

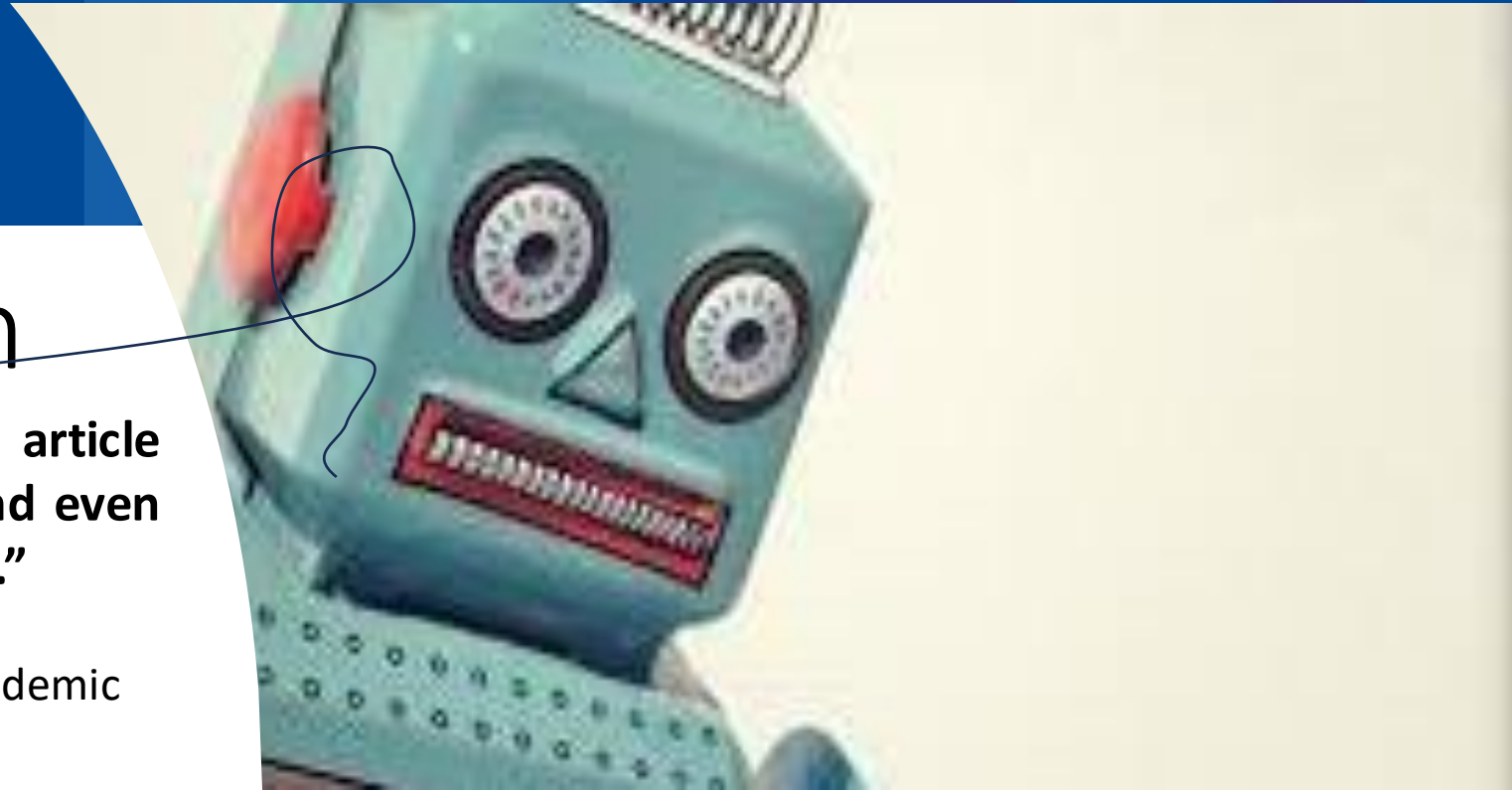




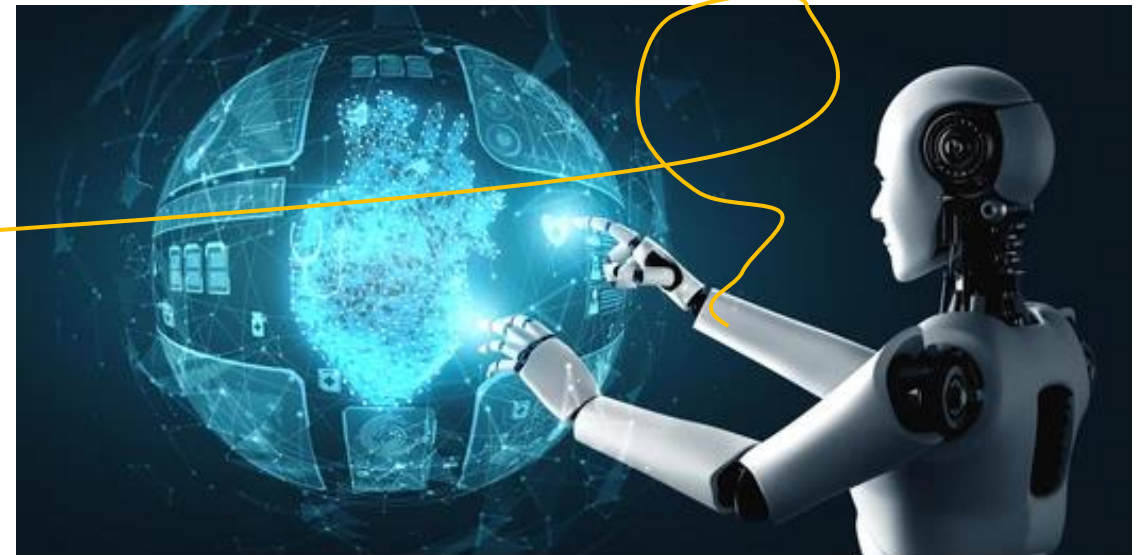
2019's Conclusion

Writing created by the dated automatic article generator, “cannot be easily detected and even if they are detected, can be hard to prove.”

(Artificial Intelligence Is a Tool for Cheating Academic Integrity, Abd-Elaal et al. (2019))



How about 'Writing created by current automatic article generator'





Towards an AI-Enhanced Teaching Environment

- The current aim is to integrate AI into the teaching environment to create an AI-friendly teaching environment. We seek to leverage the potential advantages of these tools while ensuring academic integrity and adequately preparing our graduates for the future.
- Assess the impact of AI on future job requirements and identifying the essential skills and knowledge that graduates will need to thrive in this changing landscape.



Mitigating the risk of academic misconduct using artificial intelligence through education

Mapping Educational Materials for the Artificial Intelligence Era:

Industry Perspective: Industry / Employers/ Skills






Student Perspective: (Engagement/ Critical Thinking/Creativity)

Staff Perspective: (Assessment, provided feedback, communication, teaching materials)






Academic Integrity Officers Perspective: (academic integrity practices & Ethical Considerations)

Students' perspective






I am comfortable using this AI tool to help me with my assignments.

	Strongly Agree	75	(75 Responses)
	Agree	179	(179 Responses)
	Neither agree nor disagree	105	(105 Responses)
	Disagree	58	(58 Responses)
	Strongly disagree	17	(17 Responses)





Using this AI tool improved my writing efficiency.

 Strongly Agree	76	(76 Responses)
 Agree	152	(152 Responses)
 Neither agree nor disagree	94	(94 Responses)
 Disagree	63	(63 Responses)
 Strongly disagree	33	(33 Responses)

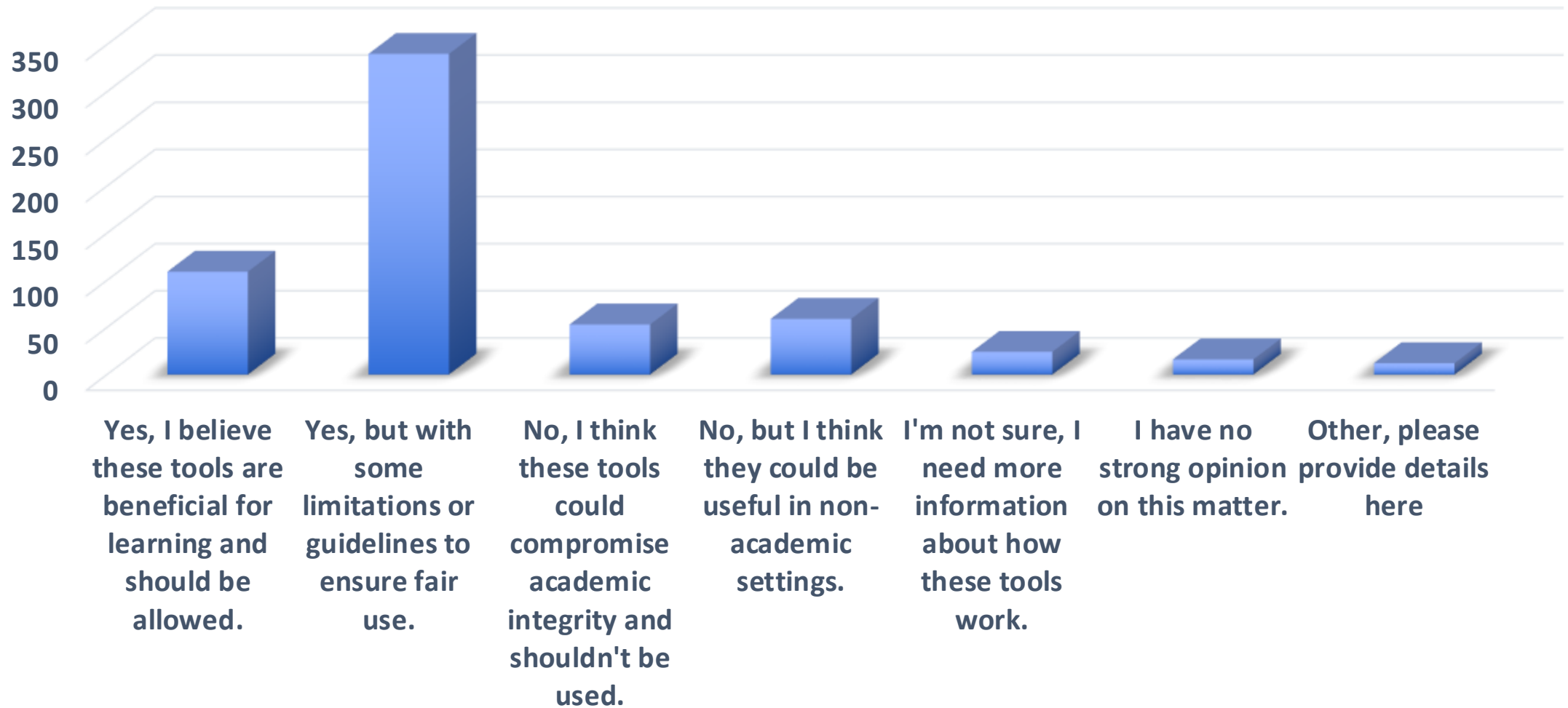
This AI tool provided me with new insights and perspectives.

 Strongly Agree	72	(72 Responses)
 Agree	208	(208 Responses)
 Neither agree nor disagree	79	(79 Responses)
 Disagree	51	(51 Responses)
 Strongly disagree	12	(12 Responses)

This AI tool saves me time when working on assignments.


 Strongly Agree	68	(68 Responses)
 Agree	183	(183 Responses)
 Neither agree nor disagree	112	(112 Responses)
 Disagree	44	(44 Responses)
 Strongly disagree	16	(16 Responses)

Do you think you should be permitted to use generative AI tools to help you with your studies? - Selected Choice







Staff's perspective






Using generative AI tools may negatively affect students' critical thinking...

	Strongly Agree	15	(15 Responses)
	Agree	13	(13 Responses)
	Neither agree nor disagree	1	(1 Responses)
	Disagree	4	(4 Responses)
	Strongly disagree	0	(0 Responses)

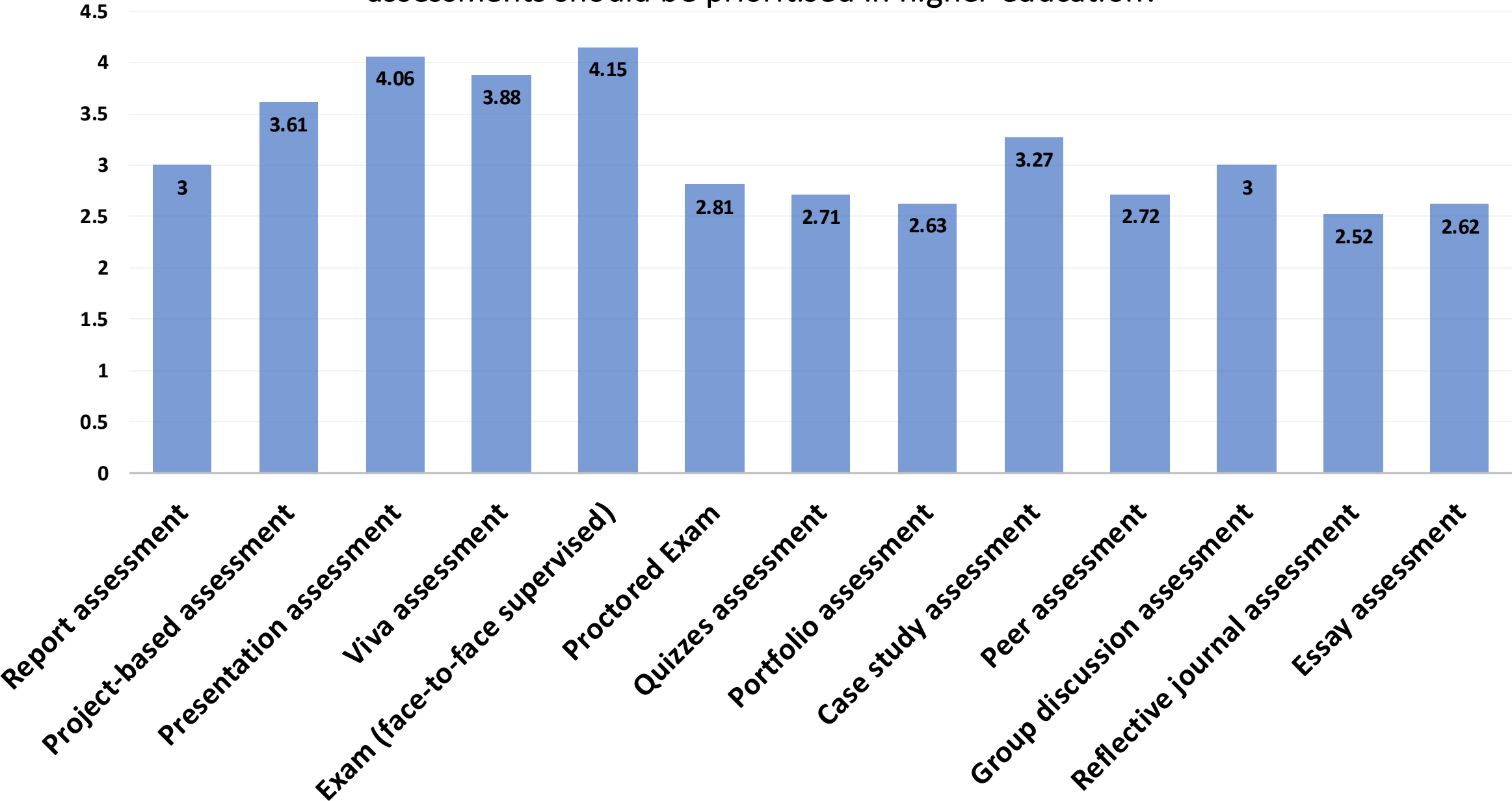
Educators are unsure how much generative AI tools influence what students s...

	Strongly Agree	9	(9 Responses)
	Agree	15	(15 Responses)
	Neither agree nor disagree	2	(2 Responses)
	Disagree	5	(5 Responses)
	Strongly disagree	2	(2 Responses)

Does AI negatively impact student creativity?

 Strongly Agree	9	(9 Responses)
 Agree	7	(7 Responses)
 Neither agree nor disagree	13	(13 Responses)
 Disagree	4	(4 Responses)
 Strongly disagree	0	(0 Responses)

In light of the potential risks posed by AI tools, do you believe certain types of assessments should be prioritised in higher education?



Industry Perspective:



Literature Review (Ongoing)

Future STEM Education for Industry 5.0: Traditional STEM education focused on degrees falls short for Industry 5.0. **Lifelong learning, transdisciplinary education, sustainability, data fluency, and human-machine interaction** are proposed strategies for future-proof graduates.

AI Applications in Higher Education Institutions (HEIs): AI can improve learning outcomes by enhancing **creativity, self-efficacy, and learning performance** in HEIs. Recommendations include investing in AI resources, developing skills, and fostering innovation.

Research in AI literacy in higher education is still in its infancy. It calls for further refinement in defining AI literacy and determining appropriate content for non-experts.

AI Literacy for Employees:

Exploring AI literacy highlights four key capabilities, offering insights into how employees interact with AI technology in digital workplaces.



Concerns:

- Traditional Degrees Insufficiency
- Lack of Preparedness
- Ethical Considerations

Focus Group Discussion (UniSA Industry Advisory Board- STEM)

- The discussion highlights the need for a balanced approach to AI integration in education, focusing on both technical skills and broader competencies to prepare graduates for the future job market in STEM industries influenced by generative AI. Participants highlighted that :

AI automation would likely replace routine tasks, emphasising the need for graduates to develop softer skills and focus on higher-value work such as critical thinking, problem-solving, communication, and emotional intelligence. Considering ethical use of these tools.

Acknowledgment of the need to integrate AI education into STEM curricula, covering technical skills and AI ethics, data management, and quality assurance. Emphasis on maintaining foundational programming skills while effectively using AI tools

Generative AI might impact them differently. For instance, AI's potential in cybersecurity, data management in mining, and the transformation of industries like civil engineering and law are mentioned due to the automation of precedent-based tasks.

Concerns:
Graduates ability to navigate the changing job market and ethical considerations surrounding AI use..

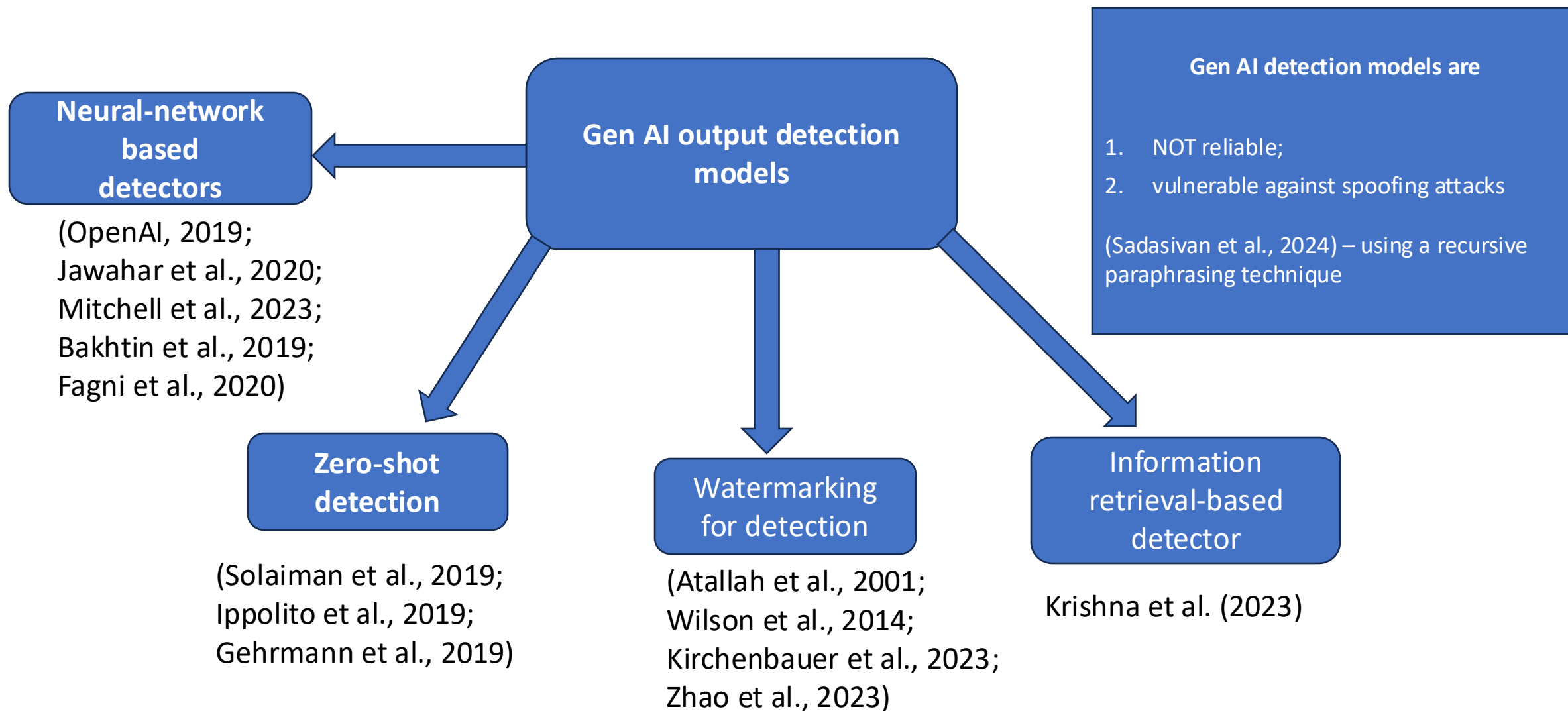
Academic integrity in the age of generative AI: Perceptions of AIOs



A word cloud featuring five terms related to academic integrity: Responsibility (orange), Trust (green), Fairness (teal), Honesty (blue), and Courage (red). The word Respect (purple) is positioned below the others. The words are arranged in a cluster, with some overlapping.

Responsibility Trust
Fairness Honesty
Courage Respect

So far...No reliable Gen AI detection tool



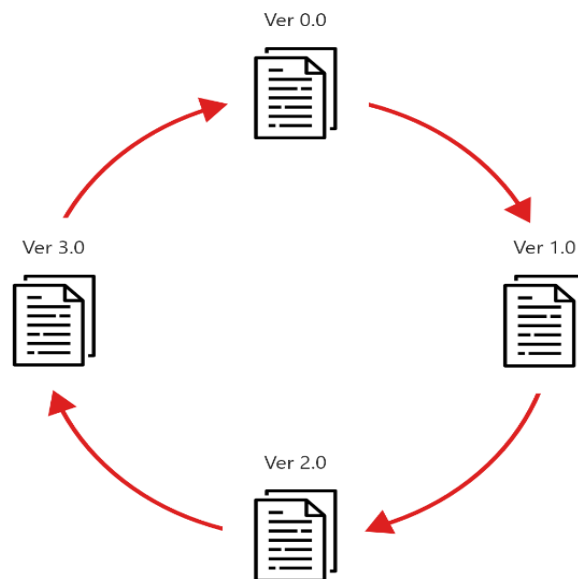


In the absence of a reliable Gen AI detection model

- How are AIOs investigating suspected Gen-AI facilitated misconduct?
- Specific insights into the challenges of investigating Gen AI-facilitated academic misconduct.
- Confidence of AIOs in their ability to investigate Gen AI-facilitated academic misconduct cases and arrive at outcomes that confirm “misconduct” rather than just a suspicion.

Mitigating Gen AI negative dimensions

❖ Document Versioning



❖ Assessment redesign-allowing for transparent Gen AI use

- Problem finding: Analysing deficiencies of AI-generated output
- Source corroboration

Thank you

