Supporting Teacher Reflection based on Everyday Evidence

(Target venue: BJET - Maximum length: 6000w)

Improving educational practice through reflection is one of the most widespread emphases of teacher professional development (TPD) approaches. However, given the immediacy of teaching and the strong timing constraints of everyday school practice, such teacher reflection is often done based on long-term memories, or on infrequent peer/supervisor observations or recordings. This paper describes three design-based research iterations of an effort towards technological support of teacher reflection based on everyday evidence. We collaborated with teachers from two Swiss secondary schools, using a variety of prototype technologies (from paper prototypes to web applications or wearable sensors). The iterative evaluation of such prototypes lead us from a high-tech-focused approach to a more nuanced socio-technical one, based on lightweight technologies and 'envelope routines' involving also students. After illustrating the potential of this approach to change teacher practice and students' learning experience, we also present a series of guidelines for the design of technology that supports such reflection based on everyday evidence.

Introduction (500w)

Related Work (900w)

Effective Teacher Professional Development (300w)

In-service Teacher Professional Development through Reflection (300w)

Technological Support for Teacher Reflection (300w)

Methodology (500w)

Iteration 1: Exploring Reflection on Multimodal Data with Wearable Sensors (500w)

Context (100w)

Method (150w)

Results (250w)

Iteration 2: Exploring Reflection In-Action through Paper Prototypes (500w)

Context (100w)

Method (150w)

Results (250w)

Iteration 3: Exploring Joint Teacher-Student Data Gathering (500w)

Context (100w)

Method (150w)

Results (250w)

Discussion: Design Guidelines for Teacher Reflection Support (500w)

Limitations and future work (300w)

References (1000w)