



## Case Study

### BACKGROUND

Overview of the research and why it has been carried out.

### FINDINGS

Details of research visits to University Farms and how educational establishments set out to achieve an outside learning environment by using farms as a basis for knowledge transfer.

### BEST PRACTICE

The main areas of best practice found on University Farms and how institutions can learn from a sound underpinning of educational practice. Developing future ideas for the balance of educational and commercial activity.

### CONCLUSION

What this research project concludes and how this primary research can lead to best practice in the future of farm usage as an educational Asset.



Author: Nicholai Thomasin-Foster

Royal Agricultural University

## FARMERS CLUB SCHOLARSHIP 2012-2013

### Higher Education Institutions (HEI's) Farms as a Teaching and Learning Resource

#### Background

In 2010 the Royal Agricultural University invested in agriculture, with the purchase of a local farm at Harnhill. This has been a test of the balance of commercial agriculture and educational activity. We tend to play it safe with the commercial viability and use the farms for visits and some trails research activity. My interest lies in re-evaluation of those two factors and brings them together in better relationship for the institutions.

Having been involved in the organisation and running of the University/College Farms Conference held at the Royal Agricultural University 29<sup>th</sup> -30<sup>th</sup> March 2010. The balance between commercial practice and education practice has an effect on the justification and viability of educational farms. We wish to continue the conference run at the University and the support of the delegates that attended showed that we do not have any study around this field of educational practice.

Does educational practice have a value that educational farms can utilise as a commercial strand in commercial justification? This has interested me greatly as we tend to have four or five enterprises within educational farmers and the commercial viability of these enterprises are poor, so institutions tend to change the enterprises and scale of them in order to satisfy commercial demand. But the educational factor does have a commercial cost that can be utilised into the commercial accounts.

#### Objectives:

- To investigate the enterprise diversity within HEI's farms and how they play a role in commercial and educational practice.
- To study the historical rational for enterprise diversity.
- What the farms are used for in terms of educational practice.
- Recommend a strategy for the balance of HEI's farms in terms of commercial and educational needs.

## Findings

The findings of this study have been gathered from a number of visits to institutions and discussions with institution representative of the educational farms. The visits were structured with a questionnaire that recorded a set range of information and then followed more in-depth discussions of educational farm operational behavior. Details of visits have been incorporated together a little to give an overview in the context of this case study. Specific details are in the main published report, available from the author.



The Higher education institutions proved a sound basis of educational farms both in the FE and HE sector. It was important to look at some FE College's as well due to 40% of HE degrees awarded are now taught at FE College's. What was found is that due to the various courses in FE the farms are set up for more of a practical experience for students, so the farms are more of an educational platform. In HE university farms the structure is focused around a commercial enterprise that has commercial research happening on the farm and visits by students tends to be observational more than practical.

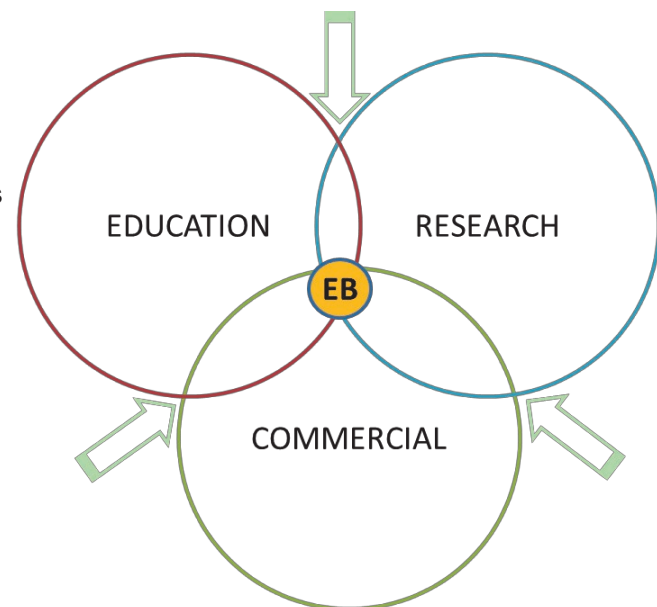
One of the aspects which was discussed in detail was the cost of educational access to the farms. Some Universities did not pay the farms for access and it was to be absorbed into the daily running of the enterprise. Some institutions did pay an educational payment and this was based on a random figure that may have been agreed some years ago and is transferred each year. There has not been any quantifiable research into this educational access payment across all institutions. What was also discussed in relation to this was the extra time the educational side played on the farm enterprises. This variant is between 15% and 30% extra, on top of the day to day running of the enterprises. Some enterprise had more visits than others and a burden for most farm managers is the number of observation visits they take round the farms. From School children, students, staff and professional visitors. It was expressed that the institutions welcomed visits of this nature and it gives the ability to show what the farms do and how research is transferred to a wider audience.

What we would like is an understanding of the role of educational farms and how they are managed. It seems that due to the nature of the farm being outside of the normal "campus" it is felt that the farm is just another business enterprise and should perform so. Some educational farms are under constant threat of being sold or contracted out and little investment is being made in them. The investment is in the central campus facilities and not in the farms. But we do see today university farms that are being invested in and being pulled back into an educational structure. If in the future we are going to see a educated next generation in Agriculture and associated industries we need to get students onto the farms to see the applied education and research in practice. This study has shown how University and College do add that additional dimension to the education courses and professional programmes but are not always recognised for this. The institutional farms need to have a forum to discuss these findings in more depth. This does happen more in the FE sector with LANDEX and the role they play in land based colleges. See their website for events (<http://www.landex.org.uk>).

## The Educational Balance (EB)

This concept of educational balance, which has evolved from this study shows how the three main core strands of University Farms overlap each other and the pressures faced by the farms management. For financial stability the requirement is for commercial viability and different institutions apply this in a variant of ways. Some institutions are a commercial unit and have student visits around the farm. Others run the farm with commercial underpinning but the educational and research is the primary usage. This means that they try and control the potential loss of profit as much as they can as the educational benefits are the primary goal.

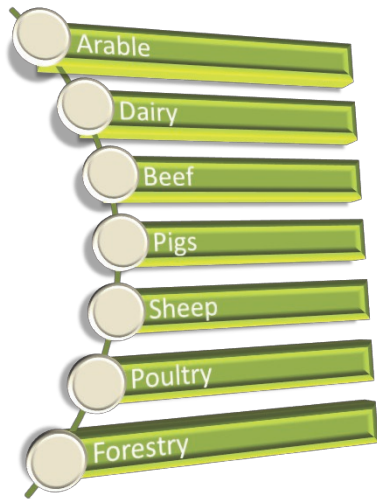
What some institutions do well is the farm is commercially viable and run in a commercial manor but the institution has tried to calculate a educational cost, which is then transferred to the farms for this factor. So we can draw ideas from different methods of farm structure and balance them for what each institution requires.



The Educational Balance



## Best Practice



**The enterprise Tree**

This section is to set out the best practice recommendations from this study in order to try and achieve an balance between commercial and educational activity.

Section missing as need to draw together at completion of main report.



## The Concept of Active learning on University Farms

Active learning is a process of independent thinking and drawing your own conclusions from a learning environment, in simple terms it is learning by doing. The reason for the addition of this in this context is very much part of the educational design of University farms is that of Active Learning. Students can draw upon the theory taught in a lecture room and start to apply this theory in an active learning environment.

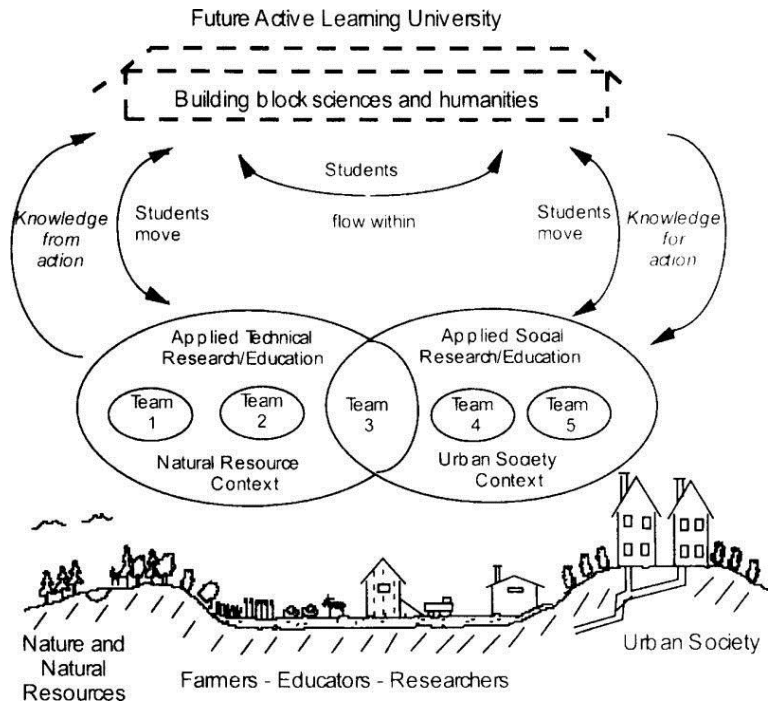
It is really about getting the two parts of the brain working, the logical aspects feed the left and the learning activities are dealt with in the right in context of understanding and interpretation of facts.

Further integration of learning with research and moving activities into other contexts are shown for an active learning university in Figure 3. The campus environment is represented by an open building for learning the building block sciences and humanities in an even more integrated format than in the previous example.

Numerous options for organization are possible within this building, and different universities may choose to use different models according to their goals and students. Walls, ceilings, roof, and floor are all porous boundaries, indicating a continuing interchange of information and experience with outside sources and clients. Applied research and learning has been moved to the field.

Strong linkages of university instructors and students with people and questions outside the conventional campus can be achieved by moving off campus, or by redefining what is 'campus.'

G. Lieblein , C. Francis & J. King (1999)



Schematic description of future university for active learning and research, with student and faculty learning activities often in the farming environment, and close relationships with both natural resource and urban society contexts.



The nature of University Farms was to create an environment for learning and problem solving. We have seen that some Universities use farms for practical demonstrations, student projects, visits and research. What we strive to achieve is an farm environment that is commercially viable but allows use to demonstrate in an education context the learning aspects for specific student qualifications.

What we have done in the past is different to what we do today. Farms where the heart of the institution and had a daily influx of students working and being taught. Due to demands and pressures on time of staff and the rise of Information Communication Technology the farms information and classes could be delivered in a lecture room.

We have to understand how people learn now, which is different to the past. A good theory session can impart large amounts of information to an audience, but does that audience understand it. This is why farms and the role of active learning is important. We need to get the classroom back into the field. There is a problem with this in respect of space utilisation and the pressures academic staff are under to make sure they teach in campus lecture rooms, but the farm is also part of that said campus. We are in a world of applied teaching and research and the farms can draw this together in an outside classroom. When speaking to academic staff who teach in lecture rooms and on the farm, nearly all comment that the session in the farmyard or field are much better attended and students understand what they are being taught as they can see it within the environment they are in and are able to logically process the concepts of theory and understand and interpret the facts in front of them.



## Conclusion

This study has been so diverse in the farms studied and it shows the rational and educational influence is different in many institutions today. The aim was to try and pull together some of the best practice shown at different institutions and how we can learn from each others ideas and management objectives. No work has really been done on the role of educational farms and this study has shown that to quantify the educational aspect, or to even try and put a price on the educational factor of the farms, has been difficult, if not really brushed under the carpet.

Every institution is different with the variant of enterprises, specific to area located in the country and matched to courses on offer, but the fundamental enterprises give a sound commercial aspect to the farm. What we have found is an educational factor of between 15% and 30% has to be factored into the running of a University Farm. This is the additional time spent on management and day to day operation of the unit.

Using the best practice and active learning roles described and the University Farms should become a vital pedagogical aspect of the learning experience.

And Finally.....Some quotes used by various people along the path of this study.

**“The Farm is the Tap-Root of the Institution”**

**“The Farm gives the Institution Credibility”**

**“Put the Theory into Practice and get out onto the Farm”**

**“If you don't get it in the Lecture Room, Get it on the Farm”**

**“Yes the Farm is Part of the Campus!”**

**“There is Nothing Like Leaning on the Farm Gate”**

## References

Bawden, R.J., R.D. Macadam, R.J. Packham, and I. Valentine. 1984. Systems thinking and practices in the education of agriculturists. *Agric. Systems* 13:205-225.

G. Lieblein , C. Francis & J. King (1999) Conceptual framework for structuring future agricultural colleges and universities in industrial countries, *The Journal of Agricultural Education and Extension*, 6:4, 213-222, DOI: [10.1080/13892240085300041](https://doi.org/10.1080/13892240085300041)

With thanks to the Farmers Club for the support and funding of this research and to all the Universities and Colleges that have helped in this project.



Royal Agricultural University  
Cirencester  
Gloucestershire GL7 6JS

UKTel: +44 (0) 1285 652531

[www.rau.ac.uk](http://www.rau.ac.uk)

