

Artificial Intelligence as an Academic Adviser in Course Selection for Open and Distance Learning: What Can AI Do?

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Abstract

This research explores the obstacles learners encounter when selecting courses within open and distance learning frameworks and assesses the effectiveness of AI-powered virtual academic advisers in addressing these issues. Despite the flexibility of distance education, the lack of tailored guidance can hinder decision-making, particularly at critical points such as course selection. The study evaluates the capability of AI-powered virtual academic advisers to overcome these barriers. The objective is to develop a virtual academic adviser that complies with the registration and course selection regulations of Anadolu University, which hosts over one million learners in its open education system in Turkey, and to investigate the responses they provide to learner inquiries. Utilising OpenAI's MyGPT application, virtual advisers have been trained to engage with learners based on their academic performance. A qualitative research methodology, specifically a holistic single-case design, was employed to analyse the responses generated by these virtual advisers and to compare them with those produced by the ChatGPT 3.5 and ChatGPT 4 applications. The findings indicate that integrating virtual advisers, who consider academic risks such as reduced performance in repeated courses, could significantly enhance learner experiences in open and distance learning environments. In conclusion, this study advocates developing an AI-based virtual academic adviser prototype to improve academic performance and facilitate decision-making during the course selection phase. This research highlights the potential benefits of AI integration in open and distance education and calls for further exploration into how this technology can enhance learning outcomes and support services.

Keywords: Higher education, open and distance learning, academic adviser, generative artificial intelligence, chatbot