



A POGIL-based approach to teaching engineering Hydrology

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Process-Oriented-Guided-Inquiry Learning (POGIL) is a classroom technique that seeks to actively engage students in learning. Students work in teams on specially designed exercises that guide them through all phases of the learning cycle. POGIL has, for example, successfully been applied in chemistry courses. For the first year of bachelor degree program Water Management at Rotterdam University of Applied Sciences, we are developing a POGIL-based hydrology course. The main motivation was to teach students problem solving rather than plugging numbers in to memorized formulas. Special emphasis was therefore put on problem solving methodology and strategies. A first trial was executed in the fall semester 2010 with a group of 52 students. Students actively participated in complex problem solving. Point of attention was that the shift from lecturing to assignments required an accessible text book including basic exercises. We present the setup of the course, example exercises, first experiences and future plans.