

Preference: poster or oral

Effects of industry-integrated learning on employability skill outcomes - views of Food Engineering students

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For many engineering undergraduate degree programmes, the opportunity to experience practical work (laboratory and manufacturing) in industry that supplement taught and practical subjects is valuable. Recently the close cooperation between higher education and industry is gaining importance as strengthening the links between both parties are considered essential to boost the economy and to enhance the quality of the workforce (Lock et al, 2009). Work integrated learning in higher education includes a joint effort by industry and higher education to enhance student learning through facilitating the application of theory into practice and is becoming increasingly significant to improve graduate employability by enhancing skill outcomes, such as team-work, communication, self-management, self-learning, analytical thinking, problem solving, and student employment prospects (Bates, 2011; Jackson, 2013)

In this study, it has been aimed to describe the benefits of implementing an alternative Cereal Processing Technology laboratory practical model for a group of third-year BSc Food Engineering students. This research assesses the student learning outcomes and gained experiences. Data were obtained from food engineering third-year undergraduate students who spent 3 work days (approximately 24 work hours) in a bread manufacturing factory's laboratory. Experiences and perceptions are gathered from 28 students by semi-structured interviews and attitude questionnaires have been conducted. The questionnaires were performed to describe the level of improvement in personal transferable skills (such as team-working, time-management, communication, learning and student understanding of the world-of-work), the value added in terms of improved technical skills students felt was gained and their perception of the practical laboratory work experience in terms of aspirations of future employment. Finally, this study identifies whether the undergraduates prefer practical laboratory work at an industrial environment as part of courses given at undergraduate level.

Keywords: cereal processing, laboratory, industry engagement, self-directed learning, industry based learning

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