

OUTSTANDING TEACHING, LEARNING AND ASSESSMENT TECHNICAL SKILLS NATIONAL PROGRAMME

Interim case study on project led by Reaseheath College
ANNETTE MCDONALD

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The project

Reaseheath College is a leading land-based specialist provider of further and higher education, located in South Cheshire, with a significant apprenticeship provision. Our project seeks to improve the quality of teaching, learning and assessment in the agriculture department, by working with employers and sector specialists nationally and internationally to review our content, delivery and assessment strategy. Our aim is to equip learners with the skills, knowledge and competencies that meet employers' needs today, as well as the inevitable new market challenges and opportunities that will face the sector post Brexit.

What are we doing and how will it develop outstanding teaching, learning and assessment?

Reaseheath College has been working for six years with the agricultural sector developing skills and new models to support an efficient and economically sustainable dairy sector through the implementation of 'Lean management' on farm. First developed in 1988 for the Japanese motor industry, Lean management is an approach to running an organisation that supports the concept of continuous improvement. We have taken this way of thinking, working and relating to problems, and applied it to the agricultural curriculum.

At Reaseheath, we are industry leaders in this field, having developed a pioneering Level 5 qualification in Lean Management with the Institute of Leadership and Management in order to train farm advisors, consultants and farmers. This project builds on this expertise and also incorporates learnings from UK Dairy Lean employers, combined with best practice from Europe, America and Australasia.

Our project will provide a unique dynamic learning experience that engages and stimulates students whilst developing their data management skills. Integral to the project will be to take the 'Lean approach' and implement on our college farm. This will enable us to create an educational resource that is industry relevant and represents excellent performance and practice within a commercial framework. We are now able to integrate new technology and live farm performance data within the curriculum. For example new weekly video blogs (Vlogs) using live farm data linked to management actions will form part of the teaching resources. Students will learn kinaesthetically by engaging in data collection, and will develop their analytical skills through monitoring performance against key performance indicators on the farm and critically appraising results.



The project draws on the experience of an extensive employer and stakeholder group in its design and delivery. These include both UK and international companies along the supply chain including farmers, Streamline Farm Management Dairy Lean Consultants, Harvey Hughes Dairy Consultants, ISOils Agronomist Consultants, and milk processors including Nemi Milk, Belton Cheese, Muller Wiseman and Arla, sector stakeholders including the Environment Agency, NFU and AHDB. International partners include Logistik & ledelse Lean Farming, the Lean Lantbruk project, Pro Agraria, Arkitektkopia AB, Vaxa Horticulture, Leanakademiert in Denmark and the Finnish Institute for enterprise management.

Working closely with employers, we have apprentices and students on extended work experience or sandwich year placements. As part of the reviewed curriculum students will now be required to work with the employer to identify an area for improvement apply their learning and

work with the employer prior to the placement to identify and project plan a process improvement on farm that will improve farm efficiency. They will then implement the changes during the placement, monitoring and measuring the impact. Through this they will gain experience of practical “end-goal thinking” of the entire supply chain, as well as evidencing the benefit of the placement to the employer.

As more employers engage, there is an aspiration to develop new progression pathways onto higher level apprenticeships, with the options of flexible delivery models that can engage international collaboration. Links with Scandinavian and European farmers has provided opportunities for international work placements. Engaging internationally has enabled this project to further improve student employability, equipping learners to compete within a global market place with high price volatility. In a rapidly restructuring sector, the next generation will be more able to deliver a high level of technical competency on farm as well as business management skills to engage effectively with new technologies and deliver positive economic and environmental outputs.

The project is employing innovative techniques to evaluate the quality of teaching and learning from the perspective of students.

An increased number of student feedback sessions and reflective learning have been integrated into curriculum delivery, both practical and theoretical, to ensure new standard setting that reflects outstanding teaching and learning from a student perspective. Within the observation process, students will be engaged in paired lesson observations, with knowledge benchmarked through e-quizzes. Additional multi-level evaluation of learning are being generated from instant ‘temperature checks’ or ‘walk the line’ evaluations with students.

It is expected that the principles of ‘lean’ will result in a greater increase in ‘outstanding’ teaching, learning and assessment. Work is being undertaken with the curriculum and farm teams, in addition to key employers, in order to get them thinking about what ‘outstanding’ would look like.

Education and Training Foundation’s Professional Standards will play a key role in helping practitioners to think from a different perspective.

A particular focus for practitioners will be to:

- Reflect, evaluate and challenge their practice,
- Collaborate within and between departments,
- Be creative and innovative in delivery to raise students’ aspirations,
- Effectively use Growth Mindset to stretch students,
- Promote responsibility for learners own learning and assessment, and effective development of students English and maths skills.

To support this process, the Professional Standards have been embedded into the project CPD and curriculum development sessions. The department will also establish a structured 'peer review/observation' process, taking on some excellent practice in this area from our Foundation team. It is envisaged that employers would also be involved in supporting this process alongside curriculum staff.

Dissemination and sustainability have been planned into the project from the outset. Farm and curriculum staff have been challenged to embed a lean culture into their departments as well as curriculum and are undergoing a new bespoke CPD programme of continuous improvement and its applicability to the agricultural sector. New curriculum is being shared with a range of interested specialist academic leads and peers, to assess both the teaching and learning methods and content.

Project resources and learnings will be disseminated through a series of workshops, case studies and discussion forums. Through this project we have engaged with a new European Dairy Lean Network to enable further dissemination and sharing of best practice between employers, academics and students.