

Making PCK explicit - Capturing science teachers' changing Pedagogical Content Knowledge (PCK) in the science classroom

One way for teachers to develop their professional knowledge, which also focuses on specific science content and the ways students learn, is through being involved in researching their own practice. The aim of the present study was to examine how science teachers changed (or not) their professional knowledge of teaching after inquiring into their own teaching in learning studies. The data used in this paper consisted of interviews and video recorded lessons from the six teachers *before* the project (PCK pre-test) and *after* the project (PCK post-test) allowing an analysis of *if* and if then *how* the teachers changed their teaching practice. As such, this study responds to the urgent call to focus direct attention on the practice of science teaching. When looking at the individual teachers, it was possible to discern similarities in the ways they have changed their teaching in lesson 2 compared to lesson 1, changes that can be described as: changes in how the object of learning was defined and focused, changes in how the examples that were presented to the students were chosen and changes in how the lessons were structured which in turn influenced the meaning of the concepts that were dealt with.