

Investigating Factors Influencing Effectiveness and Concentration in Online Learning Through Predictive Analytics

Serkan Varol

University of Tennessee, Chattanooga, Tennessee, United States

Abstract

During the COVID-19 pandemic, many students experienced online learning for the first time. For institutions offering remote learning opportunities, it is essential that online classes effectively communicate course content and create an engaging environment that allows students to maintain concentration for extended periods. Historical data includes information on individuals' access to and ability to use online education resources, demographic characteristics, and perceptions of their online learning experiences. In this study, a predictive model is developed to identify the most important factors associated with success in online learning. The model enables the prediction of individuals' perceptions regarding the effectiveness of online classes and their ability to concentrate during online learning. The results emphasize the importance of students' and educators' ability to effectively use online learning resources, their perceptions of the effort others invest in learning, and the discomfort associated with spending long hours in an online learning environment.

Keywords

Remote learning, online learning, virtual classroom, effective communication, concentration, students, educators, online education resources.