

Paper session 1B | Analyzing teaching quality through classroom observation

Room: Kullager

Discussant: Mark White, University of Oslo

Right in the middle instead of just watching – comparing classroom observation in 360-degree and traditional classroom videos

Tosca Daltoè

University of Tübingen & Institute for Educational Analysis Baden-Württemberg

Affiliated authors: Evelin Ruth-Herbein (Institute for Educational Analysis Baden-Württemberg); Ann-Kathrin Jaekel (University of Tübingen); Benjamin Fauth (University of Tübingen & Institute for Educational Analysis Baden-Württemberg); Ulrich Trautwein (University of Tübingen); Richard Göllner (University of Tübingen)

Classroom videos have been an established tool in teaching quality research and teacher education for many years. An emerging advancement in video technology are 360-degree videos that provide an all-around view of what's happening around the camera without a predetermined camera perspective. 360-degree videos can be observed using virtual reality (VR) glasses. First approaches to use and research 360-degree classroom videos in teacher education hint at the potential of this technology. To date, however, little is known about how different video types affect the assessment of teaching through classroom observation. Thus, the aim of the present experimental study was to explore differences in classroom observation and resulting teaching quality ratings between 360-degree classroom videos in VR and traditional classroom videos. N = 75 student teachers each observed a 360-degree classroom video in VR and a traditional classroom video on a

standard PC. After the classroom observation, the participants each answered questions about the classroom observation (immersion, presence, authenticity, mental load, mental effort) and provided a teaching quality rating using the standardized observation form by Fauth et al. (2022). The results indicate that observers perceive higher immersion and presence in the 360-degree classroom videos in VR. The lesson and the teacher's behavior are perceived as more authentic in the 360-degree videos in VR. Observers report no higher mental load, but higher mental effort for the classroom observation of 360-degree videos in VR. Observation ratings of teaching quality did not vary systematically between the video types, with more in-depth analyses still outstanding. Limitations of the present study and its relevance to teaching quality research and teacher education are discussed.