El Aouifi, Houssam & El Hajji, Mohamed & Es-saady, Youssef & Douzi, Hassan. (2021). Predicting learner’s performance through video sequences viewing behavior analysis using educational data-mining. Education and Information Technologies. 26. 10.1007/s10639-021-10512-4. This paper analyzes how learners interact with the pedagogical sequences of educational videos, and its effect on their performance. In this study, the suggested video courses are segmented on several pedagogical sequences. In fact, we’re not focusing on the type of clicks made by learners, but we’re concentrating on the pedagogical sequences in which those clicks were made. We focalize on the interpretation of the path followed by a learner watching an educational video, and the way they navigate the pedagogical sequences of that video, in order to predict whether a learner can pass or fail the video course. Learner’s video clicks are collected and classified. We applied educational data mining technique using K-nearest Neighbours and Multilayer Perceptron algorithms to predict learner’s performance. The classification results are acceptable, the kNN classifier achieves the best results with an average accuracy of 65.07%. The experimental result indicates that learners’ performance could be predicted, we notice a correlation between video sequence viewing behavior and learning performances. This method may help instructors understand the way learners watch educational videos. It can be used for early detection of learners’ video viewing behavior deviation and allow the instructor to provide well-timed, effective guidance.