

Striving for Change: Video-Based Teacher Education Programmes and Related Research

It is indisputable that teaching is a demanding profession and that classroom situations place great demands on teachers, their professional knowledge, vision, and action. Teacher educators, both within the pre-service teacher education and in-service professional development, have always been striving to prepare teachers to be able to meet these demands. Innumerable university programmes, individual courses and lectures have been devised as well as many special intervention programmes. It is a current trend in teacher education to make use of video sequences of classroom situations to fulfil the above stated aim (Gaudin & Chaliès, 2015).

The use of video in teacher education is not new. As Sherin (2004) noted we can find examples of courses that made use of video already in the 1960s. Ever since then the use of video has become more and more accessible, affordable, user-friendly and thus more and more commonplace in teacher education programmes. The practice of using video went hand in hand with research on the topic. Numerous papers have been written, talks held and books published that aimed to shed light on the affordances of video that facilitate teacher learning, and on the effects of video-based interventions on teachers' professional knowledge, vision, actions etc. (e.g. Brophy, 2004; Calandra & Rich, 2014; Janik & Seidel, 2009). This special issue of *Orbis scholae* aims to continue this trend. It comprises six papers that report on the use of video in teacher education and a comment that asks what video-based reflection makes effective.

The first study, by *Ann-Kathrin Schindler, Alexander Gröschner* and *Tina Seidel*, reports on a video-based professional development programme that focused on classroom dialogue. It provides an account of a case study of one of its participants and the use of classroom dialogue in her teaching. The use of video is not connected only to the changes in the teacher's practice, but also to her students' engagement. Thus, a link between effects on teaching and on students' behaviour in the classroom is made.

The second paper, by *Eric Berson, Hilda Borko, Susan Million, Edit Khachatryan* and *Kerri Glennon*, focuses on a professional development programme that included not only theoretical input but also a practicum period where the teachers could use the newly acquired pedagogical strategies in a low stakes classroom context (outside their own schools). This practicum was accompanied by daily discussions in which video sequences were used to facilitate reflection. The study looked at how the strategies emphasized during the theoretical input were applied in the participants'

6 teaching, thus again investigating the connection between the use of video in teacher education courses and the actual teaching practice.

The next two studies emphasized teachers' ability to notice and professional vision and both focus on subject-specific aspects of teaching. *Eva Minaříková, Michaela Pířová, Tomáš Janík* and *Klára Uličná* report on a professional development programme for teachers of English as a foreign language. During video club meetings, the concept of communicative competence as the ultimate goal of language learning and teaching was discussed. The study investigated whether these meetings influenced what teachers commented on when watching classroom videos.

From a mathematics teaching context, *Nad'a Vondrová* and *Jana Žalská* worked in their study with pre-service teachers participating in Master's programme. They investigated what mathematics specific phenomena the students notice when observing classroom videos and whether this is different for students at the beginning and at the end of their studies. In this specific Master's programme, the subject-specific didactics courses make use of classroom videos and the authors draw conclusions about how videos can be used in order to help pre-service teachers focus on relevant mathematics specific phenomena.

The last two studies also pertain to pre-service teacher education. In their study, *Sonja Mohr* and *Rosella Santagata* acknowledge that it is not only teachers' knowledge that influences their decision making and classroom behaviour but also their beliefs. As the authors work with prospective mathematics teachers, they set out to explore the possibilities of influencing their beliefs through the use of video incorporated into the methods course.

Kathrin Krammer, Isabelle Hugener, Manuela Frommelt, Gabriela Furrer Auf der Maur and *Sandro Biaggi* investigate the suitability of the use of own versus other teacher's video in pre-service teacher education. The study did not focus on the benefits of these two variations as such but on whether the students and the teacher educators accept them and how they evaluate their effectiveness.

In his discussion paper, *Niels Brouwer* reflects upon the role of video and effective components that need to – or at least should – be addressed in teacher education and teacher professional development to show effective results. He takes all of the six studies presented in this Special Issue of *Orbis scholae* into account and concludes that empirical approaches, particularly by combining quantitative and qualitative approaches, push the field of video-based research forward. Beyond the methodological perspective, the six papers provide an insight into current trends in the use of video in teacher education. We believe the collection is valuable also because it is diverse in terms of the countries represented (Czech Republic, Germany, Switzerland and the USA), the target audience of the intervention (pre-service and in-service teachers), subject field (mathematics, science, English, general) and which area of influence of video they focus on (teachers' practice, professional vision and ability to notice, beliefs or acceptance of working with different videos).

As a result of the increasing number of empirical studies focused on the use of video, the growing body of empirical evidence in the field will further lead to

understanding how the technology can be used to change teacher education and professional development and to foster the quality of teaching and learning.

References

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