An Action Research of Implementing Multiple Teaching Strategies to Stimulate Motivations for Science Learning--Focusing on Grade 4-6 Elementary School Students

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Abstract

This action research aimed to implement various teaching strategies, use a qualitative method to understand the effect of each strategy in stimulating the motivations for science learning, and find out which strategy is most favorable to students from their perspectives. The effects of Internet resources and tools, such as blogs, on teaching were also investigated. Besides, in the implementation of these teaching strategies or events, the difficulties encountered and methods for improvement were understood. During this research, a radar graph of stimulation performance of the implemented strategies was completed. It was discovered that outdoor teaching, personal stories shared by teachers themselves, life experiment, and library time were stronger teaching strategies with better performances. As to the application of Internet resources and tools, performance would depend on the opportunity for utilization. Under the current teaching methods, the application of blogs did not present a better stimulation performance. The improvement of the outdoor teaching system, change of the PBL execution method, resolution of equipment and time required for technology integration, and alleviation of after-school learning burden on students would be the directions for future improvement.

Keywords: Learning motivation, Teaching strategy, Technology integration