

Mindfulness Training During School Transition: A Way out of Science Anxiety

Michael Hast

IU International University of Applied Sciences, Germany

Abstract:

Schools adapted quickly to changes due to the COVID-19 pandemic, but at the same time the progress of learning slowed down. Reading and maths skills of German primary school students show significant deficits directly attributed to the pandemic experiences. These delays are critical, as children need to catch up on existing skills as well as continue acquiring new skills and knowledge, especially once they transition into secondary school. Following the transition, German students first become familiar with science as a distinct school subject, which builds on these skills that are seen to be in critical delay. Science anxiety hampers general participation in science lessons but also directly affects performance, success, and knowledge acquisition. Preventing a domino effect starting with insufficient preparation thus gains importance. To address the challenge of these three elements meeting – pandemic, transition and science anxiety – the current project investigated science anxiety among German fifth-graders by adapting an existing science anxiety rating scale for use with German students. In addition, training sessions using mindfulness have shown to alleviate test anxiety and positively impact knowledge acquisition, reducing stress by improving attention and emotion regulation. The project therefore also examined whether the implementation of a mindfulness program can successfully reduce science anxiety. The results, comparing test and control groups, showed that science anxiety can be reduced within six weeks, highlighting the significant role mindfulness can play in supporting students during turbulent times of education.