

Circular Economy in children's education – Case Study: Borna Environmental Education Institute

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The circular economy is one of the most effective models to deal with global environmental problems. Adding environmental awareness to the educational system has been done in many countries in recent decades; however, there is a wide gap between the input and its impacts on the students. Since learning is a gradual and long-term process and starts from an early age, educational systems need to adapt themselves to a more environmental-friendly approach. The current research investigates the impacts of a learning approach based on circular economy and sustainability on children in a daycare centre in the city of Karaj, Iran. The purpose of this narrow-scope case study is to use the findings as the basis for future studies.

Borna Environmental Education Institute is a daycare centre run by Borna Naturalists organisation, and an environmentalist NGO focused on environmental education. They use humanistic learning theory which expects educators to act as facilitators and observers rather than teachers in order to encourage creativity instead of goal-based approaches. The circular economy is one of the pillars of this institute and they achieved and are willing to expand their curriculum to more environmental high satisfaction from parents' learning.

Semi-structured interviews were conducted in the daycare centre to investigate the staff members' professional views on implementing a circular economy in their work. Furthermore, a questionnaire was distributed amongst parents in order to gain more knowledge about the impacts of the ongoing learning methods on their children. By using on different groups, the researchers were able to elicit two inquiry approaches more information about the advantages and disadvantages of a circular economy based education. This indeed improved the data analysis in order to pave the way for future studies.

The study found that most facilitators and staff members had profound knowledge about the circular economy and could evaluate the learning approach and its impacts on pupils. They also raised the importance of implementing CE at all educational levels. Since the circular economy is not in the government educational curriculum, the facilitators were also concerned about the costs of private institutes which led to excluding workingclass children from learning about it. Parents' satisfaction was another result of this study showing how this learning method can influence children in long term. In the end, all individuals emphasised the necessity of incorporating circular economy and sustainability into the educational system from the beginning.

This was a pilot case study in an educational institute pioneered in teaching children about environmental issues from an early age. The daycare centre is run by an environmental NGO that also organises workshops about the circular economy, environment, nature and sustainability for both educators and students. Further research is needed to study all aspects of educating children about the subjects and the age specific curriculum.