Teachers' development and reflection in the flipped classroom

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ABSTRACT

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Please indicate clearly the type of contribution you are submitting: ___ hands-on, ___explore, _x_poster.

The flipped classroom is an instruction method that has gained momentum during the last years due to technological advances allowing the online sharing of teaching material and learning activities. Bishop and Verleger defined the flipped classroom as "…an educational technique that consists of two parts: interactive group learning activities inside the classroom, and direct computer-based individual instruction outside the classroom" (Bishop & Verleger, 2013). So far, research on flipped classroom has mostly concentrated on student perceptions, engagement and achievement level, e.g. (Enfield, 2013; Fulton, 2012). Few studies have focused on teacher perceptions and development in flipped classrooms, e.g. (Hao & Lee, 2016; Wanner & Palmer, 2015). This poster presents findings on teacher development during a three-year implementation of a statistics flipped classroom in Media Technology. Our experience has shown that teachers reflected on their own teaching even before the event of teaching, because the design of a flipped classroom requires careful consideration of the course structure and content. In many cases, the teachers had to come up with new activities or redesign the whole course in order to adjust it to the flipped classroom model. We have also seen that these considerations have forced teachers to also reconsider the learning objectives of specific activities. Another aspect that promoted reflection was the production of video lectures. Finally, teachers reflected on each flipped session (out-of-class, in-class) and they adjusted the next one throughout the semester, and after the end of the semester they reflected on this experience as a whole. These reflections promoted the redesign of their flipped classroom approach for the next year. The aforementioned considerations led us to conclude that the flipped classroom approach can convert teaching experience to professional development by involving teachers in reflection loops. In order to better visualize such loops, we adjusted the Teaching Cycle of the Learning Design framework (Dalziel, 2013) to fit Cowan's reflection loops model (Cowan, 1998).

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