Alberto A. P. Cattaneo, PhD, is professor and head of the research field “Educational Technologies in VET Programmes” at the Swiss Federal University for Vocational Education and Training (SFUVET), Switzerland. His actual main research fields concern the integration of ICT in teaching-and-learning processes. Depending on the project, this can mean – on the “teaching” side – investigating teacher education and professional competence development, in particular related to digital competence; on the “learning” side, investigating reflective learning in VET, instructional design choices, and multimedia learning. Concerning this last point, in the recent years he devoted special attention to the affordances and pedagogical potentials of hypervideos, and more in general of immersive technologies (augmented reality, virtual reality and 360° videos).

“Illustrative pictures on exploiting visual displays to enhance tech-supported vocational learning”

This contribution is based on seven brushstrokes which briefly depict research cases on technology integration in vocational education. All cases exploit the use of visual displays, ranging from traditional means such as photographs and videos to more advanced technologies such as hypervideo and virtual-reality. After an illustrative description of the practices we have supported, some cross-cutting themes will be highlighted, such as the role technology can play to support vocational education and the importance of having a strong pedagogy on which to ground technology integration. We will emphasize the latter by proposing a pedagogical model of experiential learning that we have developed over the years and by focusing our attention on the concepts of experience - given that it includes physical and virtual, authentic, and simulated, reference and mistaken experiences - and of collaboration. Collaboration will be considered: at the level of instructional design, as an instructional strategy to achieve learning outcomes (including the cognitive, metacognitive, and affective dimensions of learning); at the level of the VET system, to foster connectivity among key players and across learning sites; at the community level, where a design-based research approach can be powerful in supporting collaboration among educators, researchers, practitioners, and other stakeholders.