

Business Education for Sustainability through an Experiential Quantitative Multi-Criterial Decision Making

ABSTRACT

Education for sustainability includes learning about distinct disciplines, cultures, interests, values, and risks. There is a gap in learning appropriate techniques and processes for multidisciplinary curricula, like sustainability. This research discusses the effectiveness of a Learning Tool for Sustainable Decision Making (LTSDM) based on theoretical foundations of team Experiential Learning Theory (ELT) and Multi-Criteria Decision Aid (MCDA). The approach applies quantitative multi-criteria techniques with the qualitative experiential learning process in a business context faced with a complex decision with significant sustainable development consequences. The stages of LTSDM are structured according to Kolb's (1985) experiential learning cycle. The multi-criteria modeling elements were introduced in the stage 'abstract conceptualization' for organising data, calculating indices and providing a heuristic pathway towards the decision. An illustrative trial was carried out with undergraduate students in Accounting of a Brazilian State University, which required students to role-play different stakeholders associated with the decision. The results demonstrated that LTSDM can broaden the competences of the students, to enabling them to deal with more comprehensive information and the consideration of the relationship of social, environmental, economic and financial criteria. The debriefing of the simulated trial highlighted the importance of the trade-offs between alternatives, challenged the students as to the diversity of knowledge required and the need to understand the interests and motivations of other stakeholders. In addition, the LTSDM underlined the necessary personal and teams skills associated with complex decision-making processes. We argue that LTSDM can offer a practical and complementary contribution to business teaching for sustainable development in different learning environments.

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