CEEA Abstract

Studying the Effectiveness of Teaching Sustainability in Project-Based Multi-disciplinary Graduate Level Engineering Course

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ABSTRACT

Defining the relevant sustainability learning outcomes and how we could measure our success in teaching sustainability is a complex challenge. This paper introduces the design and findings of a pilot study on the effectiveness of a new Engineering graduate course, Total Sustainability Management, in teaching and learning sustainability, both at the cognitive and the management level. The design of the pre- and post-course questionnaires was driven by the course key objectives and adopted framework of sustainability competencies. The findings and questions raised from this pilot study inform the proposed design of further study and, more importantly, the development of a framework for teaching and learning – and thus measuring – sustainability in graduate, interdisciplinary Engineering education.