ARTIFICIAL INTELLIGENCE:

A MULTIDISCIPLINARY APPROACH TOWARDS TEACHING AND LEARNING

Editors:
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Artificial Intelligence: A Multidisciplinary Approach towards Teaching and Learning

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CHAPTER 3

Artificial Intelligence Assisted Teaching and Learning and Research of Environmental Sciences

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Abstract: Artificial intelligence (AI) has become the latest tool in facilitating the computer-assisted teaching-learning process. The AI-based teaching system is viewed as a personalized one-on-one student-teacher interaction. AI in education is becoming more common and has received a lot of attention recently. This growing interest is likely to have a big impact on higher education. Many educators and educational authorities are considering integrating AI topics into K-12 curricula, to provide school students with insights into these evolving technologies. Recent studies on AI curricula have mostly concentrated on identifying which AI tools are better for student learning and what subject matter knowledge and abilities need to be taught. Since the goal of these studies was to promote information, they designed their curriculum with appropriate content, effective delivery methods, and strategies to increase students' competency levels. Environmental education seeks to explore natural processes and foster the development of skills and attitudes geared towards sustainability and the protection of the environment. Recently, AI has been widely used in geological, environmental, and related research. It can also assist in the exploration of energy resources and minerals. The use of AI in education teaching-learning and academic achievement has been elucidated in this chapter. This chapter also aims to explore the role of AI-assisted teaching of environmental sciences and how it impacts the overall learning experience. Understanding the role of AI in environmental sciences is very important as it can address crucial problems like climate change, early prediction of natural disasters, and many others. Currently, there is a need to develop accurate models at an affordable time and cost. Other than research, the implementation of AI in environmental education can lead to a change in students' aptitude and interest and can help in the development of sensitivity towards environmental protection.

Keywords: AI, Biosphere, Cyclones, Earthquakes, Teaching-learning, Tnvironmental education, Landslides.

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