

Investigating the Impacts of Education for Sustainable Development on Students' Awareness and Behavior: A Case Study in Moriyama High School, Shiga, Japan

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1. Research Background and Objectives

Education for Sustainability (ESD) aims to help people to develop the knowledge, attitudes, skills and behaviors that promote sustainability. ESD has been carried out in different countries and regions worldwide, as well as in different levels of education from primary education to higher education. In order to assess the effectiveness of an ESD program, the author investigated a case study of a "Super Global High School" program (SGH) at Shiga Prefectural Moriyama High School in Japan. There are two objectives of this study: to examine the impacts of the SGH program on students' awareness and behaviors towards sustainability, and to identify underlying reasons for and barriers to students' pro-sustainable behaviors.

2. Research Methodology

Pre- and post-program surveys were conducted for all first-year students (274) at Moriyama senior high school, who are involved in the SGH program. The surveys mainly assessed students' attitudes towards sustainability, awareness of sustainability, assumption of sense of responsibility, intention to act pro-sustainably and actions in daily life. Subsequently, two focus group discussions among 16 students were conducted to deeply understand students' motivation and obstacles for pro-sustainable behaviors. Finally, several environmental psychology theories were applied as a methodology to investigate factors affecting the results.

3. Results and Implications

The results showed that students' attitudes and awareness towards sustainability, and intentions to act pro-sustainably were improved. However, there was no clear change in pro-sustainable actions of students. It suggests the existence of an attitude-behavior gap in this group of high school students. It was found that the gap can be attributed to the lack of students' self-confidence, knowledge of action strategies and skills of using it, and other motivational factors towards specific behaviors. The study recommends that ESD programs should balance strategies on all three levels of awareness, ownership and empowerment. This study also develops a model of pro-sustainable behaviors and that can be operationalized through ESD implementation for better achievement of behavior change.