PROSPECTIVE TEACHERS' AWARENESS AND READINESS FOR ARTIFICIAL INTELLIGENCE INTEGRATION IN TEACHING

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Abstract

Teacher education plays a vital role in preparing future teachers to respond to technological developments. Artificial Intelligence (AI) is increasingly influencing teaching and learning, creating opportunities and challenges for teacher preparation. This study aimed to understand prospective teachers' preparation for AI integration by examining their awareness of AI tools, self-reported readiness to integrate AI into teaching, and perceptions of institutional support. A quantitative survey design was employed with a purposive sample of 98 prospective teachers enrolled in a Bachelor of Education programme at an Open and Distance Learning institution in Sri Lanka. Data were collected using a literature-based structured questionnaire covering demographic information, AI awareness and usage, AI literacy, teacher AI readiness, attitudes and behavioural intention, risk awareness, and open-ended questions. The questionnaire was reviewed by two experts and piloted with 20 students. Cronbach's alpha coefficients ranged from .768 to .863. Data were analysed using percentages, means and standard deviations. Respondents were highly familiar with general-purpose tools such as ChatGPT and Gemini but had limited awareness of education-specific AI tools. Ethical Teaching Practice received the highest mean rating (M = 3.67, SD = 0.74), while Pedagogical Application (M = 3.35, SD = 0.82) and Self-Efficacy (M = 3.41, SD = 0.61) received comparatively lower ratings. Perceived Institutional Support received the lowest rating (M = 3.04, SD = 0.67). These findings reflect self-reported perceptions rather than demonstrated teaching competence. Teacher education programmes should provide structured AI learning, practical training and continuing institutional support to prepare prospective teachers for effective and ethical AI integration. Future research should include B.Ed. students from different language media and disciplines to examine variations in awareness, readiness and perceived support.

Keywords: Artificial Intelligence, AI Readiness, Prospective Teachers, Teacher Education, Open and Distance Learning, Sri Lanka