NELSON MANDELA UNIVERSITY

Institutional Position Statement on

GENERATIVE ARTIFICIAL INTELLIGENCE (GenAI)

This statement will guide the various faculties in integrating AI technology into our learning, teaching, assessment, research, innovation, and engagement processes. By adhering to this Position Understanding, we provide a framework that encourages innovation, promotes teaching and research excellence, and develops an environment that mobilises AI for the benefit of our staff and students. We are committed to defining the future of education through the appropriate and intentional integration of AI. The document ensures that the use of all AI aligns with the University's values, staff and graduate attributes, promotes academic integrity, and reduces academic dishonesty. It further encourages the use of human potential in co-creating and advancing knowledge.

Our academic philosophy

Nelson Mandela University adopts innovative, humanising pedagogies and practices that affirm diverse knowledge paradigms and world views. This philosophy promotes human virtues and acknowledges humans as co-creators of knowledge in learning and teaching, research and innovation, and engagement in all spheres of academic development.

Part of our mission is to prepare graduates who are known for their social and environmental consciousness, visionary leadership, innovative and pioneering search for solutions to complex challenges, and the ability to adapt their knowledge and expertise in multiple settings through embracing lifelong learning. Furthermore, we develop graduates and diplomates to be responsible global citizens capable of critical reasoning, innovation, and adaptability. We, therefore, create and sustain an environment that encourages and supports a vibrant research, scholarship, and innovation culture. We acknowledge that within a rapidly changing global context, graduates need to be flexible and adaptive to manage uncertainty, ambiguity, and unpredictability, as opposed to only acquiring a fixed set of skills that prepare them narrowly for the world of work.

Our graduate attributes, therefore, seek to cultivate mindsets and attitudes that equip graduates to grapple with challenges and adapt to new environments quickly and effectively. Our graduate attributes have been conceptualised to include the following:

- **Foundational knowledge and literacies** represent how graduates apply core disciplinary and interdisciplinary knowledge to everyday tasks. Knowledge includes theoretical concepts and ideas in addition to practical understanding based on the experience of having performed certain tasks. Foundational literacies serve as the basis upon which graduates need to build more advanced competencies and character qualities. This includes numeracy and various literacies such as scientific, linguistic, digital, financial, cultural, and civic literacy. To meet the challenges of the 21st century, students also need to be equipped with transformative competencies to shape a better, more sustainable future. These include:
    - Creating new value means innovating to shape better lives, such as developing new knowledge, insights, ideas, techniques, strategies, and solutions and applying them to problems.
    - Reconciling tensions implies the acquisition of a deeper understanding of opposing positions, developing arguments to support their own position, and find practical solutions to dilemmas and conflicts.
    - Taking responsibility is connected to the ability to reflect upon and evaluate one's own actions, experience, and education to achieve personal, ethical, and societal goals.
- **Learning and innovation competencies** are increasingly being recognised as the skills that distinguish graduates who are prepared for increasingly complex life and work environments in the 21st century. Such competencies include intellectual curiosity, critical thinking, creativity, communication, and collaboration.
- **Life and career skills** need rigorous attention to ensure that graduates are equipped to confidently navigate life and work environments in the globally competitive information age. Such skills include professionalism and integrity, resilience and persistence, adaptive expertise, and exercising progressive agency to bring about constructive change as socially conscious, responsible global citizens.

These attributes promote the use of brain power, autonomy, integrity, creativity, and the right to information. This means humans and their creation ability are centred on the academic project. The University discourages handing over the power of the human brain to any technological tool. It views

technological tools as instruments that enhance human abilities. We understand that these AI tools are informed by collections of data generated over the years by humans.

Like many other spaces, the University has been confronted with the advent of GenAI, and this is mainly seen through student submissions of assignments and projects that exhibit dishonest use of GenAI, impacting the quality of the academic project, particularly assessments. It is essential to embrace this newest addition as an advancement of learning technologies that has been long coming. These advances have historically impacted education and disrupted how we view education, like calculators, word processing software, the Internet, cell phones, etc.

Its history in brief

The introduction of AI in the 1940s led to several shifts in the appreciation of technological advances. In the 1950s and 1960s, AI grew into GenAI, which is about the concept of machine learning. ChatGPT defines GenAI as "a subset of artificial intelligence that involves the creation of new and original content, such as images, music or text, through machine learning algorithms." The advent of GenAI has pushed many boundaries and posed several challenges to the world, including higher education (HE). The recent launch of ChatGPT saw the tool gain 100 million active users within two months of its launch, and a decline in use was seen from June 2023 (Blog/ZDNET).

Available AI tools and main functions

These are but a few examples; many other tools are appearing in the market, and existing ones are constantly modified and improved.

- Microsoft Bing AI – text-based
- Bard from Google – text-based
- OpenAI ChatGPT – text-based
- Grammarly – text-based
- Pi.ai – text-based
- Splash Pro – music generator
- Otter – meeting notes
- Copy.ai – copywrite
- Midjourney – image generator
- Stable diffusion – text to image and art generator
- Dall-E2 – images and art generator

Lessons learnt

We have seen successes when AI is incorporated as a developmental tool in the classroom and academic blogs via Moodle (the University's **OFFICIAL** learning management system (LMS)). Lecturers have used it as part of literature synthesis for literature reviews for research projects, in-class teaching, testing its accuracy in searches with students, having students debate the accuracy of the data generated against previous knowledge (this assumes that pre-class engagement with content would have been conducted), creating module frameworks/guides with students and bringing AI uses into contracted and agreed upon conversations so that where transgressions occur, we can question and correct – both developmentally and punitively.

Our approach

Considering that we cannot dispute nor ignore Open Science, Open Education and Open AI, we need to train students on questioning and verifying information from any source before incorporating it into their work. We suggest openly discussing the various forms of GenAI available to undergraduate and postgraduate students and staff; this we are seeing in the University as faculties hold discussions and share information with staff and students, listening to the voice of students, who may, under pressure, hand over their power to dishonesty and poor integrity. We need to make decisions on acceptable allowances and definite refusals. To this end, it is important to provide an indication of some of the recommended and unacceptable uses of AI by students and staff.

Recommended Uses:

- √ search engine
- √ enhancing understanding

- √ gaining insights
- √ gathering information
- √ clarifying concepts
- √ critically evaluating information

Unacceptable Uses:

- X Copy and paste generated intellectual work.
- X Claiming a generated product (text, image, creation) as your own.
- X Generating information for assessments, projects, and assignments, unless this is explicitly instructed by the academic, who has provided clear guidelines in the form of permissions and prohibitions as to the appropriate use thereof as part of an assessment designed around the use of AI.
- X Used for unfair advantage – when you are determined to deceive and do not use something in an appropriate manner.
- X Making use of AI and not appropriately referencing the sources represented in the generated text, image and/or other product.
- X Makes use of AI and does not ensure that the sources represented in the generated text, image and/or other product are accurate and represent the actual work of existing sources.
- X Generating information via AI that may or may not represent the intellectual work of another person, people or AI and thereafter making further use of AI to disguise this information and then present it as one's own.
- X When you do not follow permissions and prohibitions provided in assessment guidelines.
- X When you are not transparent about its use, do not reference and acknowledge your sources.

Considering PedAIgogy

Our learning and teaching practices have been incorporating learning technologies for a while. When incorporating learning technology, we envisage AI as a tool that improves learning experiences and develops high-quality innovative pedagogies, inclusiveness, and student success. These should encourage active student participation, critical thinking, and problem-solving skills and promote a student-centred learning environment. Our institution is dedicated to continuous learning and improvement in AI development. We acknowledge that AI technologies evolve rapidly. Therefore, we commit to staying updated on AI advancements, adjusting our learning, teaching, and assessment strategies, and exploring emerging possibilities in the educational landscape.

Establishing clear assignment guidelines and expectations about what constitutes misuse in AI can avoid confusion, errors, oversights, and academic offences. As a University, we acknowledge that not all students have been equally exposed to what AI is and what constitutes misuse of AI, as that will vary from discipline to discipline and in environments beyond learning and teaching. When GenAI is used, it should be permitted and agreed upon with the academic in charge of the module and in a form that upholds academic integrity. Proper acknowledgement of its usage must be provided in referencing and annexing (see Appendix A). Where students declare the use of GenAI, academics should establish mechanisms to determine how that will impact the overall mark. Students must demonstrate intelligent, insightful, formative work with the GenAI to receive higher marks.

Fairness in grading is necessary, as no detector tool in the market provides conclusive results. Therefore, testing GenAI use in projects is a complex endeavour. For example, when handling plagiarism enquiries and running detectors, one asks the tool to test itself; depending on the version used, different information is provided. The results produced by the detector vary depending on the type of detector used (paid or unpaid) and the detection period. Therefore, we cannot solely rely on detectors, as they cannot be used as a basis to impose academic integrity sanctions on staff and students. It is, therefore, the academic who can fully assess the merits of the use, as AI tools often fail to link sentences carefully, create critique and often cite inaccurate or fictitious references. Academics must, therefore, be significantly considered when selecting suitable assessment types and ensure that moderation abilities are available for their modules.

Responsible Use of AI Tools in Research

In today's rapidly evolving academic landscape, the integration of AI tools in research has become increasingly prevalent. Postgraduate students engaged in thesis work often embark on extensive literature reviews and engage in argumentative discussions to address their research questions and hypotheses. In recent years, there has been a noticeable surge in the utilisation of AI tools, such as ChatGPT, as an aid in the synthesis of information and as a guiding resource in the research process.

While these AI tools have proven valuable in expediting the literature review process, it is imperative to recognise that they may not comprehensively support the development of purpose statements or research conceptualisation. This aspect remains an area where guidance and supervision are of paramount importance. It is crucial to acknowledge that regulating AI tools in this context may pose challenges. However, efforts can be made to ensure transparency and accountability.

The following statements **MUST** be added to course guiding materials:

Permission Example:

Generative Artificial Intelligence (GenAI) tools are essential resources. It is valuable for you to engage critically with these tools and explore their use in generating content submitted for assessment in this course, including [*papers, take-home examinations, and specified other assignments]*. You remain responsible for all content you submit for assessments.

You may use GenAI tools to help generate ideas and brainstorm. However, you should note that the material generated by these tools may need to be more accurate, complete, biased, or otherwise problematic. We encourage you to consider how GenAI complements, replaces, or fails to replace your contributions and abilities.

Suppose you include content (e.g., ideas, text, code, images) that was generated, in whole or in part, by Generative Artificial Intelligence tools (including, but not limited to, ChatGPT and other large language models) in work submitted for evaluation in this course, this work **MUST** be declared/acknowledged. Failure to properly cite sources, including AI tools for generating content, would be considered Academic Misconduct, violating the University's Plagiarism Policy (305.04).

Prohibition Example:

By submitting work for evaluation in this course, you represent it as your own intellectual product. Submitting content for evaluation (e.g., ideas, text, code, images) that was generated, in whole or in part, by Generative Artificial Intelligence tools (including, but not limited to, ChatGPT and other large language models) would be considered Academic Dishonesty in violation of the University's Plagiarism Policy (305.04).

Declaration Statement for Research Submission Example:

I, [***Student Name***], declare that in the course of conducting my research for the thesis titled [***Treatise/Dissertation/Thesis Title***], I have utilised AI tools, including ChatGPT, in the following aspects of my study:

[***Specify Aspects or Stages of Study where AI Tools were Employed***]
[***Provide Examples of Prompts Used for AI Assistance***]

I further acknowledge that AI tools have been employed to augment my literature review process and provide additional guidance in the synthesis of information. However, I understand that the responsibility for formulating research questions, hypotheses, and purpose statements lies with the researcher, and AI tools are employed as supportive aids.

I hereby affirm that all citations and references to AI-generated content derived from ChatGPT are appropriately attributed in accordance with academic standards.

Signature: _____
Date: _____

The above declaration statement allows students to explicitly state their use of AI tools, specify the aspects of their study where they were used, and provide transparency about the prompts used. They could indicate how the prompts were used in the same way as reporting on a literature search strategy

for a literature review. It reinforces the understanding that while AI tools can be valuable aids, the researcher assumes the ultimate responsibility for research conceptualisation and purpose statements.

Conclusion

GenAI exposes numerous conditions, one being why staff and students resort to using and misusing these tools. All students accepted in our programmes have the requisite cognitive ability to perform in their selected programme, as indicated by our set academic entry requirements and selection criteria. Yet we see a rise in academic dishonesty cases that may or may not find resolution due to the abovementioned factors. Considered conversations about expectations, workloads, and overload are necessary. Most assignment submissions are timed around the same week in May and September/October when we see increases in performance anxiety, uncertainty, attrition, and suicidality. Although we acknowledge that the academic year has shrunk and is further reduced by constant incidents of protests, we must keep in mind that there are numerous indicators of success, including content completion, persistence, retention, and transfer of knowledge. Built relationships, open communication, negotiated and contracted guidelines, and shared understanding of concepts and experiences are some of the human elements that could demystify AI and reduce the number of time-intensive plagiarism cases confronting academic departments and the legal office.

References

Clark, D. (March 02, 2023). *PedAIgogy – new era of knowledge and learning where AI changes everything* [Online] http://donaldclarkplanb.blogspot.com/2023/03/pedaigogy-new-era-of-knowledge.

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Seneca Libraries. 2023. APA Citation Guide (APA 7th Edition): Artificial Intelligence. [Online] Available: https://library.senecacollege.ca/apa/artificialintelligence.

St George's University of London. 2023. Reference AI in an Assignment. [Online] Available: https://libguides.sgul.ac.uk/Harvard/AI.

Appendix A

Reference techniques for students – Using AI-Generated Information in Assignments: A Guide for Students

Remember to reference every time you use AI-generated content in your academic writing. For instance, if you paraphrased or quoted text generated by ChatGPT, reference the source in the paragraph of your document (in-text) and your list of sources at the end. Not doing so may lead to a charge of plagiarism. Because your reader will not be able to find the original AI material, you should also include a copy of the AI-generated content as an appendix to your writing.

Referencing AI Using APA

The APA guide recommends that writers record how they used the AI program. The APA site also recommends including a full transcript of the correspondence with the AI as an appendix.

In-Text Referencing

- **Example without an Appendix**

When I asked ChatGPT what the meaning of life is, ChatGPT replied that it is only an AI and that it cannot provide answers to philosophical, value-laden questions (OpenAI, 2023).

- **Example with Appendix**

When I asked ChatGPT what the meaning of life is, ChatGPT replied that it is only an AI and that it cannot provide answers to philosophical, value-laden questions (OpenAI, 2023; see Appendix A for the full transcript).

Reference List

OpenAI. (2023). ChatGPT (June 16 version) [Large language model].

Referencing AI Using Harvard

Record exactly how you used AI and keep copies of all your communications with the AI so that you can use them as appendices where necessary.

In-Text Referencing

- **Example without an Appendix**

When prompted by the author, ChatGPT responded that Vincent van Gogh was born in Zundert, Holland (OpenAI ChatGPT, 2023).

- **Example with an Appendix**

When prompted by the author, ChatGPT responded that Vincent van Gogh was born in Zundert, Holland (OpenAI ChatGPT, 2023). A copy of this response is in Appendix 1.

Reference List

OpenAI ChatGPT. 2023. ChatGPT response to Jane Doe, 2 April.