



The Second International Conference on AI-based Systems and Services (AISyS) 2025

September 28, 2025 to October 02, 2025 - Lisbon, Portugal

The Disruptiveness of Artificial Intelligence in Higher Education

A Focus on Academic Roles, Tasks, and Creative Autonomy

Prof. Joshua Chukwuere
Full Professor of Information Systems

Contributors: Francis Guambe, Mdoko Ayanda, Sternan Van Niekerk, Phemelo Meleloe, Nkosinathi Mndawe, Dr. Yakub Kayode Saheed

Department of Information Systems, North-West University, South Africa



Myself

Prof. Joshua Chukwuere is a Full Professor of Information Systems at North-West University, South Africa.

He has published over 90 articles in the areas of emerging technologies (AI, Machine learning, etc.), social media, and research methodology.

He teaches both undergraduate and postgraduate students, engages in supervisions (M&D), and is a journal editor (AJEDA).



Introduction



- AI integration in higher education reshapes pedagogical, administrative, and research practices.
- However, concerns exist about the displacement of academic roles and creativity.
- This study focuses on the dual implications of AI on academic tasks, roles, and intellectual creativity, deploying a rapid review.

Big question: Is AI an enabler or disruptor in academic roles, tasks, and creativity?

Methodology

- **Research design:** Rapid Literature Review (RLR)
- **Search sources:** Scopus, Web of Science, IEEE Xplore, ERIC, ScienceDirect
- **Inclusion:** English, peer-reviewed, 2021–2024

Based on the main research objective, the following research questions guided the study, which can be converted to research objectives:

1. What are the roles of AI disruption in HE?
2. What are the limitations and challenges of AI disruptions in academia?
3. How is AI enhancing the academic process?
4. How is AI transforming academic jobs?
5. In what ways can the fears of job loss through AI disruption be addressed?
6. What ethical considerations impact the integration of AI in HE?

Role of AI in higher education

AI-assisted grading and feedback.

Content development and virtual tutors.


Administrative efficiency (scheduling, enrollment).

Personalized learning and adaptive platforms.

Plagiarism detection and advanced analytics.

A large red shape on the left side of the slide, consisting of a vertical rectangle with a quarter-circle cutout on its right side.

Limitations and Challenges

- Algorithmic bias and lack of common sense.
 - Data privacy and transparency concerns.
 - Ethical dilemmas (accountability, fairness).
 - Limited human judgment and emotional intelligence.
- 
- Four short, curved purple lines of varying lengths and orientations, located in the bottom right corner of the slide.

Enhancing AI in Academia

AI as a creativity booster and research assistant.
How?

Automation of routine tasks, freeing academics
for mentorship.

Adaptive learning systems for personalized
education.

Collaboration and innovative teaching strategies.

AI in Academic Job Transformation



AUTOMATES GRADING,
SCHEDULING, AND ADMIN
TASKS.



ENHANCES PERSONALIZED
LEARNING AND STUDENT
ENGAGEMENT.



SUPPORTS MENTORSHIP
AND RESEARCH
COLLABORATION.



FREES LECTURERS FOR
HIGHER-VALUE TASKS.

Empirical Evidence Against Job Loss

AI transforms roles instead of eliminating them.

70% of education jobs are expected to change by 2030.

Reskilling and upskilling programs are essential.

AI literacy empowers educators to adapt.

Ethical Considerations



Transparency in AI applications



Avoidance of bias and prejudice



Data privacy and governance



Promoting fairness and human agency in AI use

Conclusion



AI acts as both disruptor
and collaborator in
academia



Enhances efficiency but
risks creativity loss



AI cannot replace human
empathy, judgment, and
mentorship



Calls for ethical, balanced,
human-centered
integration

Contact detail

Prof Joshua Chukwuere

joshchukwuere@gmail.com

Thank you!!

Questions!



Some of the references

- 1) J. Hanson, "Displaced but not replaced: the impact of e-learning on academic identities in higher education," *Teaching in Higher Education*, vol. 14, no. 5, pp. 553–564, 2009.
- 2) C. Kosnik, L. Menna, and P. Dharamshi, "Displaced academics: Intended and unintended consequences of the changing landscape of teacher education," *European Journal of Teacher Education*, vol. 45, no. 1, pp. 127–149, 2022.
- 3) D. Adamson, G. Dyke, H. Jang, and C. P. Rosé, "Towards an agile approach to adapting dynamic collaboration support to student needs," *International Journal of Artificial Intelligence in Education*, vol. 24, pp. 92–124, 2014.
- 4) R. Luckin, *Machine Learning and Human Intelligence. The future of education for the 21st century*. UCL institute of education press, 2018.
- 5) L. S. Vygotsky, *Mind in society: The development of higher psychological processes*. Harvard University Press, 1978.
- 6) R. Braidotti, *Posthuman knowledge*. Polity Press Cambridge, 2019.
- 7) I. H. Sarker, "AI-based modeling: techniques, applications and research issues towards automation, intelligent and smart systems," *SN computer science*, vol. 3, no. 2, p. 158, 2022.