

The Eye-Tracking Study of the Efficiency of Video Lectures in Blended Learning Environment

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Abstract: The results of an eye-tracking study of common video lecture formats in blended learning are presented. Their comparative analysis was carried out in terms of the level of attention and involvement of students; based on the memorability of the educational material, a conclusion was made about the effectiveness of the formats. In particular, it has been proven that the duration of eye contact with a video lecture indicates a better perception and memorability of educational information; however, it is not advisable to attract students' attention through dynamic video and computer animation due to the opposite effect. Interpretation of eye-tracking data is carried out through in-depth interviewing of 20 students – the participants in the study. The combination of eye tracking and interviewing made it possible to detect some of the drivers and barriers that encourage and hinder the implementation of blended learning, respectively. Based on the results of the study, recommendations were formulated for creating balanced educational video content.

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