical decision-making. Education systems must ensure that students are equipped to critically engage with AI, rather than passively consume it.

Academic integrity emerged as a major concern, with AI tools enabling new forms of cheating and undermining trust in assessments. This calls for **rethinking evaluation methods**, including the use of oral exams, project-based assessments, and other approaches that emphasize individualized methods of evaluation and assessment along with understanding and originality over rote outputs.

Capacity building must also extend beyond students to include **teachers and educators**, who face significant challenges in adapting to AI. Unlike learners, who usually tend to adopt new technologies fast, educators often lack the training and support needed to integrate AI effectively into their teaching. This creates a gap that must be addressed through professional development and institutional support.

At a broader level, there is a need for **national and institutional frameworks** that guide AI integration in education, including partnerships between universities, governments, and private sector actors. Public awareness is also critical, particularly in helping individuals distinguish between real and AI-generated content.



Finally, the theme highlights that capacity building should be **inclusive and continuous**, extending beyond formal education systems to reach communities, families, and vulnerable groups. This ensures that AI adoption is not only technologically advanced, but also socially responsible and aligned with broader development goals.