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**MIDLANDS STATE UNIVERSITY**

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| **VICE CHANCELLOR’S OFFICE** |

21st May, 2024

The Permanent Secretary

Ministry of Higher & Tertiary Education, Innovation, Science and Technology Development

New Government Complex

**HARARE**

**Attention: Professor F. Tagwira**

**QUESTIONNAIRE ON ARTIFICIAL INTELLIGENCE**

Your email of even reference dated 21st May, 2024 refers. The following is MSU submission.I hope you will find this in order.

1. AI tools like chat GPT, Claude and Copilot are mainly being used for research purposes and simplifying concepts which are hard to grasp. Further to that lecturers are using AI tools for content creation, for example generating lecture content and generating images. AI tools like CHATGPT, Research Rabbit etc. are being used for assistance with assignments, research dissertations, and research papers by both students and staff. However, the speed of adoption of these technologies is fairly low in developing countries as compared to Europe or America for example.
2. AI tools have had an impact on the education system as a whole. AI potentially allows researchers to be more efficient by providing tools to facilitate fast data analysis and review of literature among many other things. At the same time over reliance on AI tools can make students lazy and impact negatively on basic critical thinking skills. The conversation and formalization of policies around the impact of AI on pedagogy is a in its infancy in most developing countries.
3. Text-to speech technology - e.g voice assistants like Alexa or Siri they assist visually challenged learners to access content which otherwise would be difficult to get. Traditional braille is being replaced by by screen reading software tools. There are few case examples to use in African developing countries because these services are not widely accessible. Note that access to these tools is impacted by access to functional ICT infrastructure and Web/Internet services- which is a major challenge in post areas
4. Web based Al tools give access to information to previously disadvantaged groups who ideally don't have access to libraries. This presents opportunities to previously marginalized communities & underprivileged groups e.g girls and women in general. However, this is only true in communities which are already connected to internet and ICT facilities. It is these realities in most developing countries which present challenge. In addition, understanding of AI’s potential needs in addressing some of the key challenges is hindered by lack of access to ICT facilities and even ignorance of the existence of such tools.
5. Personalized learning/Individualisation – AI has the capability to tailor content to the individual needs of each student. An AI tool can be used to adapt learning materials, pace and difficulty levels, thus creating customized learning. Teachers and students in rural areas for example- have not had the privilege of using these AI tools and hence have no context of the relevance of such technologies. Current mainstream curricula does not cover the use of such technologies.
6. Learners participate in activities where their data is gathered- this has the potential of interfering….Learners participate in activities where their data is gathered- this has the potential of interfering with their autonomy. For students below a certain legal age, they may not be allowed to opt out even if they feel uncomfortable with participation. The quality of the resulting data may be of poor quality due to over representation or under representation of legally willing participants. As for issues to do with human rights and privacy, there are limited use case examples done in the SADC region to inform policy.
7. The challenges of the digital divide- especially access to ICT facilities for the global South means very little from developed countries is being incorporated into the AL models e.g there are extremely limited data based algorithms which are trained using data from African countries. Naturally the dominant cultures of the West inherently perpetuate stereotypes and inequalities by their over representation in the training data. In addition, AI tools often unintentionally incorporate cultural biases of the dominant Western culture and languages -resulting in further marginalization of African Languages and culture
8. As noted earlier, the access to AI tools by the majority of our teachers and lecturers means formal policies and guidelines for use of AI is still in its early infancy and hence we have extremely low use case studies done in African socio-cultural context. In the absence of such, there is no data to base the levels of misinformation teachers & learners are exposed to
9. Case studies on use of AI tools for learning are extremely limited to allow a general conclusion to be made. There is need to conduct these assessments now, and it may be inappropriate to assume that the speed0020030of adoption of these technologies in Western and Developed world is at the same pace as the global south.
10. The legislation is currently at the crafting stage, with some drafts still being worked on. However, at university level education, policies such as anti-plagiarism and ethical Ai use in teaching, learning and research are seriously being discussed for adoption. Formal interviews and online surveys- participation by lecturers and teachers online. Feedback is limited; nevertheless the pointers are mainly issued of lack of understanding of what AI is, what AI can do……Most of the misconceptions are perpetuated by poorly informed media coverage
11. Participation of teachers is generally limited because of inadequate access to formalized curricula directing the use of AI technologies in schools in general. The issues are currently under discussion with the relevant educational authorities. Nevertheless, awareness among tech-sevy youngsters is driving adoption. On techniques and technologies, there are formal university modules in degree programmes e,g Computer Science & Engineering; Telecommunications Engineering, Data Science, ICT …degree programmes where the technologies are covered and studied in detail. However there are limited courses for non technical course covering the Arts and Humanities
12. Course “introduction to AI”, “AI for every one”...are available as informal short free courses online. However specific professional programmes for teachers in General are lacking. Policy guidelines on the use of AI in teaching in schools are still being worked. On. and not yet available for use.
13. Other than for teachers in training e,g those studying BED degrees in ICT or computer science, the material is not currently widely available as at this point.
14. The policies are still being drafted and its ongoing work.
15. Not enough information is available at the moment. However, universities have started to lead in this regard and formal policy interventions are expected in the not so distant future.
16. The main challenges stem from the digital divide- where one part of the world has access to affordable ICT, technology and data infrastructure and the other has limited access. Subsuharan Africa has some areas not having access to the internet although efforts are underway to address these. In the meantime, there is limited access to the AI technologies; limited understanding of what AI is & its potential impact to learning and teaching. challenges is lack of basic understanding of what AI really is…especially in the context of its potential impact on education, instruction and learning impacts
17. AI has great potential in education- particularly in interventions to increase access to quality learning; increased inclusion and in assistive technologies for the mentally & physically challenged learners.

Thank you.

**PROFESSOR V.N. MUZVIDZIWA**

**VICE CHANCELLOR**