Teachers’ Digital Sovereignty in Physical Education in a Digital World

Main Topics for further Training for Physical Education Teachers

Pierre Meinokat¹, Carolin Knoke¹, Moritz Mödinger¹, Philipp Rosendahl¹, Ingo Wagner²

¹Karlsruhe Institute of Technology, Karlsruhe, Germany | ²Albert-Ludwigs-University, Freiburg, Germany

Classroom Management & Classroom Disruptions

- Physical Education benefits from good structure and leadership – digital media can help here⁶,⁷,⁸
- Digital components of physical education lessons unfold potential for dealing with and risks of classroom disruptions⁹,¹⁰
- Digital-based phenomena such as gamification¹¹ and e-sports¹² are suitable due to their proximity to physical education and their increasing relevance

▶ Added value for teaching: Sport and digitalization do not have to work against each other - potentials should be used to make physical education lessons more effective, motivating and sustainable

▶ Training objectives: Highlighting the possibilities of digitalization for physical education and raising awareness of the topic against the background of optimizing teaching/learning success

360° video technology

- 360° videos expand the already established teaching and learning potential of conventional video technology⁶,¹³
- 360° videos, as a link between video technology and virtual reality, enable low-threshold access to immersive teaching-learning processes¹⁴
- 360° video technology offers cost-effective design options for immersive and multi-perspective teaching-learning processes¹⁵

▶ Added value for teaching: Great potential in 360° videos as a future teaching/learning medium and training tool¹⁶

▶ Training objectives: Informing and motivating, introducing physical education teachers to immersive teaching-learning processes and training them in their use and design

Digital-based health promotion in physical education

- Use of digital media in physical education can support and optimize teaching and learning processes¹⁷
- Physical education teachers can use the information provided to promote students’ health¹⁸
- Digital media in physical education to increase student motivation and physical activity¹⁹

▶ Added value for teaching: Using the opportunities that can arise from digital health technologies in physical education and promoting students’ health

▶ Training objectives: Provide physical education teachers with information on the use of digital media to promote pupils’ health in physical education lessons

Video Feedback

- Feedback with the help of videos can promote motoric learning¹⁰
- Video feedback has the potential to positively influence learning on a pedagogical-psychological level²⁰
- Visual feedback enables multi-channel learning²¹,²²

▶ Added value for teaching: Expansion of the methodological repertoire for designing physical education lessons²³

▶ Training objectives: Familiarization with various possible uses of digital media for physical education²⁴ and initiation of low-threshold use of video-based feedback²⁵