Global Trends of Educational Data Mining in Online Learning

ABSTRACT

Educational data mining (EDM) in online learning involves data mining techniques to analyze data from online environments to gain insights into student behavior, performance, and engagement. This study explored EDM in online learning publication trends and focuses. It involved a bibliometric analysis of 615 scholarly works related to EDM in online learning as recorded in Scopus, the largest peer-reviewed citation database, on February 1, 2023. The study examined EDM in online learning publications regarding its evolution and distribution, key focus areas, impact and performance, and prominent authors and collaborations in the last decade, in which the timespan is the period from 2012 to 2022. This bibliometric analysis shows that EDM in online learning is a dynamic area of scientific research as related publications grow steadily throughout the years and involve worldwide collaborations. The study reveals current research trends, offering valuable insights for future researchers to guide their investigations in this field research, potential research directions, and the current state of knowledge on the topic, allowing a better understanding of the research landscape.