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## **Abstract**

In 2018 Teagasc published the *Teagasc Education Vision – meeting future needs*. This report incorporated the views of key educationalists and stakeholders both nationally and internationally, and made recommendations regarding future agricultural education needs of the land sector. Included as one of the goals and recommendations of this report is "to adopt innovative teaching and learning methodologies, delivery approaches and learner supports that will enhance the capabilities of Teagasc learners in a holistic way". Problem Based Learning (PBL) has been identified as an innovative teaching and learning methodology.

The overall aim of this study is to identify the benefits and challenges of Problem Based Learning as a teaching approach while also identifying teacher knowledge and attitudes towards this. Secondly, this study aims to identify models of Problem Based Learning most suitable for Teagasc education and where in Teagasc it would work best while finally advising Teagasc on the relevant teacher support resources for those potentially delivering education using a Problem Based Learning approach. Both qualitative and quantitative research methods were used to fullfill these objectives ranging from an initial questionnaire amongst Teagasc tutors to an in depth focus group with teachers and finally a number of expert interviews with Problem Based Learning practitioners and researchers.

The main findings of this study support the recommendation of the Teagasc Education Vision to develop Problem Based Learning teaching approaches. Problem Based Learning was found to bring intrinsic relevance to material been taught while also linking parts of the curriculum together so students can experience a holistic approach to education. A hybrid model approach to Problem Based Learning was identified as the model best suited to Teagasc where Problem Based Learning approaches would be used alongside traditional teaching methods. The recommendations for teacher support resources include a training workshop where teachers experience a Problem Based Learning scenario themselves in order to fully comprehend this type of educational approach. This study also recommends that Teagasc appoints a Problem Based Learning coordinator to advise and support teachers using a Problem Based Learning approach.