Identification and analysis of core topics in educational artificial intelligence research: a bibliometric analysis

ABSTRACT

Educational artificial intelligence (EAI) means an integration of artificial intelligence (AI) and educational science that is going to serve as an authoritative element of the education system in the future. However, limited bibliographic analysis study have been carried out with the purpose of conceptualising the advancements in this field of educational billiography This study aim is to identify and analysis the core topics using keywords. The method of study is using the Keywords and cluster analysis by conducting a bibliometric review of 8,660 articles that have been published from 2000 to 2020 with the help of CiteSpace software. The results reveal that EAI research primarily encompasses three controversial topics. There is controversy about the AI application to students, AI does not replace teachers and AI algorithms have great contribution in the development of education sector. Study concluded that, AI applications can improve the effectiveness of students' learning, AI can replace part of the teachers' work, the relationship between the teacher and the machine should be cooperation, not the relationship between replacement and being replaced, under the premise that teachers give full play to their initiative and innovation.