

Attitudes to Thinking and Learning in Sustainability Education: Case Basics of Natural Stone Industry in Circular Economy

Authors : Anne-Marie Tuomala

Abstract : Education for sustainable development (ESD) aims to provide students with the attitudes, values, and behaviors necessary for the contribution to sustainability. The research was implemented as a part of the Horizons Europe research project, where each partner organization had at least one pilot project locally. The pilot in question was an online course about the basics of the natural stone industry in Finland and its sustainability and circular economy aspects. The course was open to all students of applied universities in Finland, and it was implemented twice during the research. The Stone from Finland association participated in the course design, and it was also an expert in the local context and real-life provider. The multiple case-study method was chosen, as it enables purposeful sampling of cases that are tailored to the specific study. It was also assumed that it predicts quite comparable results of two different course implementations of the course with the same topic and content. The Curtin University of Technology's Attitudes Towards Thinking and Learning Survey was adapted. The results show the importance of the trans-disciplinary nature of sustainability education. In addition, the new industry areas with the general - but also industry-specific sustainability issues - must be introduced to students and encourage them to do critically reflective learning. Surveys that guide them to analyze their own attitudes to thinking and learning may expose students to their weaknesses but also result in forms of more active sustainability interaction.

Keywords : education for sustainable development, learning attitudes, learning of circular economy, virtual learning

Conference Title : ICTES 2024 : International Conference on Teaching and Education Sciences

Conference Location : Zurich, Switzerland

Conference Dates : September 16-17, 2024