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The Permanent Mission of the Kingdom of Saudi Arabia to the United Nations Office and Other International Organizations at Geneva presents its compliments to the Office of the High Commissioner for Human Rights and the Special Rapporteur on the rights to education, and would like to refer to the letter received regarding the call for inputs on **“artificial intelligence in education and its human rights – based use at the service of the advancement of the right to education”**. In that regard, the Permanente Mission has the honor to attach herewith contribution of the Kingdom of Saudi Arabia to the afore-mentioned request.

The Permanent Mission of the Kingdom of Saudi Arabia avails itself of this opportunity to renew to the Office of the High Commissioner for Human Rights and the Special Rapporteur on the rights to education with disabilities, the assurance of its highest consideration.



Office of the United Nations High Commissioner for Human Rights (OHCHR)
The Special Rapporteur on the rights to education
Email: o hrc-sr-education@un.org - registry@ohchr.org



This memorandum was prepared in response to a request from the Special Rapporteur on the right to education, in preparation for her annual thematic report to be presented to the General Assembly in 2024.

1. Please provide examples of how AI tools and systems, including generative AI, are used in education process and related decision making in your country, organization or educational institution, with examples of specific software where relevant.
 - frameworks established by the National Center for E-Learning and the Saudi Authority for Data and Artificial Intelligence (SDAIA), providing a solid foundation for the implementation of AI tools and systems in educational settings.
 - Building upon these frameworks, we are currently developing policies specifically tailored for AI and generative AI tools in education. These policies aim to provide clear guidelines and regulations to ensure the effective and responsible use of AI technologies in educational environments, fostering a conducive ecosystem for AI integration.

In terms of tools and systems:

AI-Powered Reading Progress Tools:

This tool is available in Microsoft Teams which is integrated into the national LMS, Madrasati, aiding students in practicing their reading fluency through while enabling teachers to monitor their progress.

Adoption of 3D AI Printers in Universities:

Integration of 3D AI printers in educational settings empowers students and researchers to materialize their creative ideas, thereby advancing scholarly endeavors.

Establishment of Metaverse Labs in Universities:



Creation of Metaverse labs introduces immersive learning environments that leverage cutting-edge technology to transcend physical limitations, fostering collaborative exploration in education.

Educational Catboats:

We are developing an educational chatbot that is trained and restricted to educational and curriculum data sources. This Chabot will provide personalized support to students and teachers, enhancing accessibility to educational resources and facilitating interactive learning experiences.

In parallel, MOE is:

- Fostering AI awareness and innovation among students through organized competitions and camps focused on AI-related themes, aiming to inspire creativity and highlight the potential impact of AI in education.
 - introduced dedicated AI and data science courses for high school students, providing them with comprehensive education in these critical fields to prepare them for future challenges and opportunities in the evolving technological landscape. Not only that, but also for higher education, universities are offering graduate and undergraduate degrees in AI and AI-related courses
 - We are investing in enhancing teachers' capabilities through training focused on utilizing AI in teaching and learning practices. These programs aim to empower educators with the necessary skills and knowledge to effectively integrate AI technologies into their teaching methodologies, ultimately enhancing the quality of education in Saudi Arabia.
2. Please provide specific evidence of the known impact of AI tools and systems on learners and teachers and on education systems in general, both positive and negative and explain how the impact is monitored. For example, how does the use of AI affect:



- a. persons with special learning needs, learners with different linguistic and cultural backgrounds, women and girls;
 - b. access to education of populations marginalized or underserved due to ethnicity, socio-economic status, displacement and other factors;
 - c. human interaction between teachers and students;
 - d. students' and teachers' human rights, privacy, safety, engagement, agency and critical thinking;
 - e. perpetuation of stereotypes and inequalities;
 - f. the type of information or disinformation that learners and educators are exposed to;
 - g. assessment of learning ;
 - h. education management.
- We are actively studying and monitoring the impact of AI integration in education across all relevant aspects. Concurrently, we are collaborating with various governmental institutions to analyze associated risks and develop effective mitigation plans. Our overarching goal is to ensure the responsible and ethical use of AI tools in educational settings. As well as exploring opportunities to enhance the benefits and opportunities associated with AI in education, aiming to foster innovation and enrich learning experiences for both students and educators.
 - Despite the ongoing evolution of AI's impact in education, it's crucial to acknowledge its status as an emerging technology. Concrete evidence of its impact is still unfolding.
3. Please provide examples of legislation, regulations (including codes of conduct or institutional rules) or policies addressing or covering the use of AI in educational



context, including ethical or human rights concerns around AI development and use, data privacy, bias mitigation, transparency, academic integrity, plagiarism and proper attribution. Is due diligence mandated for the use of AI in educational context? Do students have clear guidance for citing AI usage ?

- We are fortunate to have the national framework for AI in education, established by the National Center for e-Learning (NCEL), supplemented by a diverse array of guidelines and policies from the Saudi Authority for Data and Artificial Intelligence (SDAIA), meticulously crafted for the integration of AI in educational settings. These guidelines encompass critical aspects, including ethics, challenges, and risks. Additionally, we are in the final stages of crafting comprehensive guidelines for the implementation of generative AI tools in education. These guidelines will explore various dimensions, such as determining the recommended age for AI integration in education, leveraging generative AI to enhance teaching and learning while addressing concerns related to topics like, privacy, plagiarism and citing AI, and emphasizing on refining assessment methods to ensure fairness and equity in grading.
- 4. Please provide examples of participation of teachers, parents, students or communities in the development of nationwide or internal regulations addressing the use of AI in education. What has been the feedback from teachers, students and parents? Are there mechanisms in place to solicit such feedback?
- The guidelines and frameworks established by the Saudi Authority of Data and Artificial Intelligence and the National Center for e-Learning have been developed through active engagement with various stakeholder's. Additionally, As we progress with the current development of generative AI guidelines, our approach involves planning to engage students, teachers, and parents in the next steps. This inclusive strategy ensures that the perspectives and insights of all relevant stakeholders are considered, promoting transparency, accountability, and effectiveness in the implementation of AI policies within the education sector



5. How does the education system support management staff, teachers and students in understanding how to use AI and how AI works? Please provide examples and /or texts of curricula that address both the technological and human dimensions of AI competency (both how it works (the techniques and the technologies) and what its impact is on people (on human cognition, privacy, agency)) .
 - The education system strategically supports management staff, teachers, and students in grasping AI and its functionalities. Various training initiatives, including webinars and workshops that are meticulously crafted to empower educators with the requisite skills in utilizing AI tools effectively.
 - Regarding curriculum integration, MOE studying a future plan to seamlessly infuse AI subjects across the K-12 education spectrum. This endeavor is carefully tailored to match the cognitive capacity of each grade level, ensuring optimal understanding without overwhelming complexity. Along with dedicated high school courses delve into AI and data science, covering essential topics such as machine learning, data science, and deep learning.
 - As part of our commitment to fostering awareness, we facilitate specialized competitions and camps that center on AI themes, such as encouraging students to explore its potential impact on societal challenges, including environmental sustainability
6. Please provide examples of existing professional development programmes for teachers to use AI technologies. What training and support are provided to educators to effectively utilize AI tools in their daily work?
 - At MOE, the commitment remains steadfast to staying abreast of the latest trends in technology and education, and ensuring that teachers are equipped with the necessary skills. To facilitate effective integration of AI in teaching and learning, specialized training programs for educators has been implemented. These programs offer various formats such as webinars and talks. for instance, one notable example of these efforts is a recent webinar series consisting of five sessions, totaling 10 hours of instruction. This



initiative aimed to empower educators with the knowledge and skills to effectively leverage AI tools in the classroom. It is noteworthy that this webinar series attracted significant participation, with approximately 60,691 educators from across the country attending the sessions. This example serves as one of many initiatives undertaken to ensure that educators are well-prepared to harness the potential of AI technology for enhancing teaching and learning experiences.

7. Please provide examples of policies addressing gaps and inequalities in access to necessary conditions for the use of AI in teaching and learning, for instance aimed at reducing the digital divide between students with easy access to AI tools at home and those dependent on school resources? What measures are in place to ensure that trustworthy and pedagogically appropriate AI tools and resources are accessible to all students, regardless of their socio-economic background or geographical location?
 - Saudi Arabia is committed to providing equal and inclusive learning opportunities for all students, irrespective of gender, race, or ethnicity, and at no cost. Our efforts include comprehensive assessments of internet coverage to identify connectivity gaps, ensuring uninterrupted access to digital learning tools, including AI resources. Additionally, we equip schools in remote areas with necessary devices and accessories, facilitating seamless utilization of these resources and reducing barriers to accessing AI tools.
 - Amidst the evolving landscape of AI technology, Saudi Arabia maintains its unwavering dedication to its integration into education systems. Recognizing its novelty both domestically and internationally, we are dedicated to ongoing efforts aimed at further integration. We remain committed to ensuring equal and inclusive learning opportunities for all students, reflecting our steadfast commitment to equity and excellence
8. Please provide examples of state-supported collaboration or partnership between public educational institutions and corporations producing AI tools for education. Does the education system enforce contracts with specific software providers or is there a choice, at which level and is it informed by feedback from teachers, parents and students, as



appropriate? How are data sovereignty and localization being addressed in the context of using international or foreign-developed AI tools in education?

- In terms of collaboration with tech companies, our educational system has established partnerships with companies such as Microsoft to provide AI tools for education. While Microsoft is a key partner in this endeavor, we ensure diversity and choice by collaborating with other tech companies as well
 - Regarding contract enforcement, we facilitate public schools by offering free-of-charge access to the national Learning Management System (LMS) and supporting tools. Private schools, exclusively, have the autonomy to choose alternative LMS options. In essence, our approach emphasizes enabling rather than imposing, with public schools benefiting from complimentary services and private schools having the freedom to select their preferred LMS. Regular feedback collection from students, parents, and teachers ensures that decisions align with the needs and preferences of stakeholders
 - Concerning data sovereignty and localization, regulatory compliance is ensured by national authorities such as the Saudi Authority for Data and Artificial Intelligence (SDAIA) and the National Cyber Security Authority. These bodies oversee data hosting within national borders, ensure adherence to local data protection laws, to align with domestic standards and policies
9. What are the main challenges encountered during the implementation of AI in education? Have there been any technical, ethical, financial or regulatory hurdles in deploying AI solutions in the educational context ?
- At the outset, it's important to acknowledge that we are in the early stages of AI implementation in education and to recognize that this technology is still relatively new. Across the globe, nations are collectively navigating its implementation and the challenges it presents. Saudi Arabia has conducted thorough studies and analysis to understand the potential hurdles associated with AI integration in education. At the same time, we remain vigilant, closely monitoring advancements made by countries that have



progressed in this area to glean insights and best practices. Presently, our focus lies in developing comprehensive plans to integrate AI in education and ensure its ethical and responsible use, furthering our commitments to provide equal and inclusive learning opportunities for all.

10. Are there any specific areas within education where you see significant potential for AI integration in the future?
- Yes, there are several areas within education where AI integration holds significant potential for the future. These include personalized learning, adaptive assessment, virtual teaching assistants, administrative tasks automation, and educational content creation and customization
