AI and the Sense of Learner Identity for Generation Z

La inteligencia artificial y el sentido de identidad del estudiante en la Generación Z

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Abstract

Generation Z seems both transactional and more of a consumer than an engaged, adaptive, resilient or exploratory learner. Their persona is strongly tied to their understanding that learning leads to jobs. Their use of AI and related technologies is strongly linked to this persona, and this is also their rationale for using AI for "cheating." Higher education is about more than consumption. It is about personal growth and development, adaptability, creativity and imagination. It is about what the Japanese call Ikigai. This paper explores the personas at play in higher education, the nature of Ikigai, and the changes that are needed to shift Generation Z to adopt a broader understanding of the purpose of their education and strengthen their Ikigai.

Keywords: Learning personas, Ikigai, artificial intelligence (AI), time use, student agency.

Resumen

La Generación Z parece ser más transaccional y consumidora que un estudiante La Generación Z parece ser más transaccional y consumista que un aprendiz comprometido, adaptable, resiliente o explorador. Su identidad está profundamente vinculada a su percepción de que el aprendizaje conduce al empleo. Su uso de la inteligencia artificial (IA) y tecnologías relacionadas está estrechamente ligado a esta percepción, y esta también es su justificación para utilizar la IA como herramienta para "hacer trampa". Sin embargo, la educación superior es mucho más que consumo. Se trata de crecimiento y desarrollo personal, adaptabilidad, creatividad e imaginación. Es lo que los japoneses llaman Ikigai. Este artículo analiza las identidades presentes en la educación superior, la esencia del Ikigai y los cambios necesarios para que la Generación Z adopte una comprensión más amplia del propósito de su educación y fortalezca su Ikigai.

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Palabras claves: Personas de aprendizaje, Ikigai, Inteligencia artificial (IA), uso del tiempo, agencia del estudiante.

Recent studies indicate that Chat GPT-4.5 achieved a 73% success rate in a three-party Turing Test, where participants were more likely to judge it as human than actual human participants when the model was prompted to adopt a human-like persona (Jones & Bergen, 2025). This constitutes the first empirical evidence of any artificial system passing a standard three-party Turing Test. However, other models like LLaMa-3.1 achieved lower success rates (56%), and baseline models like ELIZA performed significantly below chance levels (21%-23%). These results suggest that while certain advanced models can pass specific versions of the Turing Test, this achievement is not consistent across all generative AI systems. Some are better than others (McGovern et al., 2024).

As AI systems get smarter (Ho et al., 2024), with a growing level of transparency (Haasdijk, 2023; Masood et al., 2024), several issues remain. Not least of which is bias (Mehrabi et al., 2021), enculturation (Birhane et al., 2021) and their design limitations (Bender et al., 2021). Nonetheless, students are making extensive use of AI tools and resources for a great many aspects of their learning (HEPI, 2025; Mastery Coding, 2025; Scrum-Launch, 2025). According to several sources, 86% of students already use AI tools in their learning. 24% use AI daily, 54% use it daily or weekly, and another 54% use it at least weekly.

Some students use AI to "cheat" on assessments and examinations. Here are some data showing how extensive this is:

- 8% of students admit to directly including AI-generated text in their assignments, which could be considered a form of academic misconduct (HEPI, 2025).
- 25% of students use AI tools to draft assessments, which may blur the line between assistance and cheating (HEPI, 2025).
- 56% of college students report using AI for assignments or exams, with 60.8% admitting to having cheated in some form during their academic careers. This suggests that AI tools are becoming a common method for academic dishonesty (Word Spinner, 2025).
- Turnitin.com's data shows that 11% of assignments reviewed by its AI detection tool contained at least 20% AI-generated content, indicating significant reliance on AI for academic work (EdWeek, 2024).

While some instructors have redesigned assessments to counter this use of AI to engage in academic misconduct (CSHE, 2025), others have sought to "prosecute" students within the framework of college and university regulations (Olsen, 2024). This issue has preoccupied instructors, administrators and policymakers and, in doing so, reduced the capacity of the education eco-system to engage and embrace AI as a co-intelligent partner for teaching and learning (Mollick, 2024). It has also led to many premature policies – written long before the potential and possibilities of AI have become clear.

The key idea behind this paper is simple. Just as we have seen in terms of identity-related to social media (Turkle, 2011; Page, 2013; Hagedorn, 2022; Akinwale & Ogunleye, 2024; Vico, 2024), so we see shifts in the understanding students have of their identity as a learner as they see this work as, in part, enabled by AI.

Learner Identities and Generation Z

Learner identities have been explored for some time, and the related literature is substantial. When synthesized, we can identify seven distinct learner personas studying and working at our higher education institutions. These are:

- The Thinker Intrinsically motivated students prioritize intellectual curiosity and mastery over grades or external rewards. These thinkers are more prevalent in disciplines that emphasize critical thinking and research, such as the humanities and sciences. They are less likely to drop out due to their intrinsic motivation but may struggle with practical career planning and experience anxiety as their programs near completion and the world of work approaches (Trowler, 2010; McFarlane, 2018; Bunce, 2021).
- The Consumer Students who perceive education mainly as a transaction, anticipating a degree in return for tuition fees instead of appreciating the learning process. They concentrate on grades and outcomes rather than on intrinsic learning. These students might resist challenging content and prioritize convenience over engagement. As a result, they often report lower satisfaction and poorer academic outcomes compared to peers with strong learner identities (Advanced HE Tool Kit, 2022; Bunce, 2021).
- The Resilient Learner Students who overcome significant barriers, such as socioeconomic challenges, to cultivate a positive learner identity. Resilient learners are more common among first-generation college students; 70% of participants in widening participation programs (DEI) identify resilience as a key factor in their success (Liu et al., 2022).
- The Adaptive Learner Students who see themselves as lifelong learners, able to adapt to new challenges and contexts. They exhibit high levels of self-regulation, grit, and motivation while continuously reflecting on their growth as learners (Reeve et al., 2013; Muñoz et al., 2024).
- The Explorer Students who thrive in environments that enable them to personalize their learning experiences based on their interests and goals. They actively engage in creating their own self-directed learning pathways, make choices about how they learn, and reflect on their progress (McFarlane et al., 2018; Muñoz et al., 2018).
- The Social Learner refers to students whose learning identities are significantly shaped by social interactions and relationships within the academic community. They actively participate in collaborative learning environments and depend on peer support to enhance their understanding (Byrd & Abrams, 2022; Skinner & Belmont, 1993).
- The Undecided Students with weak learner and consumer identities may feel disengaged from their studies or uncertain about their place in higher education. Often passive in their approach to learning, these students may lack motivation or clarity regarding their academic goals. There is a high risk of dropping out due to a lack of engagement or connection with the institution and the work they are asked to undertake. Approximately 20% to 30% of first-year students fall into this category due to a lack of clarity about their academic or career goals (McFarlane, 2018; NACE, 2018).

Views vary among faculty as to which of these categories represents the dominant personas they encounter, though the consumer, the social learner and the undecided appear to dominate, though the balance between these types differs between full and part-time students, older versus younger students and domestic versus international students (Jacoby & Rajasekhara, 2015; UPCEA & Thinking Cap Agency, 2021).

Faculty often report challenges and concerns regarding Generation Z students (1997-2012). Unlike previous student generations, Gen Z views higher education primarily as a

gateway to career success rather than as an exploratory academic journey. Rising tuition costs and concerns about student debt have made them highly pragmatic in their educational choices. They seek programs that offer flexibility, practical skills development, and direct pathways to employment opportunities (LendKey, 2025; Marq, 2025; SEA Open Research, 2024). They tend to be very transactional: "What must I do to get a 95% or higher?"

Gen Z students expect seamless integration of technology into their educational experiences. They are accustomed to instant access to information and prefer learning environments that incorporate digital tools such as e-learning platforms, video-based content, AI tools and interactive applications. These students often use technology for collaboration, relying on tools like Google Docs and video conferencing for group projects. However, they also value face-to-face interactions for deeper engagement with peers and instructors (Mosca et al., 2019; Challa et al., 2024; Natasha et al., 2022).

AI, Gen Z Learners and Ikigai

According to Ziesche and Yampolskiy (2025), Ikigai has various connotations in Japan, where the concept first emerged. Kamiya (1996), an Ikigai theorist, suggests that two central constructs are at play here: (a) *igikia kan* involves a state of mind along with feelings of satisfaction, well-being, and a life well led; (b) *ikigai taishō* encompasses the activities, experiences, encounters, and work that lead to these feelings.

Ikigai theorists also suggest that we should see the ways in which a person uses it through this lens. They identify four kinds of time use:

- 1. Necessary time time spent on activities that reflect our physiological needs (e.g., sleeping, eating, and bathing). Contracted time the time spent on activities we have committed to and contracted for (e.g. study time, work time).
- **2.** Contracted time time used to fulfill contracts made for such things as work, study, and legal obligations.
- **3.** Committed time the time used to fulfill personal and social responsibilities (e.g. child care time, time in worship, time shopping for food).
- **4.** Free time The time left when necessary, as well as contracted time and committed time, have been completed.

Research indicates that students, particularly Generation Z, devote significant time to social media and use AI to enhance their studies. The average daily usage is roughly 4.5 hours (Cropink, 2025; MSSmedia, 2024; Harris Poll, 2024). Platforms such as TikTok, Instagram, and YouTube serve not only as entertainment sources but also as valuable learning tools. Gen Z students utilize these platforms to access educational tutorials, engage in collaborative discussions, and connect with peers globally. Studies show that social media promotes involvement in academic activities, demonstrating a positive correlation between its use and participation in university programs (Olipas, 2024; Faramawy, 2024). About 78% of Gen Z students utilize AI tools in their academic work. Of these, 56% depend on AI for assignments and exams, while others use it for research (51%) and task organization (40%) (Intellecs.ai Blog Team, 2025; HEPI, 2025).

But there is a downside. Excessive social media use can lead to distractions, shorter attention spans, and sleep deprivation, negatively impacting academic performance. Responsible engagement and time management are critical for mitigating these risks (Gordon & Ohannessian, 2024; Chandu & Sushmitha, 2025).

For Gen Z, social media and AI present a paradox: they can enhance *ikigai* taishō through connectivity and personalized growth but risk undermining *ikigai* kan via distraction and dependency. Responsible use - prioritizing balanced time allocation and ethical 126

AI integration - is critical to harnessing these tools for long-term purpose and well-being. As Ziesche & Yampolskiy (2025) emphasize, the challenge lies in designing technologies that expand, rather than constrain, the "space of potential ikigais" as well as designing learning as an engaged, active and creative experience, no matter what is being studied.

Building Ikigai Capacities

The concept of Ikigai offers a powerful framework for addressing the personal, learning and professional development needs of Gen Z. By fostering a sense of purpose, promoting mental well-being, and encouraging lifelong learning, Ikigai can help this generation navigate the complexities of modern life with resilience and fulfillment. To enable this, several changes need to be made to how colleges and universities provide teaching, learning and assessment for these students. In this section, five specific suggestions are made for change, which are intended to shift the Gen Z student persona from consumers to explorers, social learners and resilient learners. We give case examples of developments which reflect the change being proposed:

- 1. Reimagine Programs to Allow Student Agency and Choice: Instead of detailing almost every course a student must complete to obtain a certificate, diploma, or degree, programs should allow students to choose modular, stackable learning through short experiences (boot camps, micro-credentials, competency-assessed self-directed learning), including some courses that students can design themselves. This "design your own diploma or degree" approach encourages innovation, adaptability, and agency essential components of Ikigai.
- 2. **Reimagine Assessment and Grading**: Instead of merely evaluating a student's mastery of a specific area of knowledge, skill, or competency, it is essential for students to also receive an assessment of their personal growth and development alongside their ability to exhibit the necessary skills to live, work, and make an impact in their communities. An "Ikigai Portfolio" could be a requirement for graduation, serving as a platform where students showcase their abilities to engage in teamwork, problem-solving, critical thinking, creativity, conflict management, and other essential skills needed to thrive in an AI-enabled work environment. These could be supported by boot camps for critical thinking, teamwork, and design thinking. By emphasizing a balance of skills and dispositions through required assessment, students will shift from a consumer mindset to a broader perspective on learning.
- 3. **Ikigai Curriculum Design**: The curriculum needs to reflect the four critical elements of Ikigai passion, mission, vocation, and profession into all aspects of learning. This approach would help students identify their strengths, interests, and potential contributions to society early on. One way to do this would be to create interdisciplinary courses that combine academic subjects with real-world applications, allowing students to explore various fields and discover their passions and the value of social impact. For example, a course on Sustainable Urban Design could combine elements of architecture, environmental science, sociology, design thinking and economics, encouraging students to find innovative solutions to urban challenges while exploring potential career paths.
- 4. **Develop Strong Experiential Learning Requirements**: Gen Z often views learning as a passive intellectual experience facilitated by AI and other technologies. They require engagement, connection, exploration, and opportunities to develop adaptive, creative skills. Additionally, they need to learn how to navigate and respond to threats, challenges, changes, uncertainty, and complexity. *Failure Labs*, where students work on "high-risk of failure" projects designed to help them experience and learn from failure; *community-engaged learning*, where students collaborate with non-profit and

- community-based organizations to address specific challenges for social impact, or *simulations* where students engage through AR/VR/XR with challenging situations that require real-time responses, can all help build adaptability, resilience, and coping skills. Just as occurs at Tec Monterreyⁱ, students could be encouraged to spend a semester in a work-based learning environment where they must demonstrate the application of their knowledge and skills to achieve a tangible, measurable impact on sustainable development.
- 5. **Digital Detoxification, Creativity, and Imagination:** As students increasingly rely on AI and related technologies, they need to understand how to use them effectively and how to avoid misuse. Focused experiences of addiction-busting AI and technology detox, combined with the development of design thinking, creativity, and problem-solving skills without access to technology, supported by artists and creatives in every classroom, could enhance innovative capacity and foster self-expression. Engaging in art, writing, improvisation, music, group discussions, and other forms of expression would promote Ikigai and encourage personal growth.

Adding more content to what students experience in college or university does not promote the development of Ikigai; content is abundant, and it is what AI can assist with. The student experience should focus more on personal growth and development. It involves becoming (Moreno, 2022).

CONCLUSION

Gen Z's use of AI and related technologies is deepening their devotion to their consumer persona – helping them become more efficient at securing "good" grades despite concerns about academic misconduct. The challenge of this persona is that it reduces their resilience, adaptability and personal growth – their Ikigai. To strengthen the value of their education for Ikigai, change needs to occur in the structure, design, experience and assessment of learning. The more we focus on grades and AI abuse, the less time we spend innovating, reimagining teaching and learning and developing new approaches to assessment. It is time to reimagine the experience of learning (Murgatroyd, 2024).

REFERENCES

- Advance HE Toolkit. (2022). Learner or consumer? Enable your students to develop a successful academic identity [Toolkit]. Advance HE Publishing Group.
- Akinwale, G. A., & Ogunleye, O. A. (2024). Exploring the connection between social media usage and identity formation among selected emerging adults at the University of Lagos. *Lagos Journal of Psychology*, 2(1), 92–108. https://www.lagosjournalofpsychology.com/papers/LagosJournalVol.2no1.docx_92-108.pdf
- Bender, E. M., Gebru, T., McMillan-Major, A., & Shmitchell, S. (2021). On the dangers of stochastic parrots: Can language models be too big? *Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency*, 610–623. https://doi.org/10.1145/3442188.3445922
- Birhane, A., Prabhu, V. U., & Kahembwe, E. (2021). Multimodal datasets: Misogyny, pornography, and malignant stereotypes. *ArXiv*. https://doi.org/10.48550/arXiv.2110.01963
- Bunce, L. (2021, 15 de diciembre). Building student identities as learners, not consumers, for better academic outcomes. Times Higher Education.

- https://www.timeshighereducation.com/campus/building-student-identities-learners-not-consumers-better-academic-outcomes
- Byrd, N., & Abrams, K. (2022). Positive psychology perspectives on collaborative learning environments: Enhancing academic achievement and mental well-being through engagement strategies. *Journal of Futures Studies*, 26(4), 45–59. https://jfs.ulis.vnu.edu.vn/index.php/fs/article/download/5141/4490/12210
- Centre for the Study of Higher Education (CSHE). (2025). *Designing assessment tasks that are less vulnerable to AI*. University of Melbourne. https://melbourne-cshe.unimelb.edu.au/ai-aai/home/ai-assessment/designing-assessment-tasks-that-are-less-vulnerable-to-ai
- Challa, C., Eyob, E., Adekoya, A. A., & Omojokun, E. (2024). Relationships of Learning Styles to Bloom's Taxonomy of Gen Z. *Journal of Organizational Psychology*, 24(2). https://doi.org/10.33423/jop.v24i2.7014
- Chandu, G., & Sushmitha, A. (2025). The impact of academic performance on Gen Z in the digital era. *International Journal of Creative Research Thoughts*, 13(2), 380–391. https://doi.org/10.56059/ijcrt.v13i2.2502398
- Cropink. (2025, 20 de febrero). 40+ daily social media usage stats & trends [2025]. https://cropink.com/daily-social-media-usage
- EdWeek. (2024, 25 de abril). *New data reveal how many students are using AI to cheat*. Education Week. https://www.edweek.org/technology/new-data-reveal-how-many-students-are-using-ai-to-cheat/2024/04
- Faramawy, H. (2024, 16 de diciembre). *How social media is reshaping Generation Z and higher education*. LinkedIn. https://www.linkedin.com/pulse/from-tiktok-classrooms-how-social-media-reshaping-z-higher-faramawy-ukmaf
- Gordon, M., & Ohannessian, C. M. (2024). Social media use and academic achievement among adolescents: Implications for higher education. *Youth & Society*, 56(3), 451–467. https://doi.org/10.1177/0044118X231056789
- Haasdijk, J. (2023). *A call for transparency and responsibility in artificial intelligence*. Deloitte Consulting Perspectives. https://www.deloitte.com/nl/en/services/consulting/perspectives/a-call-for-transparency-and-responsibility-in-artificial-intelligence.html
- Hagedorn, M. (2022). Emerging adults as social media actors, agents, and authors: Identity development in South African emerging adults. *SAGE Open*, 10(6). https://doi.org/10.1177/21676968221121379
- Harris Poll. (2024, 10 de septiembre). What Gen Z thinks about its social media and smartphone usage. The Harris Poll. https://theharrispoll.com/briefs/gen-z-social-media-smartphones
- HEPI. (2025, 26 de febrero). *Student generative AI survey 2025*. https://www.hepi.ac.uk/2025/02/26/student-generative-ai-survey-2025/
- Ho, A., Besiroglu, T., Erdil, E., Owen, D., Rahman, R., Guo, Z. C., ... & Sevilla, J. (2024). Algorithmic progress in language models. *Advances in Neural Information Processing Systems*, *37*, 58245-58283. https://doi.org/10.48550/arXiv.2403.05812
- Intellecs.ai Blog Team. (2025). AI-powered study solutions for Gen Z learners: Tools for success in higher education. https://www.intellecs.ai/blog/ai-and-college-learning-how-gen-z-is-leveraging-technology-for-academic-succes
- Jacoby, B., & Rajasekhara, K. (2015). The part-time student experience: Its influence on student engagement, perceptions, and retention. *Canadian Journal for the Study of Adult Education*, 30(1), 41–56. https://doi.org/10.56105/cjsae.v30i1.5392
- Jones, C., & Bergen, B. (2025). *Large Language Models Pass the Turing Test.* arXiv. https://doi.org/10.48550/arXiv.2503.23674

- Kamiya, M. (1996). Ikigai-mi-tsuite (On 755 Ikigai). MisuzuShybou.
- Liu, W., Wang, M., & Tynjälä, P. (2022). Resilience and academic persistence in higher education contexts: A systematic review of the literature. *Educational Psychology Review*, 34(1), 1–25. https://doi.org/10.1007/s10648-021-09609-4
- MacFarlane, K. (2018). Higher education learner identity for successful student transitions. *Higher Education Research & Development*, 37(6), 1201–1215. https://doi.org/10.1080/07294360.2018.1477742
- Mastery Coding. (2025, 16 de enero). *AI in education: The current landscape in 2025*. https://www.masterycoding.com/blog/landscape-of-ai-in-education
- Masood, A., Lawton, G., & Petersson, D. (2024, 10 de septiembre). *AI transparency: What is it, and why do we need it?* TechTarget. https://www.techtarget.com/searchcio/tip/AI-transparency-What-is-it-and-why-do-we-need-it
- McGovern, H., Stureborg, R., Suhara, Y., & Alikaniotis, D. (2024). Your Large Language Models Are Leaving Fingerprints. *Proceedings of the International Conference on Computational Linguistics*. https://doi.org/10.48550/arXiv.2405.14057
- Mehrabi, N., Morstatter, F., Saxena, N., Lerman, K., & Galstyan, A. (2021). A survey on bias and fairness in machine learning. *ACM Computing Surveys*, 54(6), 1–35. https://doi.org/10.1145/3457607
- Mollick, E. (2024). *Co-intelligence: Living and working with AI*. Portfolio/Penguin Random House.
- Moreno, A. (2022). *Purpose-driven learning: Unlocking and empowering our students' innate passion for learning* (1st ed.). Routledge. https://doi.org/10.4324/9781003294634
- Mosca, J. B., Curtis, K. P., & Savoth, P. G. (2019). New Approaches to Learning for Generation Z: A Literature Review on Educational Technology Adoption. *Journal of Business Diversity*, 19(3). https://doi.org/10.33423/jbd.v19i3.2214
- MSSmedia. (2024). Social media habits of college students: Trends and insights for higher education institutions. https://info.mssmedia.com/blog/social-media-habits-of-college-students
- Muñoz-Merino, P. J., Ruipérez-Valiente, J. A., Delgado Kloos, C., & Alario-Hoyos, C. (2024). Personalized adaptive learning in higher education: A review of technologies and frameworks for improving engagement and outcomes. *Journal of Learning Analytics*, 11(2), 112–122. https://doi.org/10.18608/jla.v11i2
- Murgatroyd, S. (2024). *The future of higher education in an age of artificial intelligence*. Ethics Press.
- Nathasha, K., Rahman, N. A., & Ishak, M. (2022). Learning preferences of Generation Z undergraduates at the University of Cyberjaya. *Journal of Learning for Development*, 9(2), 331–339. https://doi.org/10.56059/jl4d.v9i2.584
- National Association of Colleges and Employers (NACE). (2018). *The plight of the undecided student*. https://doi.org/10.1080/07294360.2018.1477742
- Olipas, C. N. P. (2024). Gen Z's learning experiences and its relationship to social media use: A descriptive-correlational study of IT students at Nueva Ecija University of Science and Technology. *International Journal of Advanced Research in Innovative Ideas in Education*, 10(3), 1291303. https://doi.org/10.56059/ijariie.v10i3.socialmedia.education
- Olsen, T. (2024, 19 de diciembre). As student cheating soars, some UFV instructors crack down while others struggle with institutional policies. Fraser Valley Current. https://fvcurrent.com/p/ufv-artificial-intelligence-cheating
- Page, R. (2013). Stories and social media: Identities and interaction. Routledge.
- Reeve, J., Cheon, S. H., & Jang, H.-R. (2020). A teacher-focused intervention to enhance students' engagement in learning: A cluster-randomized trial testing agentic

- engagement theory in Korea and the United States. *Journal of Educational Psychology*, 112(8), 1637–1650. https://doi.org/10.1037/edu0000475
- ScrumLaunch. (2025). *AI in education: Transforming learning and teaching in 2025*. https://www.scrumlaunch.com/blog/ai-in-education-transforming-learning-and-teaching-in-2025
- Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behaviour and student engagement across the school year. *Journal of Educational Psychology*, 85(4), 571–581. https://doi.org/10.1037/0022-0663.85.4.571
- Trowler, V. (2010). Student engagement literature review: The Higher Education Academy report on engagement dimensions and outcomes in higher education settings. Higher Education Academy, 11(1), 1–15.
- Turkle, S. (2011). Alone together: Why we expect more from technology and less from each other. Basic Books.
- UPCEA & Thinking Cap Agency. (2021). The six personas of the new learner: Changing motivations and situations of the new learner landscape. Thinking Cap Agency. https://doi.org/10.56105/upcea.new.learners.whitepaper
- Vico, S. (2024). *Doing nation in a digital age: Social media and national identity formation*. University of Exeter Press.
- Word Spinner. (2025, 27 de febrero). What percent of students have used AI to cheat? Shocking stats. Word Spinner Blog. https://word-spinner.com/blog/what-percent-of-students-have-used-ai-to-cheat/
- Ziesche, S., & Yampolskiy, R. V. (2025). Considerations on the AI endgame: Ethics, risks and computation frameworks. CRC Press.