EDUCATING FOR THE FUTURE: HUMAN CAPITAL AND RESPONSIBLE AI IN GLOBAL HIGHER EDUCATION

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Abstract

Global higher education increasingly leverages Artificial Intelligence (AI) over traditional administrative reforms to achieve strategic educational goals. This requires an urgent need to invest in the strategic development of human capital to develop the best education governance system. This paper employs qualitative research grounded in decolonial theory and draws on decades of experience with AI integration in higher education across the U.S., Europe, and Asia to address a central question: What human capital practices can be adopted to promote equity and responsible AI in global higher education? Findings reveal that despite expanded access to digital technologies, countries with poor governance are likely to experience diminishing returns in both human capital and education quality. To counter this trend, the study advocates for a multifaceted approach that includes: fostering critical digital literacy; embracing hypothesis discovery to navigate uncertainty; interrogating the embedded interests of dominant technological powers; experimenting with both local and global knowledge systems; reaffirming core human values that AI cannot replicate; engaging with the unresolved complexities of human consciousness beyond AI's cognitive reach; and reforming education governance to unlock human potential. By applying decolonial theory, this article contributes to the discourse on the future of higher education and responsibility by proposing a more equitable and human-centered educational ecosystem. It concludes with policy recommendations tailored to the unique challenges faced by countries with weak governance.

Keywords: epistemic agency, epistemic injustice, decolonial theory, digital literacy, governance.

Introduction

Global higher education increasingly leverages Artificial Intelligence (AI) over traditional administrative reforms to achieve strategic educational goals (Bromley et al., 2024; Elfert & Ydesen, 2024). In low-resource settings, they gradually delegate their core education service functions to opaque algorithm systems, such as Google and Amazon, to assess student performance, evaluate teaching effectiveness, and manage resources (H. Wang et al., 2024; L. Wang, 2024). Developing countries with weak governance depend more on irrelevant data sets, opaque algorithms, and the non-transparent computation logics in the automated process of public education delivery; they tend to resist developing their governance capability for ethical and responsible usage of AI (AIFOD Forum, 2025; Alonso et al., 2020; Cerutti et al., 2025; Lam, 2024a; Saba, 2025; Transparency International, 2025). They remain dependent on pre-trained models and datasets developed in the Global North, which often fail to incorporate local languages, cultural knowledge, and lived experiences. They also do not have many professional educators; they will rely heavily on using AI and have automation biases that put many poor people at risk and deny their access to high-quality education (Eubanks, 2018).

Many researchers predict AI will exacerbate economic inequality and then educational inequalities around the globe (Aghion et al., 2021; Cazzaniga et al., 2024; Korinek et al., 2021). Inequalities created by AI within developing countries will be greater than those in developed countries. When the income of developing countries is decreasing because of automation, they will not receive much investment in human capital, and this will result in greater education inequality. They often lack the governance capacity necessary to mitigate the adverse impacts of AI and become passive consumers of AI-driven information and experience diminished returns on human capital. Thus, AI will undermine the distributive capacities of the public education governance system (Eubanks, 2018; Miragoli, 2024; Mollema, 2025). It weakens the education governance and may cause more inequalities for those students who are marginalized in countries where AI has been developed.

To counter these trends, it is essential to adopt decolonial and critical science discourses in the development of AI policies. Such approaches shift the focus from treating individuals as data to be mined to recognizing them as human beings deserving of dignity and respect (Couldry & Mejias, 2019; Mesa-Velez, 2025; Mohamed et al., 2020; Png, 2024). This study applies decolonial theory to guide the development of human capital and responsible AI, in particular for countries with weak governance

(Mohamed et al., 2020).

This study is guided by one central research question that addresses the intersection of artificial intelligence, education inequality, countries with poor governance, and responsible AI practices.

What human capital practices can be adopted to promote equity and responsible AI in global higher education?

I adopt a qualitative approach informed by an extensive literature review and personal reflections collected over three decades of using AI in education across the United States, Europe, and Asia. My prior empirical research, which spans from studies on corporate social responsibility of foreign companies in China to diversity, equity, and inclusion practices in universities in the U.S.—provides a social-political-economic foundation for analyzing AI technology and recommending a responsible AI ecosystem (Lam, 2011, 2024b, 2024c; Eshelman et al., 2012).

This article is structured into three sessions. The first section is a literature review about decolonial theory and critical science discourse. The second section collects findings about the above research question. The third session is the conclusion.

1. Decolonial theory and critical science discourse

Decolonial theory offers a critical lens through which to interrogate the structural and epistemic dimensions of AI. AI is constrained by its epistemological boundaries, serving the interests and values of powerful groups of people at the expense of many lives. AI systems rooted in Western epistemologies are imposed on postcolonial states with little regard for cultural relevance or autonomy. In doing so, algorithmic governance risks education improvement efforts to technocratic metrics while sidelining the lived experiences and aspirations of marginalized communities. These systems increasingly function as mediators of epistemic legitimacy (Miragoli, 2024), often privileging technocratic knowledge while marginalizing local, experiential, and indigenous epistemologies (Mollema, 2025). This epistemic injustice erodes the social recognition of impoverished communities and exacerbates their material deprivation, inaccessibility, and inclusion in higher education. These developing countries experience data colonism, algorithm colonism, automation biases and epistemic injustice (Crawford, 2021; Couldry & Mejias, 2019; Fricker, 2007; Ricaurte, 2022; Tacheva & Ramasubramanian, 2023). They risk eroding human capital and accelerating data and algorithm colonization. It is essential to consider how AI-induced education inequalities intensify and multiply when additional structural inequalities are present.

There is systemic marginalization, exclusion, or devaluation of the knowledge, perspectives, and lived experiences of underrepresented communities (Fricker, 2007; Kay et al., 2024). Because AI models are trained on narrowly curated datasets for predefined tasks, they are ill-equipped to address situations not reflected in the training data (Sheikh et al., 2023). Reliance on statistical optimization to identify dominant patterns often leads to the dismissal of nuanced or atypical phenomena that fall outside the bell curve. For example, pluralistic realities of education inequalities are frequently absent from online systems and thus excluded from AI epistemologies. As a result, AI-driven solutions for better access and inclusion in the reform of higher education risk being misaligned with local contexts – especially when embedded biases in data and algorithms go unaddressed.

As Mohamed et al. (2020) argue, AI systems replicate colonial power structures; they also advocate for a decolonial AI framework that privileges participatory governance and draws knowledge from historically marginalized communities. Decolonial theory is adopted to offer critical foresight for designing contextually appropriate AI governance models aimed at advancing shared prosperity (Mohamed et al., 2020). Meaningful reforms can be introduced to resist the colonial logics embedded in AI systems, re-center human dignity, and promote a liveable planet. Extending this critique, Mesa-Vélez (2025) proposes a feminist-decolonial model of governance that resists colonial hierarchies of knowledge and extractive data practices by foregrounding relational ethics. A more just and inclusive digital environment must be cultivated to deal with AI-induced adversities and to subsequently recover from these adversities. As Png (2024) highlights, actors from the Global South must be empowered to challenge exclusionary governance structures, contribute contextually relevant alternatives, and critically interpret AI harms through locally embedded knowledge systems. Stakeholders in global

higher education are called upon to take greater responsibility in shaping AI systems that are not only high-performing but also trustworthy. Responsible AI must go beyond performance metrics and uphold core values such as accessibility, equity, openness, and inclusion (Dignum, 2021, 2022; Fu & Weng, 2024). By applying decolonial theory, this article contributes to the discourse on the future of higher education and responsibility by proposing a more equitable and human-centered educational ecosystem.

2. Findings

The following findings answer one research question:

What human capital practices can promote equity and responsible AI in global higher education? The objective of investing in human capital practices is to create a governance system that all students can maximize their opportunities and realize their potential. Developing human capital at individual levels and organization levels are recommended.

2.1. Invest in human capital at the individual level

Individuals must develop critical digital literacy and know how to create information safely and appropriately. They must be vigilant about fake AI information and develop their resilience. Individuals must develop critical awareness of how AI technologies construct and influence self-identity, social relations, and shared cultural narratives. The objective to empower individual epistemic agency and incorporate the voices of marginalized majorities, reposition them from the periphery of global technological discourse and governance to the center (Fricker, 2007; Mesa-Vélez, 2025; Spivak, 1988).

UNESCO defines digital literacy: the ability to access, manage, understand, integrate, communicate, evaluate and create information safely and appropriately through digital technologies for employment, decent jobs and entrepreneurship. It includes skills such as computer literacy, ICT literacy, information literacy and media literacy which aim to empower people, and in particular youth, to adopt a critical mindset when engaging with information and digital technologies, and to build their resilience in the face of disinformation, hate speech and violent extremism (UNESCO, 2018).

Thus, human beings must remain acutely aware of the complex interplay between artificial intelligence and the social, economic, political, and historical contexts that shape and sustain it. It is imperative to safeguard foundational human values and critically examine practices that undermine our shared humanity. As AI continues to influence our identities and expectations, individuals must be empowered not only to scrutinize the algorithms that increasingly govern daily life, but also to actively report their misuse and contribute to the development of ethical AI solutions.

Human beings are not static entities but are continually evolving through consciousness and relational becoming (Vaill, 1989). We must engage with the profound intricacies of human consciousness – dimensions that lie beyond AI's cognitive capabilities—and remain vigilant about what AI can and cannot do. Human consciousness is a deeply subjective experience, embodied within specific temporal and cultural contexts, and cannot be reduced to mere physical or computational functions (Chalmers, 1995). This depth of human awareness and human experience can never be fully captured or replicated by AI. The richness of human experience – empathy, hatred, compassion, love, suffering, purpose, subjectivity, values, hope, regret, and more – distinguishes us fundamentally from the AI artifacts we create. Therefore, we must reaffirm core human values such as mercy, dignity, and authentic human connections that can easily be denied by AI based on probabilistic models and optimization algorithms tailored to specific human preferences (Russell, 2022; Tasioulas, 2022).

It is essential to cultivate a more supportive environment for the development and deployment of AI technologies that serve the public good. This includes fostering a collective vision for building a responsible ecosystem that promotes equity and justice within the education system. Educators play a pivotal role in this transformation by guiding students to embrace hypothesis discovery to navigate uncertainty. Through experimentation and engagement with both local and global knowledge systems, students can be empowered to co-create AI solutions that are contextually relevant and socially responsible.

Human capital development at the individual level requires more than technical proficiency; it demands the cultivation of critical digital literacy, a foundational component of human capital development. Critical digital literacy is essential to empower local agents to incorporate their local knowledge and to decolonize AI epistemic mechanisms. Local people must know how to cocreate with AI while they interrogate the algorithms that increasingly govern their education and epistemology. By equipping individuals with the ability to interrogate the power structures embedded in AI systems, societies can better navigate the ethical, economic, and governance challenges posed by emerging technologies.

2.2. Invest in human capital at the organizational Level

Cultivating reflective, community-based critique is essential for transforming public consciousness, especially in nations with fragile governance where grassroots epistemic engagement can drive bottom-up reform and shift societal mindsets (Klinova, 2024). Stakeholders in the community join the openly available resources to oversight AI when these AI models are becoming bigger and making similar mistakes (Goel et al., 2025). They keep on interrogating the embedded interests of dominant technological powers and leverage on national, regional and international resources to improve their AI governance.

By equipping stakeholders with the knowledge, tools, and organizational structures – such as ethics committees, open-source audit platforms, and inclusive data governance policies – these societies can gradually establish frameworks for transparency and civic engagement, even in the absence of robust regulatory enforcement. Stakeholders will often demand that individual developers integrate ethical and legal issues much earlier in their design stage, and for organization users to implement quality assurance and data governance policies.

Effective participation in global AI governance demands that countries with limited technological infrastructure invest in foundational systems. These systems include reliable internet connectivity, stable electricity, and comprehensive digital literacy initiatives. Equally vital is the cultivation of domestic expertise in AI ethics, regulation, and policymaking. These efforts must be complemented by international cooperation and strategic resource-sharing to accelerate digital capacity building, craft inclusive AI strategies, and actively engage in global multilateral dialogues (OECD, 2019, 2024a, 2024b, 2025; United Nations, 2024, 2025; World Economic Forum, 2025a, 2025b). By leveraging existing global ethical AI frameworks like those developed by the OECD and the United Nations, and by expanding regional and international collaboration, countries can move from peripheral observers to influential contributors. To ensure equitable outcomes from AI-driven transformations, inclusive development forums and robust social protection policies should be prioritized to support individuals displaced or reskilled by automation (Geiger & Iaia, 2024; Lee, 2024).

Government policies should reduce structural inequalities and provide insurance or social networks for those who are displaced or reskilled by the AI changes. Policy-makers and regulators are recommended to introduce all technical, social, economic, and scientific dimensions of AI systems to society (Bommasani et al., 2023) through the following five key tasks: clarify what AI is and focus on actual risks and opportunities (i.e., demystification); create a functional ecosystem to make AI work (i.e., contextualization); involve diverse stakeholders from civil society to address relevant values and interests affected by the use of AI technology (i.e., engagement); develop a directive framework (i.e., regulation); and engage wisely with other global actors (i.e., societies) (Sheikh et al., 2023). These five tasks steer the process of co-development between technology and society. The progress of AI and the shared benefits of AI are most likely to be maximized in democratic societies that allow many stakeholders to contribute and control the direction of AI's development, even though the wealthy "super-star companies" are mainly centered in these countries (Acemoglu & Johnson, 2023).

2.3. Discussion

Research question 1 explores how advancing digital literacy and participatory governance can challenge data and algorithm colonialism and automation biases in the governance of higher education, particularly in countries with poor governance. A responsible AI ecosystem will emerge through the cultivation of human capital and the empowerment of local communities. New norms of AI accountability, transparency, and responsibility will be established when there are more reflective community practices in teaching, learning, and administration. Responsible AI embodies core values such as accessibility, equity, openness, and inclusion. Resource-constrained countries must strategically leverage international and regional support to enhance their digital capabilities, build equitable AI ecosystems, and actively participate in global multilateral dialogues.

To ensure that AI serves as a tool for enhancing education equality rather than reinforcing systemic vulnerabilities, human actors must remain critically attuned to the socio-economic, political, and historical forces that shape its design, deployment, and impact. This requires more than technical proficiency; it demands the cultivation of critical digital literacy, a foundational component of human capital development. Critical digital literacy is essential to empower local agents to incorporate their local knowledge and to decolonize AI epistemic mechanisms. Local people must know how to cocreate with AI while they interrogate the algorithms that increasingly govern their education and epistemology. By equipping individuals with the ability to interrogate the power structures embedded in AI systems, societies can better navigate the ethical, economic, and governance challenges posed by emerging technologies. In summary, the deliberate cultivation of human capital - paired with the strategic mobilization of accessible regional and international resources - constitutes a vital imperative for developing nations aiming to fortify governance infrastructures and build enduring capacity to confront and recover from AI-induced education inequalities. A responsible AI ecosystem that promotes equitable education is achievable in countries with weak governance structures. To realize this, it is essential to educate people with digital literacy and cultivate a community-driven, reflective system within higher education – one that prioritizes education values over the commercial interests of powerful technology corporations. Furthermore, many countries are encouraged to adopt decolonial theories as a means to resist the epistemic violence perpetuated by current AI systems and to develop their best education governance system that can realize the potential of human beings. When they adopt AI principles or guidelines proposed by influential international bodies such as the OECD and the United Nations, they need to increase their participation capacity in the global AI governance and contribute contextually relevant alternatives and locally embedded knowledge.

Conclusions

Grounded in decolonial theory, this research urges policymakers to reconsider the integration of evolving AI systems into existing higher educational systems already marked by deep disparities. The colonization of AI risks intensifying existing inequalities, particularly in countries with weak governance. To be truly responsible, AI must be reimagined within an alternative ecosystem that fosters trust and empowers all individuals to realize their full potential. While comprehensive higher education policy frameworks aimed at achieving equitable access to AI tools are a step forward, they remain insufficient to dismantle the entrenched power asymmetries between dominant technology corporations and developing countries.

We need to think deeply about how we can have a broader engagement of people in the development and deployment of AI in different sectors so that AI will not "amplify and reproduce the forms of power it has been deployed to optimize" (Crawford, 2021, p. 224). We need to demand investment from AI and technology companies in the development of safe AI first, and to more thoroughly research human interfaces in AI design. Tasioulas (2022) concluded that "our focus must be properly integrating AI technology into a culture that respects and advances the dignity and well-being of humans, and the nonhuman animals with whom we share the world, rather than on the highly speculative endeavor of integrating the dignity of intelligent machines into our existing ethical

framework" (p. 240). We need to resist the current development of AI and imagine a better ecosystem that can advance the dignity and well-being of humans and non-human animals on this planet.

In summary, digital literacy and participatory governance emerge as a foundational principle for building responsible AI strategies that are contextually grounded and socially inclusive. Local stakeholders need to critically examine how AI is developed and deployed to serve the interests of dominant and often neo-colonial power structures. This approach rejects the notion of AI as a value-neutral technology and instead exposes its embedded biases, colonial logics, and potential to perpetuate systemic inequities. By foregrounding the voices and knowledge of historically marginalized communities, decolonial higher education frameworks advocate for bottom-up, culturally responsive solutions that resist technological determinism and promote justice-oriented innovations. A more just and inclusive digital environment must be cultivated by interrogating and remedying epistemic and algorithmic injustices rather than reinforcing them. Thus, responsible AI in global higher education is not about asking the AI machine to be more responsible for its autonomous decisions. It should be the shared responsibility among stakeholders who are informed to act to achieve basic goals of education: the full human person and common goods. Better ecosystems should be cultivated for the proper usage of AI in global higher education.

References

- 1. Aghion, P., Antonin, C., & Bunel, S. (2021). Technological progress, artificial intelligence, and inclusive growth. *IMF Working Papers*, 2021(123), 1-45. https://www.imf.org/en/Publications/WP/Issues/2021/06/11/Technological-Progress-Artificial-Intelligence-and-Inclusive-Growth-460695
- 2. AIFOD Forum. (2025, May 9). Applications vs. infrastructure: Strategic investment priorities for AI in developing countries. AI for Developing Countries Forum. https://aifod.org/applications-vs-infrastructure-strategic-investment-priorities-for-ai-in-developing-countries/
- 3. Alonso, C., Berg, A., Kothari, S., Papageorgiou, C., & Rehman, S. (2020). *Will the AI revolution cause a great divergence*? IMF Working Paper No. 20/184. International Monetary Fund. https://doi.org/10.5089/9781513556505.001
- 4. Arnold, M. (2024 June 26). Central banks urged to 'raise game' on use of artificial intelligence. *Financial Times*.
- 5. Bromley, P., Nachtigal, T., & Kijima, R. (2024). Data as the new panacea: trends in global education reforms, 1970-2018. Comparative Education, 60(3), 401–422. https://doi.org/10.1080/03050068.2024.2336371
- 6. Bommasani, R., Hudson, D. A., Adeli, E., Altman, R., Arora, S., von Arx, S., Bernstein, M. S., Bohg, J., Bosselut, A., Brunskill, E., Brynjolfsson, E., Buch, V., Cardie, C., Catanzaro, B., Chiang, M., Clark, J., De Sa, C., Demszky, D., Eismann, S., & Liang, P. (2023). *On the opportunities and risks of foundation models*. Center for Research on Foundation Models (CRFM), Stanford Institute for Human-Centered Artificial Intelligence (HAI), Stanford University. arXiv:2108.07258v3.
- 7. Cazzaniga, M., Jaumotte, F., Li, L., Melina, G., Panton, A. J., Pizzinelli, C., Rockall, E. J., & Tavares, M. M. (2024). *Gen-AI: Artificial intelligence and the future of work*. IMF Staff Discussion Notes, 2024 (001), International Monetary Fund, Washington, DC. https://doi.org/10.5089/9798400262548.006
- 8. Cerutti, E. M., Garcia Pascual, A. I., Kido, Y., Li, L., Melina, G., Mendes Tavares, M., & Wingender, P. (2025). *The global impact of AI: Mind the gap* (IMF Working Paper No. 25/076). International Monetary Fund. https://doi.org/10.5089/9798229008570.001
- 9. Chalmers, D. J. (1995). Facing Up to the Problem of Consciousness. *Journal of Consciousness Studies*, 2, 200-219. https://doi.org/10.1093/acprof:oso/9780195311105.003.0001
- 10. Couldry, N., & Mejias, U. A. (2019). Data colonialism: Rethinking big data's relation to the contemporary subject. *Television & New Media*, 20(4), 336-349. https://doi.org/10.1177/1527476418796632

- 11. Crawford, K. (2021). Conclusion: Power. In *The atlas of AI: Power, politics, and the planetary costs of artificial intelligence* (pp. 211–227). Yale University Press. https://doi.org/10.2307/j.ctv1ghv45t.10
- 12. Dignum, V. (2021). The role and challenges of education for responsible AI. *London Review of Education*, 19(1), 1, 1-11.
- 13. Dignum, V. (2022). Responsible artificial intelligence from principles to practices. 56(1). arXiv:2205.10785v1
- 14. Elfert, M. & Ydesen, C. (2024) Global governance and the promissory visions of education: challenges and agendas, *Comparative Education*, 60:3, 361-376, DOI: 10.1080/03050068.2024.2371701
- 15. Eshelman, G. L.; Lam, M.L.L.; and Cook, M. J. B. (2012). Three contributing factors to effective utilization of technology in management education and practice: Personhood, mindfulness, and meditation. *Journal of the North American Management Society*, 6 (1), Article 4.
- 16. Eubanks, V. (2018). Automating inequality: How high-tech tools profile, police, and punish the poor. St. Martin's Press.
- 17. Fricker, M. (2007). Epistemic injustice: Power and the ethics of knowing. Oxford University Press.
- 18. Fu, Y., Weng, Z., & Wang, J. (2024). Examining AI Use in Educational Contexts: A Scoping Meta-Review and Bibliometric Analysis. *International Journal of Artificial Intelligence in Education*. https://doi.org/10.1007/s40593-024-00442-w
- 19. Geiger, C., & Iaia, V. (2024). The forgotten creator: Towards a statutory remuneration right for machine learning of generative AI. Computer Law & Security Review, 52, 105925.
- Goel, S., Struber, J., Auzina, I. A., Chandra, K. K., Kumaraguru, P., Kiela, D., Prabhu, A., Bethge, M., & Geiping, J. (2025). Great Models Think Alike and this Undermines AI Oversight. Proceedings of the Forty-Second International Conference on Machine Learning, 2025, Vancouver, Canada.
- 21. Kay, J., Kasirzadeh, A., & Mohamed, S. (2024). Epistemic injustice in generative AI: A taxonomy. *arXiv preprint*. https://arxiv.org/html/2408.11441v1
- 22. Klinova, A. (2024). Governing AI to advance shared prosperity. In J. Bullock, Y. C. Chen, J. Himmelreich, V. M. Hudson, A. Korinek, M. M. Young, & B. B. Zhang (Eds.), *The Oxford handbook of AI governance* (pp. 726-745). Oxford University Press.
- 23. Köbis, N. C., Starke, C., & Edward-Gill, J. (2022). *The Corruption Risks of Artificial Intelligence*. Transparency International. https://knowledgehub.transparency.org/assets/uploads/kproducts/The-Corruption-Risks-of-Artificial-Intelligence.pdf
- 24. Korinek, A., Schindler, M., & Stiglitz, J. E. (2021). *Technological progress, artificial intelligence, and inclusive growth* (IMF Working Paper No. 2021/166). International Monetary Fund. https://doi.org/10.5089/9781513583280.001
- 25. Lam, M.L.L (2024a). AI facilitates or impedes human flourishing. 2024 Regent Research Roundtables Proceedings, pp. 1-20.
- 26. Lam, M.L.L. (2024b). A Long-Haul Process Toward Health Equity. In Marques, J. (ed) *Encyclopedia of Diversity, Equity, Inclusion and Spirituality*. Springer, Cham. https://doi.org/10.1007/978-3-031-32257-0 130-1
- 27. Lam, M.L.L. (2024c). Building a better future for Christian Higher Education: Diversity, Equity, and Inclusion Officers. Fall, *Journal of the North American Management Society*. Building A Better Future For Christian Higher Education
- 28. Lam, M.L.L. (2011). Successful strategies for sustainability in China and the global market economy. *International Journal of Sustainable Development*, 3(1), 73-90.
- 29. Lee, E. (2024). Promoting progress: Authorship in the age of AI. *Florida Law Review*, Vol. 76. Available at SSRN or via DOI: 10.2139/ssrn.4609687.
- 30. Mesa-Vélez, C. (2025). Towards a feminist decolonial governance of AI. In R. Martin & S. Sandoval (Eds.), *Power, ethics and AI* (pp. 145–168). Oxford Academic. https://academic.oup.com/edited-volume/59762/chapter/508611708

- 31. Miragoli, M. (2025). Conformism, Ignorance & Injustice: AI as a Tool of Epistemic Oppression. Episteme 22, 522–540. https://doi.org/10.1017/epi.2024.11
- 32. Mohamed, S., Png, M.-T., & Isaac, W. (2020). *Decolonial AI: Decolonial theory as sociotechnical foresight in artificial intelligence. Philosophy & Technology, 33*(4), 659–684. https://doi.org/10.1007/s13347-020-00405-8
- 33. Mollema, W.J.T.(2025). A taxonomy of epistemic injustice in the context of AI and the case for generative hermeneutical erasure. *AI Ethics* 5, 5535–5555. https://doi.org/10.1007/s43681-025-00801-w
- 34. Murray, A. (2024). Automated public decision making and the need for regulation. *LSE Public Policy Review*, *3*(3), Article 3, 1–10. https://doi.org/10.31389/lseppr.110
- 35. OECD (2025). Intellectual property issues in artificial intelligence trained on scraped data. *OECD Artificial Intelligence Papers*, No. 33, OECD Publishing, Paris, https://doi.org/10.1787/d5241a23-en.
- 36. OECD. (2024a). *Anti-Corruption and Integrity Outlook 2024*. https://www.oecd.org/en/publications/anti-corruption-and-integrity-outlook-2024_968587cd-en.html
- 37. OECD (2024b). AI, data governance and privacy: Synergies and areas of international co-operation. *OECD Artificial Intelligence Papers*, No. 22, OECD Publishing, Paris, https://doi.org/10.1787/2476b1a4-en.
- 38. OECD. (2019). *Recommendation of the Council on Artificial Intelligence*. OECD Legal Instruments. https://oecd.ai/en/assets/files/OECD-LEGAL-0449-en.pdf
- 39. Png, M.T (2024). The critical roles of global south stakeholders in AI governance. In J. Bullock, Y. C. Chen, J. Himmelreich, V. M. Hudson, A. Korinek, M. M. Young, & B. B. Zhang (Eds.), *The Oxford handbook of AI governance* (pp. 981-1014). Oxford University Press.
- 40. Ricaurte, P. (2022). The coloniality of data: Datafication as a racial project. In *Data justice and the new technopolitics of numbers* (pp. 97–112). Routledge.
- 41. Russell, S. (2022). If We Succeed. *Daedalus*, 151(2), 43–57. https://www.jstor.org/stable/48662025
- 42. Saba, C. S. (2025). Artificial intelligence (AI)-poverty-economic growth nexus in selected BRICS-Plus countries: Does the moderating role of governance matter? AI & Society. Sheikh, H., Prins, C., & Schrijvers, E. (2023). AI as a System Technology. In: Mission AI. Research for Policy. Springer, Cham.
- 43. Spivak, G. C. (1988). Can the subaltern speak? In C. Nelson & L. Grossberg (Eds.), *Marxism and the interpretation of culture* (pp. 271–313). University of Illinois Press.
- 44. Tacheva, J., & Ramasubramanian, S. (2023). AI Empire: Unraveling the interlocking systems of oppression in generative AI's global order. *Big Data & Society*, 10(2). https://doi.org/10.1177/20539517231219241
- 45. Tasioulas, J. (2022). Artificial Intelligence, Humanistic Ethics. *Daedalus*; 151 (2): 232–243.
- 46. Transparency International. (2025). *Addressing Corrupt Uses of Artificial Intelligence*. https://www.transparency.org/en/publications/addressing-corrupt-uses-of-artificial-intelligence
- 47. UNESCO Institute for Statistics. (2018). *A Global Framework of Reference on Digital Literacy Skills for Indicator 4.4.2*. UNESCO. https://uis.unesco.org/sites/default/files/documents/ip51-global-framework-reference-digital-literacy-skills-2018-en.pdf
- 48. United Nations. (2024). *Artificial intelligence and the Sustainable Development Goals*. https://www.un.org/en/global-issues/artificial-intelligence
- 49. United Nations. (2025). *Global Dialogue on AI Governance: Summary and outcomes*. UN Global Digital Compact. https://www.un.org/global-digital-compact/en/ai
- 50. Vaill, P. (1989). *Managing as a performing art: New ideas for a world of chaotic change*. San Francisco: Jossey-Bass Inc., Publishers.
- 51. Wang, L. (2024). Algorithmic decision-making and governance in global education. Journal of Educational Policy and Technology, 19(2), 134–150.
- 52. Wang, H., Dang, A., Wu, Z., & Mac, S. (2024). Generative AI in Higher Education: Seeing ChatGPT through Universities' Policies, Resources, and Guidelines. Computers and Education: Artificial Intelligence, 7, Article ID: 100326. https://doi.org/10.1016/j.caeai.2024.100326

- 53. World Economic Forum. (2025a). *AI Governance Alliance Briefing Paper Series*. https://www3.weforum.org/docs/WEF Governance in the Age of Generative AI 2024.pdf
- 54. World Economic Forum. (2025b). *Advancing AI Transformation: A Roadmap for Businesses and Governments*. https://www.weforum.org/press/2025/01/advancing-ai-transformation-a-roadmap-for-businesses-and-governments/

ŠVIETIMAS ATEIČIAI: ŽMOGIŠKASIS KAPITALAS IR ATSAKINGAS DIRBTINIS INTELEKTAS PASAULINIAME AUKŠTAJAME MOKSLE

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Santrauka

Pasaulinis aukštasis mokslas vis dažniau pasitelkia dirbtinį intelektą (DI), vietoj tradicinių administracinių reformų, siekiant strateginių švietimo tikslų. Tai reikalauja skubiai investuoti į strateginį žmogiškųjų išteklių vystymą, siekiant sukurti geriausią švietimo valdymo sistemą. Šiame straipsnyje naudojamas kokybinis tyrimas, grindžiamas dekolonijine teorija, ir remiamasi dešimtmečių patirtimi integruojant DI į aukštąjį mokslą JAV, Europoje ir Azijoje, siekiant atsakyti į pagrindinį klausimą: kokios žmogiškųjų išteklių praktikos gali būti taikomos siekiant skatinti lygybę ir atsakingą DI naudojimą pasauliniame aukštajame moksle? Tyrimo rezultatai rodo, kad nepaisant išplėstos prieigos prie skaitmeninių technologijų, šalys, kuriose prastas valdymas, tikėtinai patirs mažėjančią naudą tiek žmogiškųjų išteklių, tiek švietimo kokybės srityje. Siekiant priešintis šiai tendencijai, tyrimas siūlo daugialypį požiūrį, kuris apima: kritinio skaitmeninio raštingumo ugdymą; hipotezių atradimo skatinimą, siekiant orientuotis neapibrėžtumo sąlygomis; dominuojančių technologinių galių interesų analizę; eksperimentavimą su vietinėmis ir pasaulinėmis žinių sistemomis; pagrindinių žmogiškųjų vertybių, kurių DI negali atkartoti, patvirtinimą; įsitraukiant į neišspręstus žmogaus sąmonės sudėtingumus, viršijančius dirbtinio intelekto kognityvinius pajėgumus; ir švietimo valdymo reformą, siekiant atskleisti žmogaus potencialą. Pritaikant dekolonijine teoriją, šis straipsnis prisideda prie diskusijos apie aukštojo mokslo ateitį ir atsakomybę, siūlant teisingesnę ir į žmogų orientuotą švietimo ekosistemą. Tai užsibaigia politikos rekomendacijomis pritaikytoms unikaliems iššūkiams, su kuriais susiduria šalys, turinčios silpną valdymą.

Pagrįstas dekolonijine teorija, šis tyrimas ragina politikos formuotojus persvarstyti besivystančių DI sistemų integravimą į esamas aukštojo mokslo sistemas, kurios jau pasižymi dideliais netolygumais. DI kolonizacija kelia grėsmę esamų nelygybių gilėjimui, ypač šalyse, kuriose silpnas valdymas. Kad DI būtų iš tiesų atsakingas, jis turi būti pergalvotas kaip dalis alternatyvios ekosistemos, kuri skatina pasitikėjimą ir suteikia galių kiekvienam asmeniui pasiekti savo potencialą. Nors išsamūs aukštojo mokslo politikos pagrindai, siekiant užtikrinti lygiavertę prieigą prie DI priemonių, yra žingsnis į priekį, jie vis dar nepakankami, kad panaikintų įsišaknijusias galios asimetrijas tarp dominuojančių technologijų korporacijų ir besivystančių šalių.

Turime giliau mąstyti apie tai, kaip galime plačiau įtraukti žmones į DI kūrimą ir diegimą įvairiuose sektoriuose, kad DI neįamžintų esamų struktūrinių nelygybių. Turime reikalauti, kad DI ir technologijų įmonės pirmiausia investuotų į saugaus DI kūrimą ir nuodugniau tyrinėtų žmogaus sąsajas DI dizaino procese. Turime priešintis dabartiniam DI vystymui ir įsivaizduoti geresnę ekosistemą, kuri skatintų žmonių ir gamtos orumą bei gerovę šioje planetoje.

Apibendrinant, skaitmeninis raštingumas ir dalyvaujantis valdymas tampa pagrindiniu principu, kuriant atsakingas DI strategijas, kurios yra kontekstualiai pagrįstos ir socialiai įtraukios. Vietinės suinteresuotosios šalys turi kritiškai vertinti, kaip DI yra kuriamas ir diegiamas, kad tarnautų dominuojančių, dažnai neokolonijinių, galios struktūrų interesams. Toks požiūris atmeta DI kaip vertybių neturinčios technologijos sampratą ir atskleidžia jo įdiegtus šališkumus, kolonijines logikas ir potencialą palaikyti sistemines nelygybes. Išryškinant istoriškai marginalizuotų bendruomenių balsus ir žinias, dekolonijinės aukštojo mokslo sistemos siūlo "iš apačios" kylančius, kultūriškai jautrius sprendimus, kurie priešinasi technologiniam determinizmui ir skatina teisingumu grįstas inovacijas. Teisingesnė ir įtraukesnė skaitmeninė aplinka turi būti puoselėjama per episteminių ir algoritminių neteisybių analizę ir sprendimą, o ne jų stiprinimą. Todėl atsakingas DI pasauliniame aukštajame moksle nėra apie tai, kad DI mašina prisiimtų daugiau atsakomybės už savo autonominius sprendimus. Tai turėtų būti bendroji atsakomybė tarp informuotų suinteresuotųjų šalių, siekiančių pagrindinių švietimo tikslų: visapusiško žmogaus ugdymo ir bendrojo gėrio. Geresnės ekosistemos turi būti kuriamos, kad DI būtų tinkamai naudojamas pasauliniame aukštajame moksle.

Pagrindiniai žodžiai: episteminė agentūra, episteminis neteisingumas, dekolonijinė teorija, skaitmeninis raštingumas, valdymas.