

The Role of Embodiment on Children's Understanding and Motivation in Science Learning

Carol M. Lu

Teachers College, Columbia University

John B. Black

Teachers College, Columbia University

Abstract: Students' beliefs about a subject influence their comprehension and learning of that subject (Ornek et. al., 2008). Many students consider science as a difficult subject to learn. Therefore, this study explored a new way in helping elementary children understand abstract science concepts using embodiment, or physically moving their own bodies. Students engaged in activities that helped them learn about abstract science concepts by physically performing tasks related to these science concepts. The purpose of this study was to examine the importance and role of embodiment in students' understanding and motivation in elementary science learning. The results provide evidence to suggest that embodiment has remarkable potential to enhance both children's understanding and motivation in abstract scientific concepts through the use embodiment.