

OUTSTANDING TEACHING, LEARNING AND ASSESSMENT TECHNICAL SKILLS NATIONAL PROGRAMME

**Middle Year LEAN student placement
Annette McDonald**

Managed by



In partnership with

emfec



AGRICULTURE MIDDLE YEAR LEAN PLACEMENT

**ADDING VALUE TO
STUDENTS AND
EMPLOYERS**



Background and context

From employer stakeholder meetings, it was agreed to change the structure and outcomes of the student placement year, by embedding 'LEAN' into the placement project. We did this by rewriting the placement unit, based on the ILM Level 3 Service Improvement framework.

Placement journey pre OTLA project



Critical assessment of the value of placements by the employer group as part of the LEAN improvement process.

Activity	Adding value to student	Adding value to employer
Practical skills	Y	N/A
Employability skills	Y	N/A
Work ethic	Y	N/A
Placement project	Y	N
Potential employee/employer	Y	Y

Key drivers for employers to take a placement student;

- to increase workforce capacity
- identify potential future employees
- building skills into the sector

Employer challenges;

- little interaction with students prior to the placement starting
- lack of effective matching of student competencies and attributes with business need and skills to manage placements effectively
- no clear added value to the employer or the business



Proposed changes by employer group, based on new proposed LEAN curriculum.

- Improved matching of student and employer/business needs and ability to effectively deliver an impactful placement.

Employers interview students and placements are in place by December of year 1

- Employer clearly identifies an opportunity for the placement student to add measurable value to his business

Employer to present the placement 'employee' with a improvement project proposal
Project is implemented, monitored, impact assessed, and report presented to the employer within the placement year - adding value to employer as well as student

- Increased mentoring and relationship building prior to the start of the placement

Student develops a proposed 'Lean improvement project' including proposed methodology, implementation plan, measurable, as part of his coursework. This is developed and assessed within the framework of the new ILM service level improvement module throughout year 1.

Employer shapes and mentors project development with sign off prior to placement start

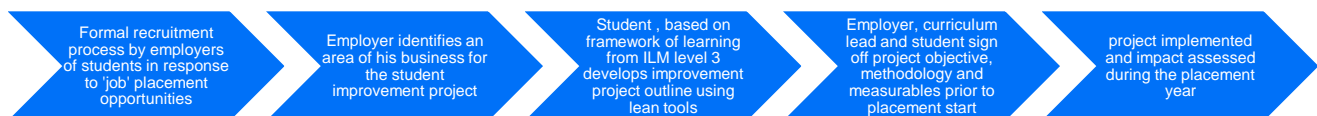
- Employer introduced to Lean principles, tools and language to enable them to reinforce learning in the work place

Employer CPD developed and available as required

- Recognition and reward.

Employers are keen to develop a scholarship/award for the best Lean project, with projects being presented to industry as part of an annual seminar/event

Placement project post OTLA project





Excerpt from Employer handbook for new LEAN placements

Section 3 – Lean Management

Glossary

Key Term	Definition
Lean Management	A series of management tools that allow a manager to map business processes and use performance data such as KPIs and benchmarking to help check if the processes are adding value or are a source of waste. The aim of lean management is to create a culture of continuous improvement
PDCA (Plan, Do Check and Act)	This is the management method by which students are asked to approach a service improvement (A change to the way the business works in one small area to help improve effectiveness or efficiency).
Protocol	A step by step, standardised series of instructions for completing tasks i.e. How to disbud a calf or, lamb a ewe. The protocol will always have some measure of success or KPI that shows if the task has been completed to the highest standard.
SIPOC	A visual representation of the supply chain. Suppliers, Inputs, Processes, Outputs and Customers of the business. This allows a manager to see how a change in one process can impact other areas of the supply chain.
Process Map	A flow diagram showing all of the major processes from the start of production through to the finished product. This can be used to find the root cause of issues within the production process i.e. those areas of the farm business that cause issues or do not maximise their value.
KPI (Key Performance Indicator)	This is either an industry standard (benchmark) e.g. Mortality rate or a target set on best practice e.g. volume and time of colostrum administration. The KPI is used to see how the business performs compared to 'best practice'. The aim should be to change the protocols and working practices until they allow the operator to meet or even exceed that KPI.
Kaizen	Are reviews of the KPIs held regularly, weekly for short reviews, monthly for longer reviews which allow the manager to direct the workers towards tasks that should improve performance i.e. We haven't produced enough butterfat in the milk so I need you to increase the concentrate in next week's ration.



The student's project whilst on their middle year

Students are required to:

- Discuss with you the employer, one area of the business to improve e.g. the DLWG of calves, or the feed intake of ewes at lambing time, reduction in the % mortality of young stock
- Produce a SIPOC of the business to make sure that any changes can be made with the support of suppliers and customers of the business
- Process map the business to identify the protocols that result in a finished product and define an area that may need improvement, supported by the employer
- Identify what the current protocol is, and why it may be leading to inefficiencies
- Provide a target KPI with support from the employer either based on industry data (benchmarks) or industry best practice
- Produce a new protocol based on the best practice which should allow the KPI to be met
- Collect data on at least a weekly basis to check if their change to the protocol has in fact made any difference to the performance in that area of the business
- Produce an analysis of their data and a conclusion that can be given to you the employer to review

Delivering outstanding teaching learning and assessment.

The new employer placement project will:

- Enhance learning and teaching by enabling students to learn from their own research
- Introduce a strong learner-led element to teaching and reducing the reliance on didactic teaching approaches
- Provide a structure for students to compare and reflect on real on-farm practice
- Develop students' research and analysis skills
- Encouraging peer review and assessment
- Increase employability
- enhance the value of a high quality placement year for both students and employer
- provide a platform for knowledge exchange and continuous improvement between students, staff and employer



Employers point of view.....

- 'We are really looking forward to working with our placement students on our improvement project. Both sides are going to learn a lot from this process'
- 'We are already using some elements of LEAN, but know we need to embed across our business, having a LEAN student is giving us the impetus to do this'
- 'Despite being a very successful business, we have skills gaps, particularly around interpretation and use of data. This is the first year we will take a placement student as we can see how it could add value to our business'

