

# Chapter 8

## Preparing Citizens for the Future Digital Literacy and AI in Education

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### ABSTRACT

*Digital and AI literacy are vital as technology shapes the future, requiring skills beyond basic computer knowledge. Integrating AI in education personalizes learning by identifying students' needs, adapting content, and providing instant feedback, creating engaging, tailored experiences. Ethical issues, including data privacy, algorithmic bias, and tech access disparities, must be addressed to ensure AI's responsible use in education. Teachers play a key role in fostering AI literacy, helping students understand both the potential and ethical considerations of technology. Embedding these skills into curricula prepares students with critical thinking, creativity, and collaboration skills necessary for a digital world. This approach equips students to engage with technology responsibly, building a generation ready to navigate and*

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*shape a fair, inclusive digital landscape.*

## **1. INTRODUCTION**

It is as true today, especially in light of modern world where technology is advancing at a much faster rate and place a much more emphasized value on preparing citizens for the future. The competency of Digital literacy has therefore gained immense prominence, besides being an asset for the people; it is also crucial for development. In moving through this brave new world of learning, the application of Information and Communications Technology more particularly Artificial Intelligence in teaching and learning is a promise of transforming learning and preparing the learners for the society of tomorrow.

The definition of digital skills is very general and it ranges from the appreciation of the internet search engines to evaluation of sources of information and use of technology in conveying information and in carrying out group activities. To live in today's society which is swimming in data and information, the development of skills and abilities to critically think through information and data is extremely crucial for learners. By attaining this ability, it allows an individual to effectively interact with the current happening around them, to be able to discuss it with the people and to make decision with right information and not with wrong information that is incline with bias. (Stolpe et.al,2024)

While people get used to having various types of digital tools in their work and personal lives, they are in a way better equipped to sort out through all the information sources in front of them. This skill set does not only improve the individual decision-making process but also develops the responsibility of the decision-makers in the online world. This makes it important for educators to ensure that they equip students with a knack on what is safe or otherwise to read when it is on the internet, hence ensure that students being produced are of those kind that can manage the current generation.

The AI tools can help determine students' approach to learning, choice of content, and rate and provide a personalized learning approach to accommodate the learners' differences. This particular approach does do more than just increase the attractiveness of content for learners but also allows them develop a better understanding of conceptual knowledge and consequently, learning becomes more effective and profound.

Furthermore, the adoption of AI into education can improve bureaucratic effectiveness such that more time is devoted to knowledge and guiding. The use of technology for grading, time- table, and resource allocation frees teachers from time consuming tasks therefore spend more time with the students. Such a change

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