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AI in Education, Research and Skills Development Roundtable

Summary Report

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AI in Education, Research and Skills Development Roundtable

Summary Report

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1 Executive Summary

Artificial intelligence is rapidly emerging as a general-purpose capability across higher education, reshaping how universities teach, assess learning, conduct research, develop talent, support lifelong learning and advance their public-interest mandate. The roundtable examined this transformation from the perspectives of university leadership, industry and international cooperation.

Universities occupy a distinctive position in the AI ecosystem. They are users of AI in teaching and research, producers of AI knowledge and talent, and custodians of academic values, including integrity, rigour, openness, inclusion and service to society. This dual role requires universities to innovate while putting policies, safeguards and institutional capabilities that ensure the responsible use of AI.

The discussion emphasized the need for universities to adopt a hybrid AI governance model: an institution-wide AI policy establishing common principles, accountability arrangements and risk-management expectations, complemented by domain-specific guidance for teaching and learning, research, assessment, procurement, ethics, data governance, accessibility and partnerships.

In education and assessment, it was highlighted that AI could be used to strengthen feedback, personalization, accessibility and learning analytics, while preserving the validity, fairness and credibility of academic judgement. More resilient assessment models were highlighted for project-based learning, problem-solving, learning portfolios, continuous assessment, AI critique and evidence of student reasoning, rather than relying primarily on the production of written outputs.

In research, AI offers significant opportunities for discovery, analysis, simulation, coding and knowledge synthesis. At the same time, universities must strengthen research-integrity rules for AI-assisted work, including disclosure, reproducibility, human verification, documentation of methods, safeguards against fabricated citations and accountability for AI-enabled outputs.

For skills development, the roundtable underlined that AI literacy plays an essential role as a baseline graduate competency across all disciplines. Beyond technical skills, universities must cultivate human capabilities that remain essential in an AI-driven economy, including critical thinking, judgement, creativity, ethics, communication, problem framing and interdisciplinary collaboration.

Universities also have a strategic role to play in public AI infrastructure. Through open datasets, localized models, research repositories, shared compute, sandboxes and skills networks, universities can help ensure that AI benefits education, research and workforce development broadly, particularly in underserved regions and communities.

Key message

The central challenge for universities is not simply to adopt AI, but to govern it effectively: ensuring that AI strengthens learning, research quality, inclusion, skills development and public value, while protecting academic integrity, fairness, accessibility and trust.

2 About the Roundtable

The roundtable on AI in Education, Research and Skills Development was organized by ITU, with the generous sponsorship of Association for Computing Machinery (ACM) and held on 7 July 2026 during the AI for Good Global Summit 2026. It convened university presidents, academic leaders and industry representatives from different regions to exchange perspectives, lessons learned and emerging practices on how AI is reshaping academic research, skills development and teaching norms.

Artificial intelligence (AI) is reshaping economies, societies and education systems worldwide. In higher education, AI is no longer a peripheral technology; it is becoming a general-purpose capability that influences how universities teach, conduct research and fulfil their public mission.

The main objectives of the roundtable are to:

- Provide a platform for multistakeholder dialogue on the impact of AI on education, research and skills development.
- Examine how AI is transforming the academic ecosystem and the university mission.
- Discuss how AI is reshaping research methodologies, knowledge production and academic collaboration.
- Share best practices, open tools and building blocks for AI education and skills development.
- Identify policy, governance and partnership priorities for universities in the AI era.

3 Opening and high-level keynote

In his welcome address, Mr Seizo Onoe, Director of the ITU Telecommunication Standardization Bureau, highlighted that AI is changing how students learn, how researchers make breakthroughs and how education systems prepare the next generation of innovators. He emphasized that universities have a unique responsibility to innovate and educate while protecting the values that underpin scientific research, including integrity, excellence, inclusion and service to the public interest.

Mr Onoe noted that these values are also central to ITU's mandate as the United Nations agency for digital technologies. ITU's work aims to ensure that the latest innovations benefit everyone, everywhere, and remain centered on public interest.

He highlighted examples of ITU's engagement with academia, including the Kaleidoscope academic conferences and the ITU Journal on Future and Evolving Technologies, where ITU academia members share emerging research. He also referred to ITU's global AI competitions, such as the Robotics for Good Youth Challenge, where many participants are students from developing countries, particularly in Africa. These competitions connect students with datasets, models, standards, open-source tools and expert mentors, including through the implementation of ITU standards.

Mr Onoe also highlighted the launch of the AI for Good Lab at the AI for Good Global Summit. The Lab aims to provide an AI knowledge-transfer programme for developing countries, supporting the development of skills, infrastructure and policy foundations for long-term success with AI.

Mr Yannis Ioannidis, President of ACM delivered the opening address for the roundtable. He mentioned that ACM and ITU are natural partners in advancing academia research and digital skills development and highlighted the partnership between ACM and ITU since the initial editions of the ITU Kaleidoscope conference aimed at academia. lays a significant role in shaping how Artificial Intelligence (AI) is taught, researched, and applied globally. Mr Ioannidis mentioned that ACM through its education programmes, research publications, conferences, and professional communities, helps ensure that AI is developed and used responsibly while building the workforce needed for the digital economy.

4 Track 1: How AI Is Transforming Education, Learning and Research

For Track 1 each table was assigned one question below for discussion and the section below summarises the discussions for each question in the order listed below:

Table 1. Does the university need an institution-wide AI policy, or several policies for teaching, research, procurement, ethics, data governance, and other internal and external uses? Who should be responsible for AI oversight at the institutional level?

Table 2. What policies are needed on the use of AI in research design, analysis, authorship, peer review, and publication? When should researchers disclose the use of AI in manuscripts, grant proposals, software, datasets, and other research products?

Table 3. Should universities redesign student academic assessment methods in an era where AI can generate essays, solve problems, and write code? What forms of assessment are more resilient to AI?

Table 4. How do we ensure AI-assisted research remains methodologically rigorous, reproducible, and transparent? What safeguards are needed against fabricated references, false data interpretation, or unverified AI-generated findings?

Table 5. How can the university prevent bias, discrimination, or harm arising from AI models used in research? Who is responsible and accountable when such phenomena occur in the university environment?

Table 6. Can AI be used to enhance assessment, including automated grading? What measures should universities adopt to ensure that assessment remains fair, meaningful and reflective of each student's true capabilities?

Table 7. How can universities contribute to open, public AI infrastructure for education and research? What partnerships are critical?

Table 8. Does AI narrow or widen educational inequalities, and what responsibilities do universities have in managing this? How can universities ensure that AI in education supports inclusion and accessibility?

4.1 Institution-wide AI policy and governance

During the discussion it was observed that there is a general trend for universities to adopt a hybrid AI governance model comprising an institution-wide AI policy, complemented by domain-specific policies for teaching and learning, research, procurement, ethics, data governance, administration and partnerships.

The institution-wide policy could establish amongst others, common principles, risk classification, accountability, oversight arrangements and escalation mechanisms. Domain-specific guidance would then translate those principles into operational rules appropriate to each university function.

At the institutional level, it was emphasized that AI oversight could be led by a senior governance body or AI steering committee with representation from academic leadership, research ethics, teaching and learning, IT, data protection, accessibility, legal, procurement, students and external stakeholders where appropriate.

4.2 AI in Research Design, Authorship, Peer Review and Publication

Universities are working towards adopting a comprehensive research AI governance framework covering research design, analysis, authorship, peer review, publication, software development and dataset management.

It was highlighted that AI systems cannot not be listed as authors because authorship is linked to responsibility, accountability and the ability to approve final outputs. Researchers remain fully responsible for the integrity, accuracy and originality of all submitted work.

Disclosure is required whenever AI materially influences the intellectual content, methodology, analysis, software, data processing, visual outputs or presentation of research. Such disclosure supports transparency, reproducibility, public trust and responsible research practice.

4.3 Redesigning Assessment in the Age of Generative AI

It was highlighted that universities are placing greater emphasis on the demonstration of understanding, reasoning, judgement, creativity and responsible AI use, rather than on the production of content alone.

AI-resilient assessment methods include oral examinations, project-based learning, authentic assessment, laboratory and fieldwork tasks, portfolios, continuous assessment, viva voce defence, reflective journals and real-world problem-solving.

AI critique is becoming explicit graduate competency and it was highlighted that students will be expected to demonstrate their ability to evaluate AI outputs, identify errors and hallucinations, detect bias, verify evidence, assess reasoning quality and understand ethical, legal and societal implications.

4.4 Research Rigour, Reproducibility and Transparency

Researchers remain fully responsible for the design, analysis, interpretation and reporting of their work. AI tools may assist research, but they cannot replace methodological judgement or scholarly accountability.

All AI-generated outputs used in research are subject to human verification, including literature summaries, statistical results, code, data analysis, figures, visuals and conclusions.

There was general agreement that no AI-generated reference be included in a research output unless the researcher has independently verified the source, bibliographic details and relevance of the citation. It was emphasized that universities encourage shared research data infrastructures, open repositories and reproducible workflows where ethical and legal requirements permit.

4.5 Preventing Bias, Discrimination and Harm in AI Research

Universities have a responsibility to ensure that AI-enabled research is ethical, fair, transparent and accountable. Bias and discrimination can emerge from data, model design, deployment decisions or inappropriate use of AI outputs.

Preventing harm requires research ethics review, dataset governance, fairness testing, documentation, stakeholder engagement, human oversight and continuous monitoring. Attention to the specific requirements of underrepresented populations, minority languages, indigenous communities and vulnerable groups are needed.

Recode's work with indigenous and remote communities across Amazon forest villages illustrates the value of localized LLMs trained on local languages, cultural knowledge and context-specific datasets. Universities can adopt comparable approaches by supporting localized and domain-specific AI models that reflect the linguistic, cultural and socio-economic diversity of their communities.

The use of AI in research is a shared responsibility across researchers, supervisors, ethics committees, governance bodies and university leadership. Researchers are responsible for appropriate design and use; the university retains ultimate accountability for governance structures, training, oversight and remediation mechanisms.

4.6 AI-Enhanced Assessment and Automated Grading

AI can enhance assessment by improving efficiency, providing timely feedback, supporting personalized learning, identifying learning gaps and assisting educators with grading. It was highlighted in the discussions that universities consider avoiding implementing fully automated decisions for high-stakes assessment.

Assessment is not merely the measurement of output; it is a judgement about a student's knowledge, reasoning, creativity, problem-solving ability, ethical judgement and professional competence. Human oversight therefore remains essential.

As universities increasingly adopt AI for assessment, grading, feedback generation, plagiarism detection, admissions testing, and learner analytics, robust safeguards are essential to preserve fairness, academic integrity, transparency, accountability, and student rights.

A useful principle is that AI would augment academic judgment, not replace it, particularly for assessments leading to final grades, graduation, scholarships, or disciplinary actions.

Safeguards include transparent rubrics, validation against human markers, bias testing, explainability where feasible, audit logs, student appeals and clear limits on where AI-assisted grading is appropriate.

Disciplinary context matters. Programmes requiring embodied practice, manual dexterity or real-time physical problem-solving may require different assessment safeguards from engineering, technology or writing-intensive programmes.

4.7 Open, Public AI Infrastructure for Education and Research

Universities can play a central role in developing open, public AI infrastructure that serves education, research, innovation and the public interest. This includes open datasets, research repositories, localized models, shared compute, evaluation sandboxes and AI skills networks.

By working with governments, industry and intergovernmental organizations such as ITU, universities can help ensure that AI infrastructure is accessible, scientifically grounded and aligned with public value, rather than driven solely by commercial priorities.

Universities are well positioned to act as knowledge stewards, trusted evaluators, capacity builders, innovation hubs and public-interest guardians in the AI ecosystem.

4.8 AI, Inclusion and Educational Inequalities

AI can narrow or widen educational inequalities depending on how it is governed. It can democratize access to knowledge, reduce language barriers, support accessibility and provide individualized learning support. It can also widen inequalities where access to devices, connectivity, AI tools, digital skills and institutional support is uneven.

It was highlighted that universities need to ensure that every student, regardless of background, income, language, disability or geography, can use AI to enhance learning, demonstrate capability and participate fully in higher education and the future digital economy. It was emphasized that AI be used to deliver high-quality education all around the world. Today most of the countries lack good teachers, AI can be used to develop and train teachers.

Practical measures include universal access to institutionally supported AI tools, accessibility-by-design, inclusive datasets, localized models, AI literacy for all students and staff, disability support integration, human oversight and equity impact assessments before deployment.

5 Track 2: Impact of AI on Skills and Development

For Track 2 each table was assigned one question below for discussion and the section below summarizes the discussions for each question in the order listed below:

Table 1. What should every graduate, regardless of discipline, understand about AI by the time they complete their degree? Should universities embed AI into non-technical disciplines such as law, medicine, business, agriculture, social sciences, humanities and the arts? If so, what approach should be adopted?

Table 2. Which skills are best taught at foundational, intermediate and advanced levels? For example: AI awareness for all students; applied AI skills for professionals; and deeper technical skills for specialists.

Table 3. What is the university's distinctive role in the AI era: talent developer, knowledgeable and skilled workforce producer, lifelong learning provider, applied research partner, innovation hub, public-interest steward, or all of these?

Table 4. Which AI-related skills are best developed through microcredentials rather than full degree programmes, and why?

Table 5. How should universities contribute to lifelong learning, microcredentials and workforce reskilling for working professionals?

Table 6. How can universities, international organizations and industry work together to ensure that microcredentials are recognized consistently by employers, professional bodies and other institutions?

Table 7. How can universities collaborate with primary and secondary schools, industry and international organizations to address the AI skills gap for the global workforce?

Table 8. What is the university's distinctive contribution to workforce preparation in an AI-driven economy, compared with industry training providers?

5.1 Core AI Understanding for Every Graduate

Every graduate, regardless of discipline, are expected to complete university with a baseline understanding of what AI is, how it works, what it can and cannot do, and how it affects society, work and professional responsibility.

AI literacy is treated as a foundational competence, comparable in importance to quantitative literacy, digital literacy and communication skills. The expected level of proficiency can differ by discipline, and graduates would be expected to complete a degree with a good understanding of the responsible use, limitations and risks of AI.

It was highlighted that most universities are already considering embedding AI into non-technical disciplines, including law, medicine, business, agriculture, social sciences, humanities and the arts. The approach is important and it was emphasized that it is better to be discipline-specific rather than generic: students should learn how AI changes knowledge, practice, ethics and decision-making in their own field.

In the humanities and social sciences, AI is to be taught not only as a tool but also as an object of critique. Students examine how AI affects culture, language, power, labour, creativity, evidence, authorship and public trust.

At the same time, universities emphasize that human oversight remains central. Employers increasingly value judgement, creativity, emotional intelligence, communication, critical thinking, ethical reasoning and the ability to work with others. AI education should therefore combine technical awareness of AI with human-centred competencies.

5.2 Foundational, Intermediate and Advanced AI Skills

AI skills should be organized as a progression from foundational literacy to applied professional capability and advanced technical specialization.

At the foundational level, all students understand basic AI concepts, common applications, responsible use, bias, privacy, academic integrity, verification of AI outputs and the social implications of AI.

At the intermediate level, students and professionals learn to apply AI tools within their discipline. This includes prompt engineering, workflow redesign, data interpretation, AI-assisted analysis, critical evaluation of outputs, documentation and responsible human oversight.

At the advanced level, specialists develop deeper technical capabilities in machine learning, data engineering, model evaluation, AI safety, cybersecurity, responsible AI design, systems architecture, deployment and governance.

Technical skills alone are not sufficient. It was highlighted that universities place equal emphasis on evaluative and critical analytical skills: the ability to question AI outputs, analyze and assess data, identify limitations, detect bias and decide when human judgement must override automated recommendations.

5.3 Distinctive Role of Universities in the AI Era

The university's role in the AI era is necessarily multi-dimensional. Universities are talent developers, workforce preparation institutions, lifelong learning providers, applied research partners, innovation hubs and public-interest stewards.

At the same time, universities face budgetary, staffing and infrastructure constraints. They must therefore prioritize areas where they provide distinctive value: deep learning, critical inquiry, interdisciplinary education, research integrity, ethical reasoning, public-interest innovation and long-term human capability development.

Universities also provide a common space between students, employers, researchers, governments and communities. They can translate labour-market needs into educational programmes while ensuring that workforce preparation does not become narrow or purely instrumental. The labour market has been impacted a lot due to AI. Universities now have an important role to play to prepare AI skilled workforce.

A key message is that ideas, judgement and values remain human. AI is a powerful tool for analysis, creation and dissemination, but universities must prepare students to use it responsibly, critically and creatively.

5.4 AI Skills Suited to Microcredentials[1]

Microcredentials are particularly suitable for AI skills that evolve quickly, are practice-oriented and can be demonstrated through specific competencies. These include AI literacy, responsible prompting, AI-assisted productivity, data visualization, sector-specific AI tools, AI governance, cybersecurity for AI, model evaluation, research integrity with AI and responsible use of generative AI in professional workflows.

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[1] Micro-credentials are a record of focused learning achievement verifying what the learner knows, understands or can do. They include assessment based on clearly defined standards and are awarded by a trusted provider. They have stand-alone value and may also contribute to or complement other micro-credentials or macro-credentials, including through recognition of prior learning. From **Towards a Common Definition of Micro-credentials (UNESCO, 2022)** by Beverley Oliver.

Full degree programmes remain essential for deeper disciplinary formation, theoretical foundations, research capability and professional identity. Microcredentials potentially could therefore complement, rather than replace, degree programmes.

The main challenge is trust and standardization. Microcredentials often fail to deliver value when employers cannot interpret their quality, level, workload or assessed competencies. Universities therefore need to define clear learning outcomes, assessment standards, credit values and verification mechanisms.

5.5 Lifelong Learning, Workforce Reskilling and Professional Development

Universities can become major providers of lifelong learning in the AI era. With AI-related learning, AI skills development would not end with graduation; professionals will need repeated opportunities to reskill and upskill as tools, occupational roles and regulatory expectations evolve.

Universities can contribute through modular programmes, stackable microcredentials[2], executive education, online courses, professional certificates, workplace-based learning and sector-specific reskilling pathways.

The role of the university is not simply to provide answers, but to help learners frame better questions, exercise judgement and adapt responsibly to new technologies. Lifelong learning is expected therefore to integrate AI capability with creativity, humanity, empathy, entrepreneurial thinking and ethical decision-making.

AI literacy must begin before university, but higher education has a crucial role in deepening that literacy and connecting it to professional practice, research and societal responsibility.

5.6 Recognition and Quality Assurance of Microcredentials

Universities, international organizations and industry canwork together to improve the recognition, portability and credibility of microcredentials.

Recognition does not necessarily require full global uniformity. A practical approach may be to develop consistent frameworks by sector, profession, region or country, while aligning with broader international principles for quality assurance and interoperability.

Partnerships could help establish common descriptors for level, workload, learning outcomes, assessment method, evidence of competence and expiry or renewal requirements where skills change rapidly.

International organizations can help convene stakeholders, develop shared taxonomies and support recognition across borders. Industry can validate labour-market relevance. Universities can ensure academic quality, assessment integrity and public trust.

[2] Stackable microcredentials are microcredentials that can be accumulated, combined, and recognized towards a larger qualification, such as a professional certificate, diploma, degree, or occupational certification.

5.7 Collaboration across Schools, Industry and International Organizations

Addressing the AI skills gap requires collaboration across the whole education pipeline. Universities can collaborate with primary and secondary schools to support teacher training, curriculum development, responsible AI literacy and early exposure to computational thinking and ethical technology use.

A strong collaboration between universities and industry was emphasized to identify emerging skill needs, provide work-integrated learning, support apprenticeships and internships, and develop real-world projects that expose students to practical AI challenges.

International organizations can help address global disparities by supporting capacity building, shared curricula, open educational resources, skills frameworks and partnerships with institutions in developing countries.

A central task is to distinguish genuine AI literacy from superficial tool use. Students need to learn what it means to think with AI: how to use AI to support reasoning without outsourcing judgement, creativity or responsibility.

5.8 University Contribution Compared with Industry Training Providers

Industry training providers are often well positioned to deliver short-term, tool-specific and job-specific training. Their strengths include speed, practical relevance and close alignment with immediate market needs.

Universities offer a distinct and complementary contribution. They provide broader intellectual formation, disciplinary depth, research grounding, ethical reflection, critical inquiry, interdisciplinary learning and long-term capability development.

In an AI-driven economy, workforce preparation is not be limited to learning how to use today's tools. Graduates must be prepared to adapt to tools that do not yet exist, evaluate claims critically, understand societal implications and exercise responsible professional judgement.

The most effective model is complementary: industry contributes current use cases and applied expertise, while universities provide durable foundations, independent research, public-interest orientation and human-centred skills.

6 AI in Universities

This section puts in perspective based on the discussion at the round table how AI is transforming universities in ways that are broader than the adoption of a new technology. AI is changing how knowledge is created, taught, assessed, disseminated, and applied.

It highlights the main dimensions of how AI can transform education, research and skills development and the characteristics of each dimension.

6.1 Personalization of Learning

AI enables highly personalized learning experiences by adapting content, pace, assessment, and support to the needs of individual students.

Characteristics:

- Adaptive learning pathways.
- Personalized tutoring and feedback.
- Intelligent recommendation systems.
- Early identification of learning gaps.
- Customized support for diverse learners.

6.2 Human-AI Collaboration

AI is increasingly functioning as a learning, teaching, and research assistant rather than a replacement for human expertise.

Characteristics:

- AI-assisted teaching and curriculum design.
- AI-supported literature reviews and research synthesis.
- Human oversight of AI-generated outputs.
- Augmentation of academic productivity.
- Enhanced decision-making through AI insights.

6.3 Data-Driven Education and Research

Universities increasingly use AI to analyze large volumes of educational and research data.

Characteristics:

- Learning analytics.
- Predictive student success models.
- Research data mining.
- Knowledge discovery from large datasets.
- Evidence-based educational interventions.

6.4 Research and Scientific Discovery

AI has become a powerful research tool capable of accelerating scientific discovery across disciplines.

Characteristics:

- Automated data analysis.
- Simulation and modelling.

- Hypothesis generation.
- Scientific literature analysis.
- Faster experimentation and discovery.

6.5 AI-Enhanced Research Integrity and Discovery

AI can strengthen research by enabling faster literature synthesis, automated analysis, simulation, modelling, coding, data cleaning and visualization. It can also support interdisciplinary discovery by identifying patterns across datasets that would be difficult for researchers to detect manually. Used responsibly, AI can improve the scale, speed and depth of research across scientific, technical, social science and humanities disciplines.

Characteristics:

- AI-assisted literature review and evidence synthesis.
- Automated coding, data cleaning and statistical exploration.
- Simulation, modelling and scenario analysis.
- Discovery of patterns in large or complex datasets.
- Support for interdisciplinary collaboration and new research questions.
- Human verification of AI-generated findings, citations and interpretations.
- Documentation of AI tools, prompts, datasets, model versions and limitations.

6.6 Interdisciplinary Integration

AI is no longer confined to computer science departments.

Characteristics:

- AI in medicine, law, business, agriculture, and engineering.
- AI-enhanced humanities and social science research.
- Cross-disciplinary innovation.
- Integration of computational and critical thinking across curricula.

6.7 Transformation of Assessment

Traditional assessments are increasingly challenged by generative AI capabilities.

Characteristics:

- Shift towards authentic performance assessment.
- Greater use of oral assessments.
- Project-based and competency-based assessment.
- AI-assisted grading and feedback.
- Evaluation of AI critique and verification skills.

6.8 Development of New Graduate Competencies

AI is reshaping the skills universities must develop.

Characteristics:

- AI literacy for all graduates.
- Prompt engineering and AI interaction.
- Critical evaluation of AI outputs.
- Digital and data literacy.
- Ethical and responsible AI use.

6.9 Enhancement of Accessibility and Inclusion

AI has significant potential to improve educational access.

Characteristics:

- Real-time translation.
- Speech-to-text and text-to-speech capabilities.
- Personalized accessibility support.
- Support for students with disabilities.
- Assistance for multilingual learners.

6.10 Ethical, Legal and Governance Challenges

AI introduces new responsibilities for universities.

Characteristics:

- Academic integrity challenges.
- Data privacy and security concerns.
- Bias and discrimination risks.
- Questions of authorship and accountability.
- Need for institutional AI governance frameworks.

6.11 Addressing Bias and Harm in AI-Enabled Research

AI used in university research can introduce bias at multiple stages, including research design, dataset construction, model selection, training, testing, interpretation and publication. Bias may arise from underrepresentation of certain populations, poor-quality data, historical discrimination embedded in datasets, limited language coverage, inappropriate proxy variables or lack of contextual understanding. If left unaddressed, AI-enabled research may produce misleading results, reinforce inequalities or cause harm to individuals and communities.

Universities can establish safeguards to ensure that AI-assisted research remains fair, transparent, accountable and scientifically robust. These safeguards can be embedded in research ethics

review, data governance, model evaluation, publication standards and institutional oversight mechanisms.

Characteristics:

- Bias and fairness assessments before, during and after AI model use.
- Review of dataset representativeness, provenance, consent and limitations.
- Inclusion of diverse populations, languages and contexts in research design.
- Documentation of model assumptions, evaluation methods and known limitations.
- Human oversight of AI-generated research outputs and interpretations.
- Independent verification of high-impact findings.
- Research ethics review for AI projects involving people, communities or sensitive data.
- Mechanisms for reporting, correcting and learning from AI-related harms.
- Clear accountability assigned to researchers, supervisors, ethics committees and institutional governance bodies.

6.12 Continuous Lifelong Learning

AI is accelerating the pace of skills obsolescence.

Characteristics:

- Demand for lifelong learning.
- Microcredentials and short courses.
- Workforce reskilling and upskilling.
- Flexible learning pathways.
- Continuous professional development.

6.13 Open Science and Public AI Infrastructure

Universities are becoming important contributors to public-interest AI infrastructure ecosystems.

Characteristics:

- Open educational resources.
- Open research repositories.
- Shared datasets and data commons.
- Localized and domain-specific AI models.
- Public AI infrastructure and research clouds.

6.14 Localization and Cultural Relevance

Universities play a unique role in ensuring AI reflects local contexts.

Characteristics:

- Local-language models.

- Indigenous knowledge preservation.
- Context-specific datasets.
- Culturally relevant AI systems.
- Digital sovereignty and inclusion.

6.15 AI for Skills Development and Workforce Readiness

AI is transforming the skills universities must develop across all disciplines. Graduates will need more than the ability to use AI tools; they will need to understand when AI is appropriate, how to evaluate outputs, how to detect bias and hallucinations, and how to combine AI-enabled productivity with human judgement, creativity and ethical responsibility

Universities could embed AI skills into curricula at foundational, intermediate and advanced levels. It was emphasized that Foundational AI literacy be made available to all students. Intermediate skills would focus on discipline-specific applications of AI in fields such as law, medicine, business, agriculture, engineering, education, social sciences and the arts. Advanced skills would support specialists in AI development, model evaluation, responsible AI design, safety, governance and deployment.

Characteristics:

- AI literacy for all students, regardless of discipline.
- Discipline-specific AI applications and case studies.
- Critical evaluation of AI-generated outputs.
- Responsible prompting and AI-assisted workflows.
- Understanding of bias, privacy, transparency and accountability.
- Data literacy and evidence-based decision-making.
- Human-centered skills such as judgement, creativity, communication and ethics.
- Stackable microcredentials for rapidly evolving AI competencies.
- Lifelong learning pathways for professionals and alumni.

Taken together, these characteristics show that AI adoption in universities is not defined by technology adoption alone. It is defined by their capacity to use AI to improve learning, advance research, develop future-ready skills and serve the public interest, while ensuring that AI systems are transparent, inclusive, accountable, and aligned with academic values. Universities that succeed in this transition will combine innovation with governance, experimentation with safeguards, and technical capability with human-centred judgement.

7 Summary of Discussions

1. Adopt a university-wide AI governance policy supported by domain-specific guidance for teaching, research, assessment, procurement, data governance and accessibility.
2. Make AI literacy a baseline graduate competency across all disciplines, with discipline-specific applications and ethical reflection.
3. Redesign assessment to emphasize reasoning, judgement, authentic performance, oral assessments, reflective work and AI critique.

4. Require disclosure, verification and documentation of AI use in research and scholarly outputs.
5. Establish fairness, accessibility and bias safeguards for AI-assisted assessment, student support and research systems.
6. Develop microcredentials for rapidly evolving AI competencies, linked to transparent learning outcomes and quality assurance.
7. Build partnerships with industry, government and international organizations to support shared infrastructure, open resources, capacity development and the recognition of AI-related skills.
8. Ensure AI initiatives reduce rather than widen inequalities by providing universal access, accessibility-by-design and targeted support for disadvantaged learners and communities.

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