

## **Boundary objects in the design of educational interventions**

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The Swiss dual model for vocational training relies on a combination of authentic practice in the workplace and conceptual learning at school. Apprentices work four days per week in a company and spend the fifth day in a professional school. The switching of context from the company to the classroom entails some difficulties for apprentices. A case study conducted at the outset of the project in the field of logistics showed that conceptual knowledge acquired in school is not always applicable in the company for social (decisions are taken by the management) or technical (high automation leads to deskilling of the workforce) reasons. On the other hand, school does not always provide opportunities for reflection by contextualizing teaching with regards to the apprentices' experience. Bridging this abstraction gap with technologies constitutes the main problematic of our research.

Following a design-based research methodology, we co-designed an intervention in a real-world setting with two teachers from a professional school. This contribution highlights the role of boundary objects (Star & Griesemer, 1989) in the iterative process of analysis, design, implementation and redesign which characterizes the approach. Boundary objects are narratives, events or technological devices which play a central role in the resolution of tensions as novelty and differences in points of view arise. At each phase of the project, boundary objects helped building shared understanding between the protagonists of the project.