



Water as Focus of Problem-Based Learning: an experience in Italian Secondary School

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In this work I explore if problem-based learning (PBL) can be an effective method to integrate socio-environmental issues with curricular topics in secondary school. During earth sciences lessons students of six classes in different Italian schools experienced the problem-based learning (PBL) approach to deal with scientific and socio-environmental issues related to aspects of water in natural and human systems. A PBL approach was never used before by teachers in these classes, nor was a hydrosphere module taught previously. In the first group of three classes students were given a text with a scenario based on a socio-environmental water issue, followed by a dialogue containing experts' perspectives on how to deal with this issue. In a second group of three different classes, students were given the text with only the scenario but no dialogue. Teachers' interviews and students' questionnaires show that this approach increases students interest and engagement, especially within the second group. Learning outcomes in terms of knowledge remain, in the average, almost the same as other modules developed with more traditional methods, but this approach is likely to develop more scientific abilities and awareness on environmental issues.