SYMPAB - (16236) - EYE-TRACKING IN SCIENCE EDUCATION RESEARCH: A COMPREHENSIVE REVIEW OF THE RECENT RESEARCH LITERATURE

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Short Abstract

This contribution contains preliminary results of a systematic literature review focused on using eye-tracking (ET) in science education research. The goal was to analyse the trends in the science educational research using ET, summarize the results and identify knowledge gaps. Articles, early access articles and conference papers indexed in the Web of Science Core Collection published by the beginning of 2020 within the topic were included. Based on their abstracts, 105 papers were submitted to thorough analysis. Leading authors research aims, indications for learning and other categories were recorded. USA and Taiwan were the most productive countries related to the use of ET in science education research.. ET is mostly focused on university students, although there are studies comparing students on various levels of education. With respect to the field of study, about 13% of the analysed papers focused on science, 27% on biology, 25% physics, 23% chemistry and 12% in geography education research. Reading, data representation and learning materials' evaluation were the top three topics ET was used for. The contribution therefore offers a relatively quick insight into the ET's status quo to researchers already in the field or novice-researchers who can contact scholars focused on similar topics or set their own research in an area yet uncultivated.