

# Gaze Analytics: where do we stand?

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**Abstract:** Analytics and big data are the new hit in learning technologies. Expectations for effective support of learning are rising with the advent of MOOCs and the combination of massive data and artificial intelligence techniques. This recent approach to support learning resembles what online companies do to build increasingly precise customer profiles and recommendation systems. Are such approaches valid in the context of learning? eLearning platforms nowadays develop dashboards for teachers to follow-up on their students and build A/B testing facilities into the learning platforms.

In this talk, I will illustrate the process of mining gaze and clickstream data for indicators of learning and understanding. I will summarise several years of research about dual eye-tracking that have shown the importance of attending to references as a predictor for understanding. I then report findings from clickstream analytics that attempt to model the depth of information processing from the log of actions on the video player.

Defining indicators for learning is only the first step in the control loop that analytics try to achieve. The next milestone in analytics research is to design and test strategies to support learners.