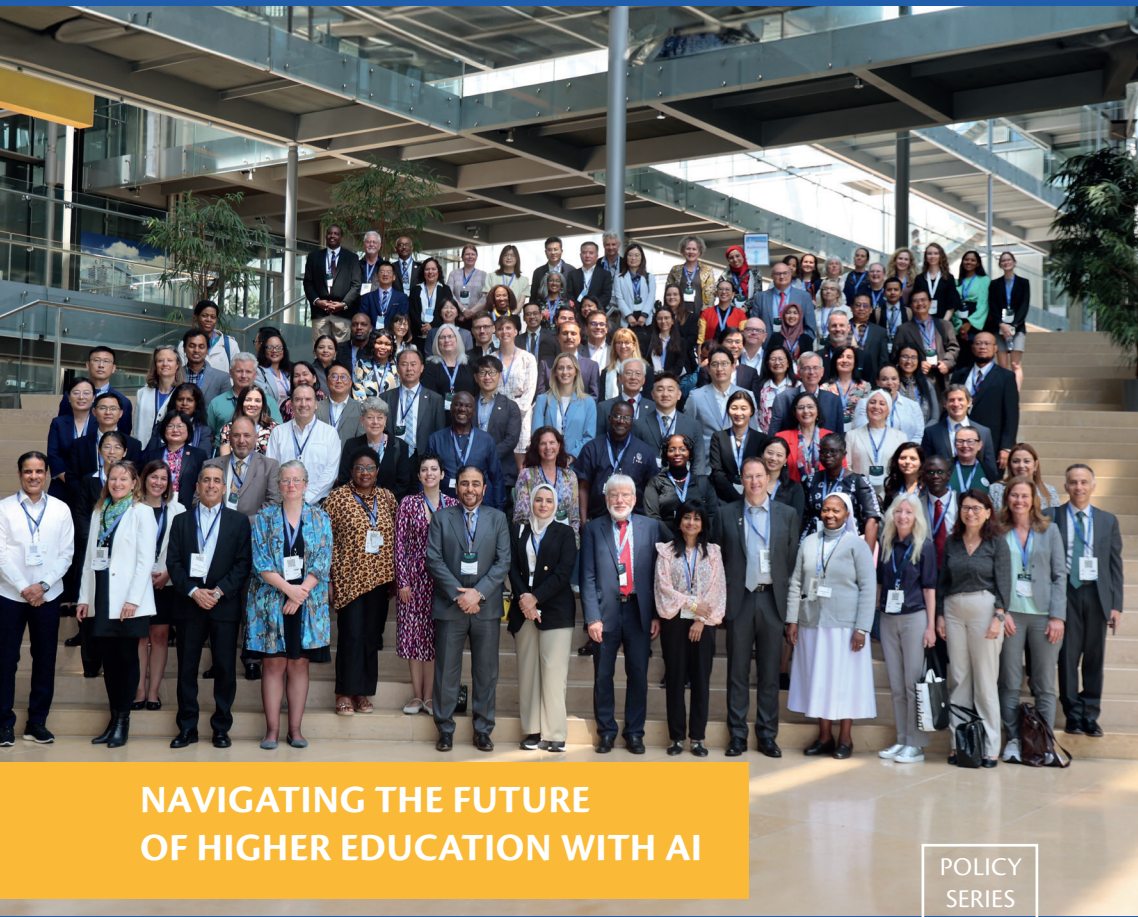

NAVIGATING THE FUTURE OF HIGHER EDUCATION WITH AI

POLICY SERIES 2

2024 ICDE LEADERSHIP SUMMIT POLICY DIALOGUE REPORT

INTERNATIONAL COUNCIL FOR OPEN AND DISTANCE EDUCATION

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Globethics

Navigating the Future of Higher Education with AI

2024 ICDE Leadership Summit

Policy Dialogue Report

Globethics Policy No. 2

Globethics Policy Series

Director: Prof. Dr Fadi Daou, Executive Director of Globethics

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FOREWORD

This policy report is the outcome of the ICDE leadership Summit hosted by Globethics in Geneva, from 5 to 7 June 2024, in partnership with UNESCO-ICHEI, under the title: *Ethical Leadership in the Age of AI: Rethinking Futures of Education*. Throughout the three days, 126 participants and 60 speakers from 35 countries contributed to enriching the reflection, from theoretical and practical perspectives, about the future of higher education in the fourth industrial revolution era.

The report does not mirror the Summit's programme, but captures the outcomes from the presentations and discussions and presents them under five titles: 1) Ethical Implications of AI in Higher Education, 2) A Culture of Innovation, 3) Equitable Leadership, 4) Social Justice, and 5) Future Praxis. Hence, the report aims to be "an accessible tool to shine a light on some of the key challenges and opportunities that are before us," ensuring a critical engagement with AI in educational spaces, that fosters accessibility, equity, and quality.

Furthermore, the Summit demonstrated how much the context is critical for this type of reflection. There is no one roadmap or plan that applies everywhere. The inextricable relationship between artificial intelligence and higher education is reshaping policies and practices in very diverse ways. This reality invites those who are in leadership roles to be mindful of both their own situation and the experiences of others. Engaging with AI in higher education requires one to be contextually and culturally situated, globally connected and informed, and ethically anchored. The four types of component of the report guide towards this attitude, combining

policy reflection with case studies, recommendations, and questions for further reflection.

I.

INTRODUCTION: THE NEXUS OF AI AND EDUCATION

1. The International Council for Open and Distance Education Summit 2024, hosted by Globethics, brought together leaders, educators, ethicists, and technologists to explore ethical leadership and artificial intelligence (AI) in education. This policy dialogue report captures the key discussions, themes, and outcomes from the summit and provides you with insight as you and your institution navigate the impact of AI on education. Soon, if not already, AI and education will be inextricable, and this report provides an accessible tool to shine a light on some of the key challenges and opportunities that are before us. Here you will find case studies and recommendations for critical engagement with AI in educational spaces, including how to improve accessibility, equity, and quality of education overall.

2. Naturally, open and distance education are particularly sensitive to changes brought about by digital technologies and exacerbated by the mass movement towards online learning brought about by the global pandemic of 2020 to 2023. Application of AI in open and distance education will potentially cut across every aspect of education—from pedagogy, evaluation, curriculum development, learning platforms and more. Negotiating a way forward remains very much undetermined, perhaps as we are all somewhat outpaced by the changes brought about by AI and related

technologies. What remains certain, however, that charting a course for ethical leadership in education in the age of AI is only improved through the building of strong and diverse networks.

3. A small but critical step in this direction was taken collectively by the participants of the Summit and the institutions the represented. Many who came to Campus Biotech in June 2024 felt that they were already immersed in the AI revolution, while others felt that they were still on the cusp of it. Levels of optimism or receptivity towards AI also varied. Some felt AI holds the potential to improve access to education, provide personalised learning experiences and support, and boost institutional efficiency. Others expressed caution, pointing to the potential of AI to exacerbate inequalities, widen digital divides, and further enforce harmful power imbalances. Holding this variety of perspectives in tension, participants did converge on the necessity of fostering ethical leadership in the deployment of AI in education. The Summit showed that there is strength in diversity as participants challenged each other, brought different ideas and concerns from their respective contexts, and built-up relationships that will help carry the dialogue forward.

4. The case studies, reflections, and recommendations of this report seek to provide all stakeholders with a compass to orient their own work on AI and education. We provide this with a view of harnessing AI's capabilities while upholding ethical standards in an evolving, global educational landscape. We hope that this will inspire more conversations and more connections to help build up the capacity to use AI ethically in a variety of educational contexts. There is also a clear need for social justice and equity within both AI and education, which was brought into sharp relief by the

concerns participants shared from around the world. We hope that the contents of this report will inspire all readers to take up critical engagement with AI in education and contribute to growing and necessary global awareness.

5. This report seeks to be a contribution to an already ongoing and rich dialogue. It is far from exhaustive, though we do hope you will find that it speaks to your questions and challenges regarding the implementation and use of AI in your institute of higher education. Each chapter shines a spotlight on a critical area of discourse, and, though interlinked, do not necessarily have to be read in order. We have also provided some questions for your own reflection at the end of each section to help you pause and integrate the contents of this policy dialogue report. We hope you enjoy engaging with it as much as we enjoyed preparing it for you.

6. As you reading through this policy dialogue report, we invite you to reflect on how you and your institution might benefit from these practices and recommendations. Consider what you could adopt, what does not apply to your context, and how you might extend or adapt the use of AI in your institute of higher education. You may also wish to consider what resources and professional development required to realise the appropriate strategic vision for AI within your institution.

II.

ETHICAL IMPLICATIONS OF AI IN HIGHER EDUCATION

Ethical Use of AI

7. The ethical implementation and use of AI in education was one of the primary themes emerging from the Summit. Leaders from educational institutions around the world wrestle with the challenges of maintaining ethics standards that pre-date AI, and therefore do not anticipate some of the unique challenges precipitated by AI and related digital technologies. This pressure to adapt quickly and appropriately to these new realities was also made more difficult by the seeming urgency to innovate in education and benefit from AI, as well as pressures to mitigate potential threats and risks related to AI. Contributors varied in their contexts and approaches, but overall, there was unifying concern for ethical leadership, transparency, inclusivity, accountability, and data privacy.

Ethical Leadership

8. AI and related technologies are increasingly prevalent in classrooms, university administration, online learning, and personalised learning environments. This makes the need for ethical leadership with expertise in these new technologies critical for the future of education. But how this leadership is understood and exercised remains open for discussion. We observed that throughout the Summit participants used similar words and phrases but having radically different meanings. Therefore, a casual observer may

gain a sense of greater agreement than is really there. Experts in online and distance education repeatedly return to notions of fairness, equity, and transparency in ethical leadership, but such values-oriented language varies in interpretation and expression from context to context. Similarly, there was repeated calls for inclusivity, accountability, and data security as part of expressing ethical leadership in the age of AI. We should take this not as an exhaustive list of criteria for ethical leadership, rather as emerging points of convergence where we can cultivate broader and deeper discussion, drawing on the diversity of networks like Globethics and ICDE.

Transparency

9. Ethical implementation and use of AI demands that decision making around AI is open and understandable to all stakeholders. This includes human decision making such as assessing tech partnerships, data privacy policies, and where AI is being used throughout educational institutions. This also includes AI-driven decisions, where AI takes over some functions traditionally held by humans. Institutes of higher education have a significant role to play in educating themselves and members of their community about how, why, and when AI is used. Technology companies, however, also have a critical role to play in developing a culture of transparency around AI. Clear communication is important about the functioning of AI systems, the data they use, and their place in making decisions.

10. This transparency is necessary to foster trust and confidence among administrators, educators, students, and all institutional stakeholders and partners. It is also necessary for broader critical institutional engagement with AI, including the development of clear and useful guidelines around AI, to assess its congruency

with institutional mission and values. Openness around AI also allows for the development of clear and useful guidelines around its deployment throughout educational systems and institutions.

11. It is also necessary for critical institutional engagement with AI, to assess its functioning, effectiveness, and its appropriateness for each institute of higher education. Openness around AI also allows for critical discourse around how, when, and why AI is used throughout institutes of higher education. Clear institutional communication about how AI systems work, what data they use, and how decisions are made to foster trust and understanding among all stakeholders. This requires building up AI-literacy throughout education and seeking transparency from the technology companies providing AI technologies and solutions.

Inclusivity

12. Ethical implementation and use of AI also requires inclusivity. This helps ensure that AI is developed and implemented for the benefit of everyone, especially those from traditionally marginalised and underserved groups. AI should enhance accessibility and educational equity, help overcome digital divides rather than exacerbate existing or create new ones. All those who participate in the development of AI, including large technology companies, start-ups, universities and other institutes of higher education, should strive for inclusivity in the development of AI. This should be accomplished by diversifying development and ethics teams and ensuring that those from marginalised and underserved communities are better represented in all phases of development. In terms of AI and education, inclusivity should consider linguistic and cultural needs, and adaptability to different learning needs.

Accountability

13. There are clear risks associated with using AI in education. Accountability is required from all stakeholders, including leaders, teachers, and students, to mitigate problems like bias, privacy breaches, plagiarism, and more. Institutional leadership must ensure that AI systems are fair and used transparently, and have mechanisms in place to address problems that may arise from their use. Teachers using AI, whether for course design, grading, or creating online learning environments, must be vigilant in using AI to create equity not further marginalise already vulnerable students. Students must also be held accountable in their use of AI through clear guidelines and policies relating to academic integrity. All of this requires that institutions invest in AI literacy for every member of an educational community.

14. Throughout the summit, participants discussed the convenience and effectiveness of regulations concerning AI use for academic purposes. They explored the possibility of developing new proctoring AI-based tools for preventing fraud or plagiarism. This subject proved to raise more questions and debate than clairvoyant agreements and statements.

Data Privacy

15. The increasing use of AI in education implies that educational institutions will deal with an increasing amount of personal data. Using AI in administrative, research, and teaching activities all raise important questions about data privacy and related concerns for the ethical implementation and use of AI in education. Stringent data handling and protection measures must be in place from day one. Institutional policies and practices should follow local legislation and regulation and go beyond these when insufficient. Each country or legal jurisdiction will require different responses.

Institutes of higher education will have to assess if their regulatory environments provide sufficient safeguarding of data or whether more robust institutional safeguards should be put in place that go beyond local laws and regulations.

Human-centric Design

16. This aspect of ethical implementation and use of AI in education is one that many are grappling with to ensure that AI technologies augment human capabilities rather than replace them. AI systems should be designed and used with the needs and values of the educational community in mind, supporting the role of educators rather than undermining them. This has specific implications for the rise of generative AI and academic integrity, where students, educators, and researchers may be easily seduced by the promises of AI shortcuts at the expense of their own learning or professional endeavours. A human-centric approach focusses on providing AI experiences that are intuitive, accessible, and aligned with the goals and values of the educational institution. It also includes actively involving users in the design process, understanding their contexts, and ensuring that the technology adapts to their behaviours and preferences, rather than the other way around.

Questions for further reflection

- What mechanisms can be put into place to promote transparency in AI decision-making processes in educational institutions?
- In what ways can AI be implemented and used in ways that promote inclusivity and address existing inequalities in education?
- Do you have a data management policy in the institution and a team responsible for its implementation and compliance?

Case Study: Ethical Leadership

Universitas Terbuka: Technological Infrastructures for Inclusive Education

Universitas Terbuka (UT) in Indonesia is a pioneer in using AI to enhance educational access and equity. UT is an open university serving more than 525,000 students in Indonesia and abroad. Its diverse student population is spread across remote and underserved regions, making equitable access a primary concern. The University has implemented several AI-driven initiatives aimed at improving the educational experience of its students.

One of the key AI innovations is the MyUT application, which uses Single Sign-On (SSO) technology to streamline academic and administrative processes. MyUT allows students to register for courses, access digital libraries, and manage their academic affairs through unified platform. Additionally, UT has integrated AI voice chatbots to assist students during the registration process, which provide real-time support, answer questions, and guide students.

The provision of both printed and digital interactive course materials helps reach more students. Digital course materials are equipped with text-to-speech technology, enabling visually impaired students to access educational content. The university also leverages AI in online learning tutorials, using AI to facilitate discussion forums, and support students throughout their learning journey.

III.

A CULTURE OF INNOVATION

17. Participants demonstrated a keen interest in innovation in education alongside innovation in technology. Participants mentioned the potential for AI to develop personalised learning, adaptive and learning paths, and intelligent tutoring systems. There was also measured enthusiasm for the potential of AI to tailor educational processes and systems more broadly, including from registration and support services, using AI chatbots and voice assistants in administrative functions, evaluation, and more.

Innovation in Education

18. Education is innovating alongside AI. Personalization is one of the main areas where some claim that AI could be used to transform education throughout the world, although participants may not share a common understanding of this concept, its meaning and scope. Some clear statements were made, concerning AI contributions to higher education: AI tools and platforms may help educational institutions adapt to the learner's time, pace and style. These technologies can potentially provide personalised support and help students understand complex concepts through interactive and engaging learning experiences. In some educational institutions running pilot programmes, AI is also being used to create personalised learning paths that aim to provide learners with individualised practice problems and instructional content. Many summit participants expressed the expectation that, through

continuous analysis of student data, including evaluation results and engagement, AI can adjust learning paths to offer more targeted testing and content. Also, that personalised AI learning assistants can generate recommended resource lists, manage digital conversations, and combine relevant study materials. In some universities, these assistants are actually being used to help answer student questions, provide resource recommendations, and support personalised learning paths by preliminary integrating AI technologies. The personalization embedded in these AI-facilitated environments promise to foster more inclusive and equitable learning environments. Care must be taken, however, to account for interpersonal and collaborative pedagogies that might be displaced. Safeguards must also be in place should AI facilitation hallucinate or potentially mislead.

Intelligent Learning Communities

19. AI is also starting to play a role in the development of intelligent learning communities. Here, AI is deployed to foster collaboration and engagement within educational environments. One such application of AI is the use of intelligent segmentation and labelling in course resources. This involves multimodal information processing, including image, audio, and text recognition, to create a more interactive learning experience. Technologies like OCR, speech and facial recognition are currently used in some educational institutions to segment videos, generate summaries, extract key concepts. All of these advances could make it easier for students to navigate and understand course materials. Participants agreed that the development of intelligent learning communities can support students around-the-clock and also identify students who may benefit from extra human support, as well as facilitate real-time collaboration among learners. Monitoring student participation and engagement, when used judiciously, can be used to

support all students in accessing the resources they need to succeed.

Questions for further reflection

- How can institutions foster a culture of innovation that respects the unique contexts and starting points of different universities?
- What are the benefits of adopting an incremental approach to AI innovation in education?
- How can the effectiveness of AI pilot projects be systematically assessed, documented, and disseminated?

Case Study: Innovation

Innovation in Education in the Age of AI - Jiangsu Open University, China

Jiangsu Open University (JSOU) is a pioneering institution in China that is leveraging AI to revolutionise its educational framework. Located in the economically developed Jiangsu Province, JSOU has embraced AI and related technologies to enhance learning, teaching, and administration. In 2023, JSOU launched its new vision of becoming a "Digital Intelligence Innovation University", emphasising deep integration of digital technologies within education to create integrated educational environments combining virtual and "real" elements. The university has effectively integrated MOOCs (Massive Open Online Courses) into its educational offerings, enhancing accessibility and quality of education. JSOU leverages MOOCs to provide flexible learning opportunities, allowing students to access high-quality resources regardless of their location.

JSOU focuses on digital intelligence leadership, which goes beyond traditional information technology by incorporating AI and related technologies. This approach seeks to advance the digital transformation within the university, systematically improving education across all disciplines. Integral to this approach is the use of personalised learning paths for students. Here, AI analyses student needs and performance data to offer resource recommendations and learning strategies.

Achieving the vision outlined above also requires a transformation for the way teachers teach. Effective integration of AI requires ensuring teachers have the necessary digital literacy and technical skills, and so JSOU provides ongoing professional development and encourages the adoption of new technologies.

While AI has the potential to enhance education, it can also exacerbate digital divides if not implemented equitably. JSOU focuses on providing access to digital tools and resources for all students, including those from disadvantaged backgrounds.

IV.

EQUITABLE LEADERSHIP

20. While the above sections looked broadly at the implementation and use of AI throughout educational institutions, here we sharpen our focus to look at the role of leadership specifically. Ethical leadership is a transformative force in open education. The ethical principles discussed above, including inclusivity, equity, and accessibility, can all help guide the development and governance of Open Educational Resources (OER) and AI, fostering global approaches to lifelong learning and educational equity. However, the equitable integration of AI in education faces resistance, necessitating robust leadership models grounded in ethical foundations.

21. A significant gap exists between theorising AI's potential in education and achieving concrete progress. Initiatives are often limited to small-scale pilots and face slow implementation due to a lack of supportive culture, capacity, and resources. While experimentation within implementation provides a space for theoretical exploration, rigorous evaluation is crucial and is often lacking in many initiatives. Universities' heterogeneity, including differences in size, location, program diversity, delivery modes, and data cultures, underscores the necessity of discussing the "futures" of education, moving away from rigid, one-size-fits-all solutions. Concerns about AI widening existing gaps, especially regarding the accessibility of open-source AI tools, extend beyond cost and necessitate collaborative innovation.

Emerging Challenges

22. AI and OER can act as catalysts for change and lifelong learning, enabling leaders to remain creative and current. However, significant infrastructure limitations, particularly in emerging economies, pose a considerable challenge. Many countries struggle with inadequate bandwidth, connectivity, and a lack of computing hardware, which hampers the effective implementation of AI technologies. There is a notable opportunity for personalised and accessible learning experiences through intelligent teaching systems, which can support autonomous learning and provide meaningful analytics. However, leaders need to foster an environment where data-driven policies and data-driven decision-making are a common ground for institutional performance. Changing the mindset of staff, teachers and even students remains one of the core challenges that universities from emerging countries face in order to develop digital transformation. Leaders should engage with cultural transformation while struggling with technical demands concerning AI implementation.

Institutional Strategies and Integration

23. Various institutional strategies can help students and faculty navigate the integration of AI in higher education, including setting up task forces, issuing statements on AI use, providing online resources and training, and facilitating town hall discussions and symposia. The goal is to support staff and students with the necessary knowledge and skills to effectively utilise AI. Institutions can also focus on creating supportive partnerships and collaboration opportunities with industry to guide future developments. However, the integration of AI is uneven across different regions, and there is a need for a new leadership approach to accompany AI adoption, ensuring alignment with effective change management and quality assurance.

Assessment and Curriculum Innovation

24. AI has completely changed testing and evaluation within educational settings. Authentic assessments that encourage students to explore learning and develop critical skills rather than simply completing prescribed tasks will be increasingly essential across all disciplines. This approach requires a significant redesign of assessment, and institutions are increasingly focusing on developing holistic approaches that guide staff and students to become ethical digital citizens. This involves balancing the complexity of AI integration with comprehensive training, learning experiences, and curriculum considerations. The goal is to foster critical thinking and ensure that students can navigate AI tools responsibly and with academic integrity. The challenges here are immense.

Global Perspectives and Regional Initiatives

25. There are varying levels of AI readiness across different regions of the world. In Southeast Asia, for instance, the readiness for AI integration is uneven, with significant global concerns about ethics, privacy, technical barriers, and regulatory frameworks. In Malaysia, efforts are being made to strengthen the Silicon Valley of the East by supporting semiconductor firms and establishing centres of excellence in AI. Similarly, Hong Kong universities are focusing on safety, effective monitoring, and AI literacy for both students and staff, though more work is needed in pedagogy and assessment redesign. The adoption of AI in higher education in Africa focuses on enhancing personalised learning, administrative efficiency, and accessibility through tools like intelligent tutoring systems and MOOCs. However, challenges such as infrastructure, skill gaps, and ethical concerns need to be addressed to fully leverage AI's potential in transforming education. In North America, AI adoption in higher education focuses on enhancing personalised learning and improving administrative efficiency, with

applications ranging from adaptive learning platforms to AI-powered chatbots that assist with student services. In Latin America, AI adoption faces challenges relating to digital divides, particularly disadvantaged communities and different regulatory frameworks across the continent. Additionally, there are concerns about exacerbating existing gender inequalities and uneven access to technology.

Human Centred AI Governance

26. As AI becomes ubiquitous, the importance of developing human-centred approaches to the governance of AI in higher education will become more important. In general, such an approach emphasises transparency, justice, fairness, non-maleficence, responsibility, privacy, beneficence, autonomy, assurances of outcome, and explicability. Presenters proposed a framework for AI governance that is grounded in human consciousness and wisdom, promoting well-being and humanistic education. Ethical principles are ideally aimed at ensuring that AI is developed and used in ways that enhance the human condition, encouraging decision-makers to put humans first. Over-representation of values and world views from dominant cultures poses significant challenges to defining human-centred AI, human-centred governance, and even human-centred education. Notions of human flourishing, values, and world views inform how we approach the concept of human-centred, resulting in differing outcomes.

Questions for further reflection

- What qualities and skills are essential for leaders to effectively manage the integration of AI in education?
- What strategies can be employed to support educators in upskilling and adapting to AI tools?

- How might you preserve and enhance the human-centric approach when implementing AI technologies in your organization?

Case Study: Equitable Leadership

IIOE Micro-certification project to upskill and reskill higher education workforce: International Centre for Higher Education Innovation under the auspices of UNESCO (UNESCO-ICHEI)

While AI, especially Generative AI presents both challenges and opportunities for the higher education system, HEIs worldwide are increasingly harnessing the potential of AI for diverse purposes, reshaping the perspectives of students, teachers, and the institutions themselves. Implementation of AI in higher education must be paired with thoughtful strategies for reskilling and upskilling of higher education workforce (including teachers, leaders and support staff), ensuring that human oversight is integrated into the deployment and management of these tools.

The International Centre for Higher Education Innovation under the auspices of UNESCO (hereafter "UNESCO-ICHEI") and the International Institute of Online Education (hereafter "IIOE") is taking action to develop a flexible mechanism that empowers Higher Education Institutions (HEIs) to plan for its workforce to upskill and reskill. The IIOE Micro-certification Project for Higher Education Workforce is designed to address multifaceted challenges and propose possible solutions for HEIs. From institutional strategy planning, recognition advocacy, course content development and implementation, and competency framework recommendation, a comprehensive support system is assembled to facilitate the effective and ethical application of AI in higher education.

The IIOE Micro-Certification Project aims to:

- Offering flexible and customised solutions for the higher education workforce to upskill and reskill with AI capacities;
- Set transferable definitions of digital competencies and evaluation criteria as a reference for teaching personnel, HEI leadership, and learning support staff's professional development;
- To form a content repository that gathers courses, case studies, and guidance that allow exchange and peer learning;
- Encourage recognition of digital competency building as an important part of professional development through policy discussions, guidelines, and opportunities for expert consultancy.

More broadly, the project aims to propose a new approach to the continuous growth of upskilling and reskilling, more effectively providing quality, just-in-time learning in a joint force engaging relevant higher education stakeholders, and advocating for formal recognition of the need for digital competency-building and lifelong learning of the higher education workforce. For HEIs, micro-certification addresses the legitimate issues of recognising online and informal professional learning of the higher education workforce, and broadens the channels of content development and policy update.

At the current stage, UNESCO-ICHEI developed the IIOE Higher Education Teaching Personnel Digital Competency Reference Framework (hereafter "Reference Framework"), serving to offer clear definitions and evaluation criteria for competency-based learning. The framework offers a trajectory of integrating digital technology into the teaching cycle. Additionally, supplemental

guidelines for evaluation team setup, certification process, and course design and development guides are provided to facilitate HEIs to build a robust training, evaluation, recognition, and planning process for implementing IIOE micro-certifications.

Apart from empowering university teaching personnel, this project also sees HEI management team and supporting staff as key forces driving the digital transformation of higher education. Taking into account the development trajectories of its partner institutions, IIOE will further expand the reference frameworks catering to the needs of HEI leadership and learning support staff and other stakeholders. Additionally, IIOE will be offering more training courses in the context of facilitating the effective integration of Generative AI in Higher Education in the "1+X Generative AI Course Series".

UNESCO ICHEI strongly encourages personalised and localised implementation in its project strategy. Based on the reference framework, the Micro-certification project starts with readiness analysis, identifying specific training needs of HEIs. UNESCO-ICHEI will work with HEIs to match resources, including policy references, expert consultancy, and course resources, to provide multiple channels for the higher education workforce to upskill and reskill.

V.

SOCIAL JUSTICE

27. AI has a critical role in advancing the UN Sustainable Development Goals (SDGs) through education. It underscores the importance of aligning AI in education with broader social justice and equity objectives for the greater good of humanity. It is crucial to recognise that social justice is multifaceted, it can be economic, cultural, or political. Within the educational context, social injustice extends beyond economic issues such as access to education and technology. It encompasses other dimensions, including heteronormativity, white supremacy, physical disability, neuronormativity, and settler and cultural colonialism which can manifest as cultural injustices (problems of representation) or political injustices (issues of power in educational design and leadership).

Economic Injustice

28. Economic injustice exists in emerging economies with large, dispersed populations, where distance education and AI could scale educational access to otherwise unreachable groups; however, emerging economies may also suffer from infrastructure inequality where some regions lack consistent electricity and high bandwidth internet, which would limit the potential of technological solutions. Injustice can also exist in predominantly affluent nations, where economic disparities exist between urban and rural locations and for some marginalised

communities. In affluent nations, non-economic injustices such as cultural underrepresentation or misrepresentation can exist, and there is a role for AI in supporting broader dimensions of social justice, but caution is also needed as AI platforms are not as well trained in minority languages and cultures. Practical applications and aspirational practices can include building platforms and integrating AI to reduce economic inequality and expand access to education across various age groups, including lifelong learning opportunities for older adults.

29. Although AI has potential to enable personalised learning, it still functions within a structured system, requiring resilience and intelligent governance for adaptive innovation and equitable learning. The imperative to innovate often clashes with traditional pedagogical practices, prompting a rethinking of assessments, content overload, teaching roles, and student empowerment. This evolution demands both a shift in mindsets and technological advancements.

Open and distance education

30. Open and distance education could facilitate lifelong learning with the flexibility needed in diverse locations, including in places where distance or access to internet present a challenge. AI has potential to provide adaptability and enhance "teacher presence" in contexts with insufficient educators for the student population. Specific applications of AI in teaching and learning included AI tutors, development of learning materials, adaptive learning, intelligent tutoring systems, AI chatbots for answering questions and participating in discussion forums, and AI-driven formative assessments and automated proctoring for summative assessments. Some institutions use AI collaboration tools and

virtual and augmented reality to offer immersive learning experiences for online and distance learners.

Challenges

31. There are manifest challenges associated with implementing and using AI in education. There is, for example, unequal access to the internet and related technological infrastructures. Some regions and households have access to good internet, allowing them to readily embrace AI. Others need to travel far distances to even access the internet, if they can afford it at all. Other challenges are linguistic and cultural, with English dominating online spaces. Many countries, and therefore educational institutions, operate in multiple languages, minority languages tend to not be well-served by AI and related technologies, and indigenous languages are often held as sacred, and communities want to protect them from the commercialisation and misappropriation of AI.

32. The advent of AI may also increase digital divides, especially those relating to digital skills development and AI literacy among students, teachers, and leaders. Lack of open source and open access AI tools create exclusivity around its adoption, counter to the expectation of inclusion that is grounded in the promises of AI.

33. Further to this, issues of academic integrity could diminish student and teacher performance and outcomes, compromising overall educational quality and the prestige of traditional institutes of education.

Opportunities

34. Conversely, AI offers opportunities for learners to translate content into their own languages and learn about different cultures through AI translation. Some institutions use AI to provide multilingual support, delivering content in various languages. Developing digital competence and literacy among teachers and administrators is also facilitated by the advent of AI. Open and distance education, combined with digital intelligence leadership, can be applied in student support services, learning resource construction, social services, scientific research management, and systematic collaborative innovation. AI as digital intelligence leadership can provide cognitive insights, strategic guidance, transformation drive, coordination, innovative governance, and cultural cultivation. The combination of digital intelligence leadership and transformation can impact people, time, distance, and society. Mechanisms to evaluate the impact and track concerns regarding fairness, privacy, and security are crucial.

Linguistic Diversity

35. Summit discussions underscored that certain languages are underrepresented online and in AI applications, hindering culturally responsive teaching. English is especially dominant in online spaces and therefore in the training data used in some AI. Learning in one's mother tongue is crucial, raising questions about AI's role in countries with many minority and tribal languages lacking sufficient written texts. Additionally, integrating Indigenous languages, often considered sacred, into AI raises concerns about the "participation paradox," where including such data could undermine rhetorical and cultural sovereignty.

Non-Economic Injustice

36. The Sustainable Development Goals (SDGs) are helpful in considering the purpose of education and AI. To advance the greater good, discussions around AI in education should focus on building AI for the betterment of the world, for which the 17 SDGs provide a detailed and useful template. This approach provides a new perspective for evaluating the inclusion of AI in education by considering its effects on climate change, gender inequality, reducing overall inequality, hunger, economic growth, health and well-being, and peace, justice, and strong institutions. As above, when considering the concept of human-centric AI, we must also interrogate the notions of "better" and "development", especially considering the perspectives of marginalised and excluded peoples and groups.

Questions for further reflection

- How can AI be leveraged to advance the UN Sustainable Development Goals (SDGs) in education?
- What steps can be taken to ensure that AI implementations do not exacerbate digital divides and other forms of inequality?
- How can institutions balance the need for technological advancement with the preservation of cultural and linguistic diversity?

Case Study: Equipping Teachers

Can AI Support Inclusive and Accessible Learning?

Dominique Scheffel-Dunand from Canada presented a case study on her institution's research into AI's impact on inclusive and accessible learning. Inclusivity here refers to accommodating diverse student needs and promoting equity, while accessibility

focuses on improving usability for all, particularly through adaptive technologies for learners with disabilities.

Her university implemented a model where all teachers experimented with integrating AI and conducting small-scale research, reflection, writing, and dissemination to iterate on best practices. This model emphasised teachers' experiences and reflections on applying AI to support non-native learners in translating texts to their native languages or improving their writing in the target language. Teachers were given the agency to navigate this complex landscape, supported by a community, and granted the freedom and responsibility to innovate, experiment, and learn.

VI.

FUTURE PRAXIS

37. Emerging trends in education and AI point to the role these new technologies will have in transforming education, especially open and distance learning. AI holds promise for enhancing the quality of education and access to it, including in remote and underserved regions. The proliferation of AI, especially generative AI, will prompt institutions of higher education to rethink their reasons for existing and continuing on as they have historically done. The very nature and meaning of higher education is called to question by advances in AI and related technologies.

Personalised Learning

38. One of the great hopes for AI in education is the development of personalised learning. AI can contribute to this by designing customised itineraries that adapt to each student's time constraints, preferred learning paces, and individual learning goals. This could foster greater autonomy in learning by empowering students to take ownership of their educational experience. AI also holds potential for distance education through AI-powered tutors, scalability in online education by providing support to a large number of students simultaneously, and making education more accessible to a wider range of learners. AI can also advance research through the analysis of vast amounts of data collected from online learning environments, therefore providing valuable insights for improving teaching and learning strategies.

39. Further to this, AI can develop competency-based programs that focus on the acquisition of specific skills and knowledge, aligning with the growing trend toward micro-credentials. Other applications of AI in teaching include supporting lesson planning with tailored resources, providing virtual assistants powered by AI to act as learning companions, and streamlining administrative tasks. Monitoring and assessment tools such as speech monitoring and facial recognition are being explored to gain insights into student engagement and learning progress, though ethical considerations need careful attention here, given the history of bias in facial recognition, for example, in other contexts. Universities are building AI-powered learning processes. These include AI-powered video summarization, chapter extraction, and personalised learning resource recommendations. AI-powered search engines are also emerging, allowing students to navigate vast repositories of educational resources efficiently, though attention to privacy is important here.

Ethical Considerations and Ontological Principles

40. Interaction is vital for education, and AI should enhance, not replace, student-student and student-teacher interactions. Technosolutionism, the belief that technology can solve everything, was challenged during the Summit. Critical engagement with technology is crucial. Personalist pedagogies, which are ones that emphasise the irreplaceability of interpersonal engagement for the development of the whole person as an individual, advocating for active consideration of the learner's moral compass and social context. The concept of *Bildung* (or comprehensive education) was also mentioned, offering a broader perspective than the technical training often associated with AI in education. There was good agreement that, while AI can handle some tasks, humans do have an irreplaceable role in education.

41. AI can empower students and create a flourishing learning environment mediated by the teacher. However, the specifics of these irreplaceable roles remain unclear. Guidelines are needed on how to use AI effectively, including identifying "green lines" for fostering academic integrity and essential cognitive capabilities, as well as "red lines" for when AI should not be used in education. AI could democratise learning, but also enable unethical behaviours or practices that hinder adequate intellectual development, potentially hijacking education's purpose. Developing wisdom, epistemic competencies, critical thinking and collaborating with academic integrity teams are crucial to navigate these challenges.

Questions for further reflection

 What role should AI play in developing personalised learning experiences for students?

 How might we ensure that the implementation of AI in higher education does not replace or reduce human-human interaction, but rather creates more opportunities for valuable student-instructor and student-student collaboration?

 How can leaders avoid techno-solutionism while promoting the ethical use of AI?

 What guidelines are needed to ensure the ethical use of AI in education, particularly regarding academic integrity and critical thinking?

Case Study: Future Praxis

Enhancing Student Engagement through Emotionally Intelligent Feedback

The Smart Feedback project at Tec de Monterrey, led by Professor Lilia Carolina Rodríguez Galván, explores the integration of AI and Natural Language Processing (NLP) in enhancing educational

feedback. By analysing students' emotional states through text-based feedback, the project aims to improve both cognitive and emotional engagement in the learning process. Implemented across several campuses, the initiative impacted 908 students, showing significant improvements in motivation and emotional well-being.

The Smart Feedback project demonstrates how AI can be used to personalise and enhance learning experiences by addressing students' emotional needs alongside their academic progress. However, it also highlights the need for transparency in how AI analyses and uses personal data to ensure students' trust.

The project also underscores the importance of ongoing evaluation and refinement of AI tools in educational settings. The use of pre- and post-tests, as well as thematic text analysis, proved crucial in assessing the impact of the AI-driven feedback.

The Smart Feedback project provides insight into the responsible use of AI in higher education. It emphasises the potential of AI to enhance educational outcomes when used thoughtfully and ethically, with a focus on both cognitive and emotional aspects of student learning.

VII.

RECOMMENDATIONS

42. For each of these five major areas of concern — ethics, innovation, leadership, social justice, and future praxis — discussions repeatedly returned to the importance of developing AI that is inclusive and accessible. Against the backdrop of the enormous potential of AI is the ever-present concern for it to be a force for good in education. This especially revolves around concerns on linguistic, ethnic, gender, economic and cultural marginalization. Necessary concerns about data privacy, bias, and the potential for AI to perpetuate existing inequalities are also major problems receiving too little attention from both regulators and Big Tech.

43. Emerging themes include that infrastructure limitations are significant in many developing regions and countries, especially bandwidth and connectivity, coupled with a lack of computing hardware. However, there are opportunities for personalised and free learning experiences through intelligent teaching systems. Student consultations are important. Their digital literacies can be cultivated to use and evaluate variety of AI tools to support personalised and autonomous learning experiences, and providing valuable insight into the learning experience. Therefore, it is important to design governance of AI from, and for, human consciousness and wisdom, and to ensure that AI-based systems offer quality education not second-rate education to the less privileged.

44. Some key recommendations include:

    1. Promoting situated innovation involves recognising and valuing the initial conditions of an institution and setting innovation expectations that align with its real possibilities and aspirations, as there is no “one-size-fits-all” approach to innovation in higher education.

    2. Promoting an incremental approach to AI innovation in education emphasises gradual advances to sustain motivation and avoid frustration caused by the gap between AI's theoretical potential and the current experiences of institutions.

    3. Developing a risk map and implementing small-scale pilot projects before scaling up AI use in academic programs ensures core mission elements are preserved and allows for assessing the effectiveness of AI implementations.

    4. Identifying existing gaps in infrastructure, accessibility, language, digital skills, and student self-regulation and creating conditions to overcome these gaps is essential for advancing inclusion and promoting equity through AI in education.

    5. Establishing a data-driven ethical culture requires clear policies around data management and adherence to ethical standards such as security, transparency, privacy, and accountability to guide AI implementation in higher education.

    6. Navigating the complexities of AI implementation requires leaders with training in organizational change management

to ensure that digital transformation affects all aspects of the organization without succumbing to techno-solutionism.

7. Promoting institutional strategies to support educators in upskilling and adapting to AI tools, while rethinking curricular designs and traditional assessment practices, is crucial for effectively integrating AI into education.

8. Fostering discussions and community-wide agreements about academic integrity emphasises ethical awareness and student ownership over their learning process while developing guidelines for the use of AI.

9. Promoting consensus-building and deep reflection on institutional values focuses on student autonomy, equity, diversity, well-being, and sustainability to ensure coherence and adherence to ethical guidelines in AI implementation.

10. Safeguarding and promoting a model of hybridization between technology and human teaching ensures that interpersonal interaction remains a priority in student-centered approaches to education that foster enhancing learner agency and criticality.

Globethics

Globethics is an international non-governmental organisation working for ethical leadership through the integration of academic and public engagements. Registered in Geneva, Switzerland, as an independent, not-for-profit foundation with an international Board, and affiliated centres across the globe, Globethics seeks to be inclusive of diverse cultural, religious, philosophical, and humanist ethical wisdoms, and to be the bridge between the different world views on ethical issues.

We strive for a world in which people, and especially leaders, are educated in, informed by and act according to ethical values and thus contribute to building sustainable, just and peaceful societies. The founding conviction of Globethics is that having equal access to knowledge resources in the field of applied ethics enables individuals and institutions from developing and transition economies to become more visible and audible in the global discourse.

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NAVIGATING THE FUTURE OF HIGHER EDUCATION WITH AI

2024 ICDE LEADERSHIP SUMMIT POLICY DIALOGUE REPORT

This policy report is the outcome of the ICDE leadership Summit hosted by Globethics in Geneva, from 5 to 7 June 2024, in partnership with UNESCO-ICHEI, under the title: Ethical Leadership in the Age of AI: Rethinking Futures of Education. Throughout the three days, 126 participants and 60 speakers from 35 countries contributed to enriching the reflection, from theoretical and practical perspectives, about the future of higher education in the fourth industrial revolution era.

The report aims at capturing the outcomes from the presentations and discussions and presents them under five titles: 1) Ethical Implications of AI in Higher Education, 2) A Culture of Innovation, 3) Equitable Leadership, 4) Social Justice, and 5) Future Praxis. Hence, the report aims to be "an accessible tool to shine a light on some of the key challenges and opportunities that are before us," ensuring a critical engagement with AI in educational spaces, that fosters accessibility, equity, and quality.

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