AI in TLA:

Some research articles & books

Articles

Maintaining the integrity of the South African university: The impact of ChatGPT on plagiarism and scholarly writing.

Singh, M. 2023. Maintaining the Integrity of the South African University: The Impact of ChatGPT on Plagiarism and Scholarly Writing. *South African journal of higher education* 37(5): 203–220. Available at: https://sun.primo.exlibrisgroup.com/permalink/27US_INST/2fbt29/cdi_scielo_journals_S1753_59132023000500015

Abstract:
Recent advancements in artificial intelligence (AI) have reignited discussions about the value of the university and its role in producing and facilitating knowledge. The invention of ChatGPT has led to differing responses in the academy, with some welcoming its abilities and others fearing that it may undermine what schools and universities do, calling it "apocalyptic" (Green 2022). These aspects impact the integrity of the academy and are therefore a fundamental contribution to the debate. The impact, as well as the perceived impact, of AI on teaching and learning in higher education has been consistently documented in popular media. Therefore, the aim of this article is to understand the impact of ChatGPT on plagiarism and scholarly writing. It contributes to the under-researched academic discourse of generative artificial intelligence and teaching and learning by garnering the views of three established professors in South Africa. The findings from this qualitative endeavour demonstrate that, for these professors, these kinds of technology are welcome, and students need to be taught how to engage with them rather than vilifying them. Much of the responsibility rests on the lecturers and the university to create a teaching and learning environment that allows for these technologies to enter the classroom, especially in the way we assess.

Generative AI in first-year writing: An early analysis of affordances, limitations, and a framework for the future

Cummings, R. E., Stephen M. Monroe, and Marc Watkins. 2024. Generative AI in First-Year Writing: An Early Analysis of Affordances, Limitations, and a Framework for the Future. *Computers and composition* 71: 102827. Available at: https://sun.primo.exlibrisgroup.com/permalink/27US_INST/2fbt29/cdi_crossref_primary_10_1016_j_compcom_2024_102827

Abstract:
The foundations of composition pedagogy – including collaboration, respect for student autonomy, and reflection – provide a supportive frame of reference for exploring the impact of generative AI on writing.•We conclude that college writers may not always be eager adopters of AI tools. Many of our students expressed concerns about losing authorial voice and being interrupted by AI during their writing processes.•Students also expressed optimism about the usefulness of AI writing tools, particularly during the stages of invention and research.•During our engagements with generative AI in the composition classroom, we used three main tools – Elicit, Fermat, and Wordtune. Each of them showed promise for writing tasks when their engagement was carefully defined for specific writing tasks.•Our work allowed us to create the DEER praxis, which emphasizes intentional and defined engagements with generative AI for specific writing purposes, and frequent reflection. Our First-year Writing program began intentional student engagements with generative AI in the fall of 2022. We developed assignments for brainstorming research questions, writing counterarguments, and editing assistance using the AI tools Elicit, Fermat, and Wordtune. Students felt that the tools were helpful for finding ideas to get started with writing, to find sources once they had started writing, and to get help with counterarguments and alternate word choices. But when given the choice to use the assistants or

not, most declined. Generative AI at this stage is unreliable, and many students found the tradeoff in reviewing AI suggestions to be too time consuming. And many students expressed a preference for continuing to develop their own voices through writing. Our experience in engaging AI led to the creation of the DEER praxis, which emphasizes defined engagements with AI tools for specific purposes, and generous use of reflection.

How to Teach Responsible AI in Higher Education: Challenges and Opportunities

Aler Tubella, Andrea, Marçal Mora-Cantallops, and Juan Carlos Nieves. How to Teach Responsible AI in Higher Education: Challenges and Opportunities. *Ethics and information technology* 26(1). Available at: https://sun.primo.exlibrisgroup.com/permalink/27US_INST/2fbt29/cdi_swepub_primary_oai_DiVA_org_umu_218640

In recent years, the European Union has advanced towards responsible and sustainable Artificial Intelligence (AI) research, development and innovation. While the Ethics Guidelines for Trustworthy AI released in 2019 and the AI Act in 2021 set the starting point for a European Ethical AI, there are still several challenges to translate such advances into the public debate, education and practical learning. This paper contributes towards closing this gap by reviewing the approaches that can be found in the existing literature and by interviewing 11 experts across five countries to help define educational strategies, competencies and resources needed for the successful implementation of Trustworthy AI in Higher Education (HE) and to reach students from all disciplines. The findings are presented in the form of recommendations both for educators and policy incentives, translating the guidelines into HE teaching and practice, so that the next generation of young people can contribute to an ethical, safe and cutting-edge AI made in Europe.

Reconceptualizing ChatGPT and generative AI as a student-driven innovation in higher education.

Dai, Y., Liu, A., & Lim, C. P. 2023. Reconceptualizing ChatGPT and generative AI as a student-driven innovation in higher education. Science Direct: 33rd CIRP Design Conference. https://doi.org/10.13140/RG.2.2.33039.05283
https://osf.io/preprints/edarxiv/nwqju

Abstract
Higher education is poised at the precipice of the changes and challenges brought about by ChatGPT. This paper addresses some of the most fundamental questions about the role, position, and implications of ChatGPT and generative artificial intelligence (AI) tools amidst the evolving landscape of higher education and modern society. By linking technological affordances with educational needs, we conceptualize ChatGPT as a student-driven innovation with rich potential to empower students and enhance their educational experiences and resources. However, this empowerment comes at a price. It requires collaborative efforts among the stakeholders to address the new and emerging challenges regarding student training, higher education curricula and assessment, and technology development and governance. It also implies new directions for educational research and theories.

Books & eBooks

The AI Literacy Imperative: Empowering Instructors & Students

Brent Anders, 2023

About the book:
The AI Literacy Imperative: Empowering Instructors & Students" is a seminal work that delves into the critical need for everyone to have AI Literacy in modern society, especially in academia. The book explains how educators must have a deep understanding of the key aspects of AI literacy: Awareness,

Capability, Knowledge, and Critical Thinking, to effectively teach this vital skill to students. Drawing upon extensive research and practical experience, author Brent A. Anders, PhD. presents a comprehensive guide for instructors to integrate AI literacy into their curriculum. By exploring the fundamental concepts and applications of AI, this book empowers educators to equip their students with the skills necessary for success in both their professional and personal lives in our new AI integrated society. Throughout the book, a deep understanding of the complexities of AI and its implications for society are demonstrated. Through a rigorous exploration of the latest research and pedagogical considerations, the book provides educators with a clear roadmap for teaching AI literacy in a way that is understandable, manageable, motivational, and upholds academic integrity.

More information:
http://sovorelpublishing.com/index.php/2023/06/04/new-book-the-ai-literacy-imperative-empowering-instructors-students/

Impromptu: Amplifying Our Humanity Through AI
Reid Hoffman & GPT-4, 2023

About the book:
Impromptu: Amplifying Our Humanity Through AI, written by Reid Hoffman with GPT-4, offers readers a travelog of the future — exploring how AI, and especially Large Language Models like GPT-4, can elevate humanity across key areas like education, business, and creativity.

But, it's not just a book, it's a conversation. In a first, Hoffman doesn't just write about GPT-4; he interacts and writes with GPT-4, letting readers see the technology's capabilities — its strengths and limitations alike. Using GPT-4 as his "author's co-pilot," Hoffman paints an intriguing, challenging, and often entertaining picture of what's possible: where trouble may arise, but also crucially, what could possibly go right. His conversation with AI takes us on a journey to the future, where AI is not a threat, but a partner. A partner that can help us unlock our full potential as human beings.

How might humanity use GPT-4 to continue our long-standing quest to make life more meaningful and prosperous? How can we use it to help solve some of the hardest challenges we face? To expand opportunities for self-determination and self-expression?

Along with solutions and opportunities, GPT-4 will also create its own challenges and uncertainties. Impromptu explores how we might address risk as we continue to develop AI technologies that can boost human progress at a time when the need for rapid solutions at scale has never been greater. Impromptu starts the conversation, and invites us to join that conversation to shape our collaborative journey and achieve our destiny.

More information:
https://www.impromptubook.com/

Robot-Proof: Higher Education in the Age of Artificial Intelligence
Joseph Aoun, 2017

About the book:
How to educate the next generation of college students to invent, to create, and to discover—filling needs that even the most sophisticated robot cannot.
Driverless cars are hitting the road, powered by artificial intelligence. Robots can climb stairs, open doors, win Jeopardy, analyze stocks, work in factories, find parking spaces, advise oncologists. In the past, automation was considered a threat to low-skilled labor. Now, many high-skilled functions, including interpreting medical images, doing legal research, and analyzing data, are within the skill sets of machines. How can higher education prepare students for their professional lives when professions

themselves are disappearing? In Robot-Proof, Northeastern University president Joseph Aoun proposes a way to educate the next generation of college students to invent, to create, and to discover—to fill needs in society that even the most sophisticated artificial intelligence agent cannot.

A "robot-proof" education, Aoun argues, is not concerned solely with topping up students' minds with high-octane facts. Rather, it calibrates them with a creative mindset and the mental elasticity to invent, discover, or create something valuable to society—a scientific proof, a hip-hop recording, a web comic, a cure for cancer. Aoun lays out the framework for a new discipline, humanics, which builds on our innate strengths and prepares students to compete in a labor market in which smart machines work alongside human professionals. The new literacies of Aoun's humanics are data literacy, technological literacy, and human literacy. Students will need data literacy to manage the flow of big data, and technological literacy to know how their machines work, but human literacy—the humanities, communication, and design—to function as a human being. Life-long learning opportunities will support their ability to adapt to change.

The only certainty about the future is change. Higher education based on the new literacies of humanics can equip students for living and working through change.

More information:
https://mitpress.mit.edu/9780262535977/robot-proof/

Generative AI in Higher Education: The ChatGPT Effect
Cecilia Ka Yuk Chan & Tom Colloton, 2024

About the book:
Chan and Colloton's book is one of the first to provide a comprehensive examination of the use and impact of ChatGPT and Generative AI (GenAI) in higher education. Since November 2022, every conversation in higher education has involved ChatGPT and its impact on all aspects of teaching and learning. The book explores the necessity of AI literacy tailored to professional contexts, assess the strengths and weaknesses of incorporating ChatGPT in curriculum design, and delve into the transformation of assessment methods in the GenAI era. The authors introduce the Six Assessment Redesign Pivotal Strategies (SARPS) and an AI Assessment Integration Framework, encouraging a learner-centric assessment model. The necessity for well-crafted AI educational policies is explored, as well as a blueprint for policy formulation in academic institutions. Technical enthusiasts are catered to with a deep dive into the mechanics behind GenAI, from the history of neural networks to the latest advances and applications of GenAI technologies. With an eye on the future of AI in education, this book will appeal to educators, students and scholars interested in the wider societal implications and the transformative role of GenAI in pedagogy and research.

More information:
https://sun.primo.exlibrisgroup.com/permalink/27US_INST/2fbt29/cdi_oapen_doabooks_135718