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Students’ views of assessment in project-led engineering education: findings from a case study in Portugal

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According to the demands of the Bologna process, new educational methods and strategies are needed in order to enhance student-centred learning. Project work is one of those approaches. This paper aims to evaluate the impact of project-led education (PLE) on students’ learning processes and outcomes, within the context of a first-year engineering programme. It explores students’ perceptions about assessment procedures and processes. Data collection was based on individual surveys at the end and the beginning of each PLE edition and through focus groups, after a period of six months. Findings are presented according to emerging themes from the data analysis, focusing mainly on students’ perspectives of learning and assessment, the role of formative and summative assessments in PLE and their impact on learning. Implications for improving assessment practices are discussed.

\textbf{Keywords:} higher education; assessment; project-based learning; students’ perceptions

\section*{Introduction}

European higher education institutions have introduced a number of changes in curricula as a consequence of the Bologna process. New methodologies of teaching and assessing have been adopted in order to improve student achievement which has to focus not only on the development of technical competencies, but also on the development of transversal competencies.

Life-long learning, critical thinking and problem-solving are some of the competencies identified by Nightingale et al. (1995) which students should develop across programmes of study in higher education, in order to meet expected competencies of professional entities. This requires that teaching, learning and assessment are conceived in such a way that they provide students with several opportunities to support the development of these competencies. As Hargreaves (1997) points out, assessment is the most significant motivator for learning. Therefore, assessment procedures should promote and reward the achievement of the learning outcomes which they seek to develop.

A range of ‘alternative’ assessment methods have been identified in higher education settings. Many designations, such as performance assessment, authentic assessment or...