Learning of Chemical Equilibrium through Modelling-based Teaching

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This paper presents and discusses students’ learning process of chemical equilibrium from a modelling-based approach developed from the use of the ‘Model of Modelling’ diagram. The investigation was conducted in a regular classroom (students 14–15 years old) and aimed at discussing how modelling-based teaching can contribute to students learning about the main qualitative aspects concerning chemical equilibrium. The data (collected from the written material produced by the students and the video-recording of the classes) were organised in case studies for each group of students. The discussion supports the conclusion that elements from the ‘Model of Modelling’ diagram, as well as methodological aspects related to the teacher’s action, influenced the students’ learning process.