

**APPLICATION OF ARTIFICIAL INTELLIGENCE AND CHALLENGES ENCOUNTERED
BY SENIOR HIGH SCHOOL TEACHERS IN THE DIVISION OF BATANGAS CITY**

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Abstract

This study examines the application of Artificial Intelligence (AI) and the challenges faced by Senior High School teachers in the Division of Batangas City. As AI increasingly shapes modern education, its integration offers benefits such as personalized instruction, automated assessment, and enhanced classroom management. However, concerns regarding teacher readiness, data privacy, and ethical use continue to pose significant challenges. Guided by the Web-Based Learning Theory, this study assessed AI use across four domains: pedagogical, social, managerial, and technical. A descriptive survey method was employed, with data collected through a validated questionnaire administered to randomly selected teachers. Statistical analyses, including weighted mean, t-test, and Pearson's r, were applied to interpret the results. The results indicated a high level of AI utilization, particularly in lesson delivery and performance monitoring. However, teachers faced challenges, including insufficient training, limited infrastructure, and student over-reliance on AI tools. A significant relationship was also observed between the extent of AI use and the challenges encountered. The study recommends targeted teacher training, the establishment of ethical guidelines, and the improvement of infrastructure to support effective AI integration. These findings can guide schools and policymakers in enhancing digital teaching practices.

Keywords: artificial intelligence, education, challenges