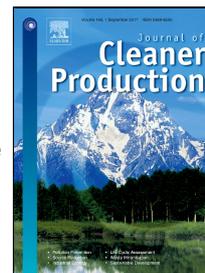


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Inquiry into Sustainability Issues by Preservice Teachers: A Pedagogy to Enhance Sustainability Consciousness



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Abstract

Education for sustainable development (ESD) is transformative education aiming at developing participants' understanding of sustainability issues and transforming their attitudes and behaviours regarding environment, society and economy. Sustainability consciousness, an expected outcome of ESD, is a complex of cognitive and affective learning. Development of sustainability consciousness requires transformative learning experiences. [The study presented in this paper](#) employed action research to enhance sustainability consciousness of the preservice teachers through inquiry based learning. The study was done in the Institute of Education, Lahore College for Women University, Pakistan. The study integrated sustainability education in an existing course entitled 'Research Methods in Education'. The course is included in the final year of B.Ed. (Honours) programme. Outcome of the ESD-integration was measured in terms of change in the sustainability consciousness of the preservice teachers. The Action Research project engaged 27 preservice teachers in inquiry-based learning (empirical investigations and research based discussions) for a period of 11 weeks. The participants investigated sustainability issues collaboratively. To investigate the change in participants' sustainability consciousness through inquiry based learning, researchers collected through pre- and post-tests, interviews and observation. Quantitative data were analyzed through paired t-test while qualitative data through thematic coding. The data indicate that empirical investigations into sustainability issues by the preservice teachers and research-based discussions enhanced preservice teachers' sustainability consciousness. This highlights the transformative potential of inquiry based learning. Moreover, it indicates that sustainability education can be successfully integrated in the course of 'research methods in education'. The findings suggest that teacher education programmes and other university programmes may employ inquiry based learning as a vehicle to enhance sustainability consciousness of the undergraduate students.

Keywords – Education for sustainable development, Sustainability consciousness, ESD pedagogy, Inquiry based learning, Undergraduate Research, Higher education

1. Introduction

Education for sustainable development (ESD) or sustainability education is a vision of education aiming at developing “competencies that enable individuals to participate in socio-political processes and hence to move their society towards sustainable development” (Barth et al., 2016). This vision emerged from the observation that education was perpetrating and perpetuating unsustainability (Orr, 1991). To counter this problem i.e. “problem of education” (Orr, 1994), ESD has been advocated by the ESD researchers. ESD addresses the problems of sustainability like poverty, population, environmental degradation, social injustice etc. Brundiers and Wiek (2013) argue that sustainability problems are “wicked” problems. They are complex, life-threatening and urgent. To address these problems, ESD needs to empower students to be able to understand the problems holistically and take actions at individual and collective levels. In other words, ESD should focus on improving students' knowledge of sustainability issues and transforming their attitudes and behaviours as “sustainability

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