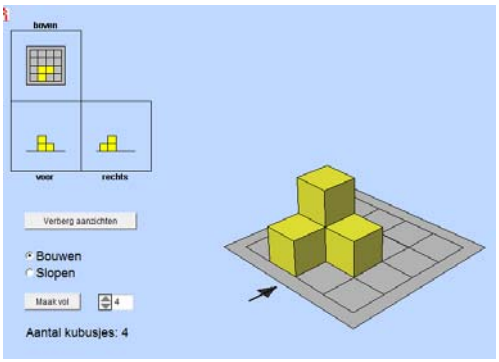
Dynamic representations on the interactive whiteboard

Jan van der Meij (main applicant), Ton de Jong, and Hans van der Meij received a Kennisnet grant for a research project called “Dynamic representations on the interactive whiteboard”. This project will run from December 1 2010 to December 31 2011.

Project Description

In primary education, classical blackboards are rapidly replaced by interactive whiteboards. The visual appeal of the mostly free and easily accessible digital learning materials and the possibility to dynamically manipulate these materials (representations of a process or an object) is seen as a big advantage. However, it is unclear whether these perceived benefits also translate to positive effects on learning outcomes. This project will examine if the use of dynamic representations on an interactive whiteboard leads to better learning as compared to the use of static representations. The research uses two types of dynamic representations: one in which a dynamic process plays a role (the water cycle) and one in which the dynamics of representation lies in the ability to rotate and manipulate the representation (aspects or view points). In both cases, using existing learning materials. Teachers in experimental conditions use dynamic representations. Teachers in the control conditions use static representations. The research is carried out in second grade (groep 4) with 7-8 year old children.

Water cycle



Aspects