

Teachers' Perceptions of Artificial Intelligence (AI) Applications in Secondary Education: A Case Study in Vietnam

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Abstract

The Fourth Industrial Revolution (4.0), with its many technological achievements such as artificial intelligence (AI), Blockchain, Big Data, and IoT, impacts all different fields. In the field of education, the application of artificial intelligence (AI) is developing and transforming rapidly, opening up many great opportunities for the development and change of educational methods globally. However, it also raises deep concerns about the unevenness and disparities related to infrastructure and technical resources in each country. This study investigates teachers' perceptions of AI applications in secondary education in Vietnam. Surveys were conducted among 198 teachers across all subjects, using both multiple-choice questionnaires and Likert scales. The survey results show that all teachers have heard of artificial intelligence (AI), however, the use of this tool still has many limitations compared to some other applications such as the use of multimedia resources. Overall, teachers have a positive view of AI applications, especially the great potential it offers. However, the application still has many limitations regarding personal interaction, accessibility, technological dependence, etc. Therefore, the application of artificial intelligence needs to be scientific, ethical, and meaningful, requiring each country to adapt it to its own educational and cultural context. This study provides insightful perspectives on the application of artificial intelligence (AI) in secondary education in Vietnam, aiming to support managers and policymakers in formulating policies and strategies for future teacher training programs.

Keywords: Artificial Intelligence, Secondary Education, Teacher Awareness, Vietnam