Nuffield Farming Scholarships Trust

NatWest award 2005

Agricultural Engagement with Education

Ian Beecher Jones NSch

A NatWest award



another way



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Contents

A NatWest award	1
Scholar Contact details.	2
Contents	3
Executive summary	4
Objectives	4
Recommendations.	
Background	
Outline of travel	
Why engage agriculture with education?	
What is the perception of UK agriculture?	
Starting young.	
Agrikids	
DairyKids	
School milk campaign	
Year of Food and Farming	13
School farms	
Recruiting to the sector	
Enterprise education	18
'Outstanding in the Field' recruitment campaign	
The NZ dairy sector's approach	19
Windows to Dairying	
Supporting the next generation	23
Generation Y (Why?)	24
Managing the politics	25
Working together – for better, for worse	25
Human capability working group	
Working with employers	
HR toolkit.	
Work experience in New York state.	
Lantra SSC.	
Agricultural ITO	
Conclusions.	
MarketingLevy boards	28
Support funding.	
Working together.	
Catch them young	28
<u>Technology</u>	
Appendix A	30
Agricultural Future of America Ag Teacher's Creed.	30
National Association of Agricultural Educators Creed	
Appendix B	31
Appendix C	
Bibliography	
Acknowledgements	
What has happened post trip?	
Contacts.	
Index	

Executive summary

Objectives

From my study I wanted to learn the following:

What could the UK learn from the New Zealand and Australian agricultural sectors about engaging directly with schools?

How well set up is the UK agricultural sector to engage with education?

How well do industry bodies and sectors collaborate in addressing the issue of 'working together' to a broad agenda rather than an agenda of self-interest?

What inspirational ideas could I bring back to the UK to make a difference?

What I wanted for the next period of my life – a look at the inner me!

Recommendations

With so many positive findings, it has been very difficult to select the five key recommendations; however, here they are:

- 1. To increase and improve agriculture's awareness of and engagement with school and city farms as a source for the workforce of the future.
- 2. For industry to engage with 'The Year of Food and Farming' and ensure that it has the capacity to deliver and develop a long-term approach to bridging the gap between agriculture and education.
- 3. To facilitate a 'Windows to Food and Farming' programme, providing a co-ordinated programme of work experience, enterprise education, farm experience days and school visit days for year 10-11 students across the country and the creation of a real umbrella website of information.
- 4. To market the career opportunities across the food and farming sector in a more positive and constructive manner at an earlier age in school.
- 5. To develop the AgriKids programme for 8-10 year olds with the help and support of Young Farmers (NFYFC).

I will expand on each of these items in the following report. However, from the large number of ideas I had and developed throughout my travels, I need to ensure the report focuses on what really needs to be undertaken and where the impact can be greatest.

Background

Ever since I left the family farm in 1994 I realised what I'd left behind. The skills farmers use to produce food, look after the countryside and create an environment for others to enjoy are remarkable. I'm proud, very proud to be associated with the industry and now as a messenger of the work my father and brother do on the farm, the sheep meat they produce and the trees and crops they grow.

The questions from outside the industry have grown ever more engaging over the 15 years I've been away from the 600 acre farm. The wider public now want to know far more about food, food production and the farmers' role than ever before. I want to be a message carrier as my skills lie there rather than producing the food!

I clearly remember the enthusiasm I put into converting part of the home farm into an educational centre for parents, teachers and kids to come and share the joy of the land. The feelings I had then were driven by the desire to let others appreciate what I and so many others in the industry had each day of our lives. Others could and should pay for that opportunity if the experience was of high quality, engaging and stimulating for each of the audiences. I know that I'm not alone in these thoughts and feelings – others have made farm attractions very successful and a profitable part of the business. Congratulations to them.

At BAGMA (The British Agricultural and Garden Machinery Association), my previous employer I facilitated the start of a campaign to recruit new engineers to the sector. Out of that 'The tractors in



Schools project was created. It is a long term approach to the recruitment issue. Catch them young in primary schools and perceptions and influences can be changed and hopefully new engineers can be created after the excitement of relating to a tractor in their school.

It was this project that really opened my eyes to the beauty, energy, opportunity and delights of the agricultural industry. Young children clambering over a tractor (safely) were becoming inspired by the agricultural sector. I had to learn more!

I changed my topic from looking at the workforce of 2020 from recruiting foreign labour to a more long term approach of working with schools after David Miller, a 2004 Nuffield Scholar, and Nick Beeby, the Meat and Wool New Zealand representative in Brussels, give their presentations at the Fresh Start conference. Their energy and drive they gave to their topic stimulated something inside me that I had to follow – working with our own children to help secure the future of the agricultural industry; you could say, the 'home-grown' approach.

The initial research I conducted around the original study and the 'Workforce of 2020' was not, however, in vain. This background work provided a very good grounding and understanding for the problems that we face and how the agricultural sector and industry as a whole are going to fulfil labour requirements in 2020.

The long and short of it is that we in the UK and the western world in general, are not producing enough babies to provide a future workforce that matches our economic growth.

Outline of travel

Initially, with my first topic of study, I travelled to Poland to understand the foreigner's view of the UK market and access to it, and then to Kansas in the US to attend the conference 'Employee Management for Production Agriculture'.



Following the change in study topic I ventured to New Zealand and Australia. In New Zealand I met the Meat and Wool Board to investigate their successful 'Outstanding in the Field' programme. When I left the UK I had two meetings planned on the second day of my trip; the rest was left open and ready to be filled by contacts from the first meeting. It worked extremely well; I filled up the remainder of the visit and met some fantastic farmers, teachers, decision makers and students who made the whole trip a truly memorable experience.

My entire visit took nine weeks. While not a huge amount of time, it had a significant influence and impact on me. It changed my life and pointed me down a new path in both my business and personal life.

Why engage agriculture with education?

Because if we don't, no one else will and our amazing industry will fall apart! It's an issue we have to deal with as we can't and shouldn't rely on others fixing it for us. Government try and look where that gets us!

The solution to the workforce of 2020 has to be created for the long term; not a short term fix. Develop locally a solid foundation and then import labour on a short term basis when necessary.



Nuffield Scholar Ian Pigott created Farm Sunday as a result of his Nuffield study as a method of opening the farm gate to the public. The event is to provide a method of educating consumers about farming and food production. Open Farm Sunday is a national initiative with more farmers joining the initiative that takes

place on a Sunday in June each year. It's brilliant and is growing year on year.

What is the perception of UK agriculture?

Hugely varied. In my opinion the public perception of UK farming has experienced a great change for the better. Economically it may be different, through the disaster of the Foot and Mouth outbreak (FMO) in 2001. For whatever reason, perhaps the burning pyres on TV, or the fact that FMO was due to government mishandling rather than farmers' own doing, this change in perception has had a big impact on the public's understanding of what UK agriculture is all about.

Whether it is the result of local sourcing of food, food miles, obesity issues and other similar campaigns, I'm convinced the public's empathy with food producers is on the increase. Teaching in schools is the start of educating young people so they know and appreciate what is in the environment around them.

The industry has embraced this change in perception with enthusiasm. It has, however, led to a plethora of organisations, companies and individuals, springing up and trying to do their best for the education of young people or the general public. Has this led to a confusing message being delivered by the sector to schools and the general public?

One of the most fascinating observations made by David Miller¹ from his Nuffield study was what he thought other people thought of UK agriculture. Agriculture was a:

Job with low esteem

Very long working hours

Disregard for nature and its environment

Working in all weathers

Lonely occupation

Low pay

Few holidays

^{1 (}Miller, March 2006)

I'm sure you could present these perceptions to employees in a wide number of industries and they would agree with some of those comments – nurses, chefs, doctors, truck drivers and dustmen, among others. So farming and its related industries are not on their own.

David's positive points about farming were:

Able to enjoy working in the open air in beautiful countryside

Face the challenge of new technology

Diverse range of skills to master

Play with big toys

No two years, months or weeks are the same

Working on your own initiative

Have a career path

There are many fewer employees in other industries who would be in a position to enjoy any of these let alone them all. Agriculture does offer them all.

My report is based on what I found during my trip, starting at primary school age, moving through secondary school, work experience and industry scholarships. The country by country approach is less inspiring to me, as I think there is so much crossover between countries that repetition would interfere with the message. Working with different age groups and gauging what can be learnt and shared between each sector was hugely inspirational to me.

In October 2006 FACE commissioned a report to benchmark the views of young people on 'Food, Farming and Countryside' issues². The research was commissioned to establish and monitor the views and opinions of 11-16 year olds towards food, farming and the countryside, and to inform the future development of interesting and inspiring educational initiatives. The report set out to:

- Explore the attitudes held by young people about food, farming and the countryside
- Evaluate what differences, if any, there are in views expressed in various geographical areas, rural and urban locations, types of school and ages of young people
- Assess what differences, if any, are due to food, farming and countryside resources, activities or experiences
- Provide a flexible research design that can accommodate questions from individual consortium members

The views of young people and understanding of the countryside make very interesting reading. Note the following examples of how young people describe a typical farmer today:

How would you describe a typical farmer today? (Figure 1 below)

- When asked to describe a typical British farmer, young people were most inclined to refer to their characteristics (39%), followed by how they look (30%) and then what they do (25%)
- Responses were considered and varied, with the most frequent attribute (farmers' clothing) mentioned by no more than one in six children (15%)
- The majority of responses were positive, with one in ten (10%) considering them hard workers and more than one in twenty (6%) specifically describing them as 'normal'
- Stereotypes prevail however, with 10% describing them as scruffy, dirty or smelly, 7% as

² Benchmarking the views of young people on Food, Farming and Countryside issues - FACE 2006

old, 5% as grumpy and 3% as underpaid

 Others mention accessories such as a beard, a sheepdog or a shotgun, chewing a straw, or having a local accent

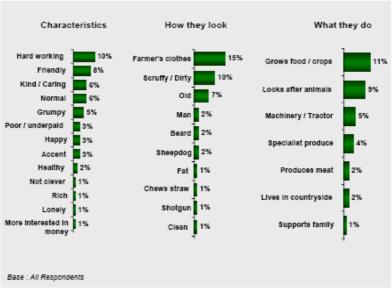


Figure 1 - How would you describe a typical farmer today?

When it came to the skills a farmer needs, the following answers were given – Figure 2 gives an overview of all the answers:

- Nearly two thirds (64%) of young people feel that animal care is one of the most important skills that farmers today must have. There was no equivalent skill listed which relates specifically to growing crops
- Business sense and team working were also chosen by nearly one in every two children (47% and 46% respectively), suggesting that they recognise some of the intellectual demands of farming as well as the physical pressures
- In line with the qualitative groups, young people were least likely to consider conservation, accountancy and IT as important farming skills (18%, 11% and 8% respectively)

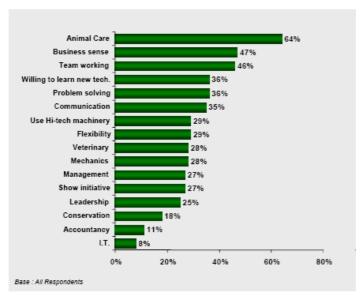


Figure 2: Which of these skills do you think farmers in Britain today need the most?

The research makes compelling reading and is extremely interesting when it comes to developing a programme for engaging with education. The sooner this document is given a public airing the better, to ensure that time is given to work with kids in a constructive manner so that preconceived ideas may be reinforced or changed.

Starting young

At what age does the industry need to start working with schools to have an informed influence on the education and development of children? At the start of the Tractors in Schools Project I thought that it should be the secondary school age group, as they were closer to the work environment and may have a more informed opinion about their future. How wrong I was! I came to the conclusion very quickly that it is primary schools that have to be influenced and at a level suited to them. The ability of kids to take on information, be inspired by 'stuff' and benefit from a real, positive learning experience is incredible The results of this experience will remain with them for a very long time.

In the UK I worked with the Farming and Countryside Education (FACE) organisation to develop materials to work in schools. Based on the fact that I didn't have any experience of material development, getting in the experts was the most important step to help ensure success. FACE had also created the CEVAS scheme, that allowed farmers to be trained in skills to talk to kids in a more informative and relevant manner; a great initiative that works really well.

FACE also said that any materials should be related to the national curriculum, again a vital piece of advice to get schools and teachers on board. As my trip unfolded around New Zealand and Australia, this advice was so important to customers; the teachers, in getting them interested in inviting agriculture into the curriculum. I got the impression that there was a minimal link between the activities provided by industry and the various national curriculum equivalents.

There are so many activities taking place around the world that allow primary schools to learn about agriculture, curriculum linked or not, but a couple from New Zealand impressed me, for different reasons. AgriKids and DairyKids both brought a mixture of development and fun to their activities.

FACE has worked with a number of organisations to create the CEVAS (Countryside Educational Visits Accreditation Scheme) to help farmers open up their farms to the public. This is a great initiative to provide farmers with the skills to handle a whole class of kids and the energy associated with them. The scheme started as a three-day course, but has been restructured to provide a one-day course, with an online version to get more farmers certified to run their own courses.

The skills required to run school-related events, either on- or off-farm, are quite specialised, and in my experience the level of understanding at which farmers often talk to children are too high. Kids need to have their imagination stimulated during the learning process; this will instil a greater level of learning. It's a really hard skill to learn, but much more rewarding.

When left to think harder about a subject, how many times have you eventually come up with the answer and felt better about it? Equally, if kids don't get the opportunity to think, you don't get the benefit of their imagination. How powerful that is as an insight to what kids are thinking or how their thought processes work.

There are loads of opportunities to practise this skill and kids provide just one. However, in my experience it is fundamentally the most important skill for anyone who engages with school kids to have in their communication toolbox.

The organisation LEAF (Linking Environment and Farming) created a self-help media campaign called 'Speak Out' that was aimed at farmers who wanted to communicate with consumers at a more informed level. Farmers have traditionally been poor communicators and this scheme helped hugely in getting messages across.

Agrikids

This is an idea created by New Zealand Young Farmer, Shane Tilson. Being the architect of an event that brings 6 -10 year old kids to the senior YFC competition in a really creative way was hugely rewarding for Shane. By mounting a series of 10 to 12 short activities in an 'It's a knockout' type obstacle course using practical farming as the focus, kids not only learn about agriculture, but have a huge amount of fun doing it.

Starting with a couple of multiple choice question sheets involving general knowledge and agriculture related questions, the kids move on to a series of activities around a track. From pulling a small go-kart to building a gate, putting a bridle on a polystyrene horse's head and running a three person wool sack race, the kids had many different experiences of farming.

To see the exhausted boys and girls at the end of this 30 minute event was quite humbling. The kids who took part did so to win for themselves, for their school and for farming. They were so enthused to be part of such an event, from local competitions through to the regional finals; their schools just had to win. And they certainly put all their efforts into it.

What the event lacked, in my opinion, was a link to the curriculum that teachers would find useful, but also support from industry organisations. The main sponsor also supports the main YFC competition, but I thought that linking in with industry organisations in a subtle way would provide a long term approach to recruiting staff to the sector and to the various careers events I will describe later.

I thought at the time it would be a great initiative for the UK as it ticked all the boxes of healthy eating, learning about agriculture and meeting the needs of the 'Learning Outside the Classroom' manifesto and the 'Year of Food and Farming'.

DairyKids

I wasn't lucky enough to see one of these days in action, due to the joys of travelling to New Zealand in winter, but through discussions with ATR Solutions and Shaun Wilson I was given a picture of what kids experienced on the day. What they saw, what they felt and what they heard was memorable and influential and as the age ranges were both primary and secondary, the link to careers in the sector was beginning to be formed.

The event consists of a structured interactive day on the farm for children, where they get to participate in hands-on farming activities.

1. In the field - cow nutrition

Consumption to production: Measure the quantity of water drunk by a cow in a day; pick the weight of grass equivalent to a daily cow's consumption. Then compare grass with the volume of milk produced by the cow.

2. Calf rearing - weighing the calf

Weigh students then estimate weight of calf. The children guess whose weight is the closest to that of the calf. Weigh calf and compare with student weight.

3. Calf rearing - feeding the calf

Children measure the correct milk powder according to weight of calf, then feed the calf. They also get to measure a correct meal according to the weight of a calf, and then feed it.



Kids touching and feeling cattle feed

4. In the dairy - from cow to vat

The children participate in a number of role plays including 'herding the cows' and 'milking fingers'. They learn about the technical processes involved in obtaining milk from the cows, then cooling and storage in the vat and transport to the factory, as well as hygiene in the dairy and animal health.

Again, I liked the hands-on nature of the events, but this had a real eye to the future because of the 'Window to Dairying' events, described later. There were many more curriculum links and with the DairyKids brand there has to be a logical link with the YFC's AgriKids. Whether this will happen is open to question, but both are really creative ideas.

In Australia, the Department of Primary Industries (DPI) Landlearn is leading the way in the education of children in schools. A forerunner of FACE and many other organisations in New Zealand or the UK, it works with industry to create materials that meet curriculum requirements and bring both teachers and children into contact with agriculture in a really positive manner.

The Department of Primary Industries has embarked on a project called 'Connecting with Communities'. Sonja Tymms is the project manager. She travelled the world learning how each country – Canada, France, the UK and USA - with their different dynamics - are addressing the issue of connecting with the community.

Many of her findings could well have been mirrored across the world. A number of countries had industry leading initiatives and others fell behind, but positive examples could be found in each. In the UK she found the Linking Environment and Farming (LEAF) Speak Out campaign was successful in providing positive messages to the general public at all levels, something that DPI Landlearn would like to recreate.

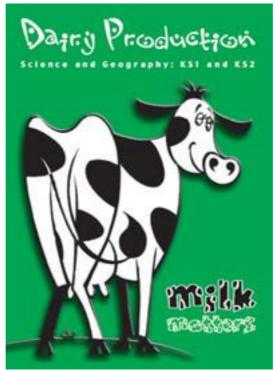
Compared to programmes in Canada, the UK and USA, DPI Landlearn's major success story was that "the 'Agriculture in the Classroom' programme is mapped to, and evaluated against, higher level outcomes, DPI and DE&T; it is funded by government and it is supported by CAS and PIR Vic expertise, resulting in a strategic approach and higher quality materials." While not knowing the full detail of what is happening in the USA and Canada, criticism seems a little harsh on the UK system, that has made huge efforts in aligning itself to the curriculum to help ensure success in the delivery of educational programmes.

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³ OS post travel report Sonja Tymms – 25th October 2005

School milk campaign

In 1998 the School Milk project was initiated by the Women's Food and Farming Union and funded by the Milk Development Council (MDC). The project aimed to increase the uptake of milk in primary schools, which is of enormous nutritional benefit to children's daily diet. The project gets right to the heart of influencing kids and ensuring their health for the future. How much it informs where their milk comes from is questionable, but without attending a facilitation day or having research available, this is hard for me to assess. The general feeling is that kids don't know where their milk comes from or how it is produced.



School milk campaign materials from the MDC

The project, however, is something quite remarkable. What impresses me is that it gets right to the heart of school and educational facilitation, with government encouraging Local Education Authorities (LEAs) to remove fizzy drinks and replace them with healthy drinks such as milk and water. I believe this scheme is vital to the education of young people, showing the health benefits and advantages of having milk as part of a balanced diet. If milk can stimulate a greater interest in the wider field of agriculture and food production, then so much the better. I guess the only thing we have to ensure is that farmers are paid a realistic amount for the quality milk they produce.

In the time I spent with Diane Cannon of the MDC I also learned that, much to my amazement, the levy bodies do talk to and share information with each other. The current arrangement through the separate levy bodies is that the joint levy body's education committee does use levy payers' money to promote agriculture. How well this is done is open to question, but a co-ordinated approach has to be commended. In future, under the new levy body the 'joint' education service should be even more streamlined, with central thoughts and ideas coming together far quicker than they may have done in the past. The agricultural industry can only benefit from an organisation that has the financial resources to do this, under the correct management and leadership.

Year of Food and Farming



Before I left to embark on the southern hemisphere leg of my study, an initiative called the Year of Food and Farming, for the academic year September 2007 to June 2008, had been mooted. The aim of this initiative was to bring together three government departments to recognise the potential of industry to deliver a series of events promoting food and farming in the classroom and beyond. These would allow kids, parents and teachers to understand where their food comes from; the role of farmers in

that process and the importance of sourcing products locally. A great idea, but could industry in Britain work together to deliver on such a broad agenda?

As well as working with government, the agricultural sector had to learn to work with itself in a manner that doesn't undermine the efforts of a huge number of enthusiastic individuals and organisations to help deliver the programme. A strong visible leadership, with flexible guidelines to allow the army of enthusiasts to find their role within the year is essential to the success of the Year of Food and Farming. At the time of writing this report, the balance between leadership, flexibility and a forward drive has been established and the project is moving forward in a positive manner. It is undoubtedly the best opportunity for the agricultural sector to engage with the educational system and influence the learning and understanding of parents, teachers and children the sector has ever had.

Government has also had an influence in developing the year through its 'Growing Schools' initiatives, to help teachers facilitate curriculum related learning. This involves kids growing vegetables and other produce in their school grounds, or working with local farmers to help achieve this – a real hands-on approach to getting kids involved.

The idea was welcomed in New Zealand and Australia as interesting. A major UK government initiative was created in 2005 called 'Learning outside the Classroom', that encouraged schools to get kids outside to have a different learning experience of not only agriculture, but all other industry sectors. Agriculture in particular fitted into the outline plans tremendously well. Working with government initiatives are a skill the agricultural sector had to learn.



David Miliband, left Secretary of State for the Environment and I at a Tractors in Schools event for the Year of Food and Farming

Another initiative by the Countryside Foundation for Education (CFE) is to host and run a series of Estate days and Countryside Live events.

Both events take the countryside to an audience of primary and secondary schools in a hands-on way, giving a whole range of students an opportunity to feel, hear, touch and smell the countryside in a way they haven't done previously.

My hope for the Year of Food and Farming, under the guidance of Tony Cooke, Bill Graham, Sir Don Curry and Mike Tomlinson, is that it brings together a fantastic range of activities, channels them in a similar direction and presents them to the customer, the teachers, in a co-ordinated and structured manner. There is so much fantastic work going on across the industry that local enthusiasm shouldn't be stifled, but enhanced.

School farms

While staying with Nuffield Scholar John Wright in Christchurch, he mentioned in the usual Nuffield way, that a friend of his was governor of a local secondary school called Darfield High, and that they had just created an agricultural course for students. Gavin Henderson, the friend and governor, chaired a 15- man board of local farmers to provide support and input for the school to provide a structured programme for year 11-13 students. Their intention was to provide local farmers with a workforce suitable for 21st century agriculture, as they had huge difficulties in recruiting the right staff for their businesses.

The scheme was set up and each student had to pay \$400 towards the course, that partly covered the cost of boots, overalls and travel to venues. The actual cost of the course was \$1600, with the difference made up by fund-raising events and donations by local farmers. This process created a bond between local farmers and the school, that created a 'want to succeed' attitude and ensured they had first pick of the best students from the school!

The school had 46 students who signed up to the class in the first year, made up of two classes of 23 with a full-time agricultural teacher, who was a shepherd from the west coast of New Zealand before an accident encouraged him to look for alternative work. As well as the practical side of the course during four periods of focused agricultural study a week, work experience during the holidays was a key part of the course. It served as the finest recruiting ground for farmers as they could 'trial' the students for a week each holiday, while the students could also size up potential employers!

A similar system was used at Taumarunui high school, where Robert Carter, chairman of the New Zealand Sheep Council, was the facilitator and engine behind this school's link with the agricultural community. Even with 60 students on the agricultural course, they could not find the funds to employ a second ag lecturer to support the highly enthusiastic and motivated former science teacher Johan van Deventer, a South African by birth, but a Kiwi at heart!

The main difference between the two schools was that Darfield High School evidently had the better students, because those who enrolled on the course were keen to be there, which couldn't be said for the Taumarunui students. Their enthusiasm to disrupt and disobey was much higher – if only that energy could be channelled in a positive direction! One factor common to both, but more so in the case of Taumarunui, was the support of the agricultural sector. The board was enthusiastic, but I think that much more could be done by the likes of Meat and Wool New Zealand, Dexcel and other commercial companies to support these agricultural courses.



Students at Taumarunui High school learning to fence

Recruitment of staff was a key concern across the country and the amount of work being done, as I will describe later, is huge. Yet this market of agricultural courses at high schools seems to be largely untapped. A small investment in these schools would provide a much greater return to the sector than the generic advertising and promotional campaigns that are commonly undertaken, however impressive they may be. The enthusiasm of both Johan van Deventer at Taumarunui and Rex Smith at Darfield High School cannot be underestimated; support from industry across New Zealand should be more forthcoming.

In the UK I only came across this types of school once I got back home. My first visit was to Oathall School in West Sussex, a secondary school with 2500 pupils and a farm nestling among the 1960s school buildings. The farm faced closure in the 1990s until Prince Charles stepped in and rescued it, as he recognised the value of the farm to the school. Following his intervention the school has had a number of ministerial visits in recognition of the excellent opportunities the farm provides to the whole school.

Not only is there an agricultural section, but the farm is used across the whole school for art, design, maths and history lessons, among others. The reason is that it brings the curriculum alive in the eyes of the all the students. They experience sounds, sights and emotions only a living breathing farm can provide – OFSTED has pronounced on a number of occasions that the whole school has benefited from its on-site farm.

In a similar manner to the New Zealand experience, pupils on these courses are better equipped to enter the agricultural sector. Oathall also have their own young farmers club. These students and staff should be given more resources by industry to nurture them into the workforce of tomorrow. Howard Wood is the key contact and his enthusiasm is no different to that of Johan and Rex; they are a special breed and should be rewarded highly by the sector.

lan Egginton-Metters, assistant director of the Federation of City Farms and Community Gardens and School Farms Network, enthused about the future of these special farms. Currently there are 66 school farms in the UK, and for the first time in many years nine schools had applied to build farms on their sites. This I found most bizarre as agricultural colleges have been closing down their own units as unprofitable, yet schools want to establish new farms and resources to facilitate agricultural teaching.



lan would also like to encourage wider industry involvement with the schools, as they are in a position to develop more positive perceptions of agriculture in both inner city and more rural communities. The issues these farms face are wide ranging, but key areas are the storage of feed for the animals, access to livestock for use in schools and machinery to help the farm function. With the support of local farmers many of these issues can be overcome, but it is clear to me that in the UK, as in New Zealand, the support of allied industries is vital to their future. With the combined support of industry and the local authority, a school and city farm will play a major part in changing the perceptions and minds of young people, parents and teachers.

Listening to all the enthusiasts speak about their role within the city and school farms organisations across the world, they all, for some reason, find it hard to identify their USP, unique selling point. When an organisation has so many finding one may be hard, but to industry the most tangible aspect of what these organisations can offer is future employees. In a 'captive' environment, numerous students are being exposed to the sights, sounds and feelings associated with growing and nurturing animals and plants and associated skills in a manner I never really appreciated. These students are the workforce of the future.

Rather than canvass every school in the country for potential employees, maybe working with these organisations would be more beneficial and provide the USP that industry may need, to persuade it to adopt and engage these organisations more positively.

What is the business case for getting involved with these and other similar schools? Results are long term and difficult to quantify, but once on the track of supporting a local school recruitment of staff should be a thing of the past if it is all handled correctly. I heard a story of such an investment.

A local engineering company was short of engineers so it created a relationship with the local secondary school which happened to be across the road from them. Working with the design and technology teacher they created projects and tasks for the students to carry out that developed into work experience which for the enthusiastic ones developed into full time jobs.

Another related benefit from this experience was that the students became better people after their work experience and contact with business. They respected the owner of the business and from that they knew how to handle themselves in a work situation; a benefit no one expected at the outset. The employer also changed his opinion of the school and students because they all engaged so well with the process.

Therefore everyone benefited and the skills shortage is a thing of the past for that company. It is a model scenario that didn't cost a great deal of money; the results for all were top of the class. Why can't agriculture find a similar way of working with the school farms initially and then to a broader range of schools.

One of the funniest stories I heard was in New Zealand from Lisa and Warwick Lissaman . We shared stories about my project with Lisa who is a primary school teacher and she had the most novel method of impressing kids. The kids at her school were participating in an aviation day at school using books and videos to learn from. With her farming connections she arranged for the local fertiliser spreading plane to fly over during the lesson. All the kids would talk about from that day on was farming and their use of planes. None of them had realised that planes were used in farming; I thought this was a really positive message about the agricultural industry.

One of the most revealing reports I came across was from Jane Fraser⁴ in New Zealand. She won a Kellogg Scholarship to research the value and result of school education by comparing rural education and the effect it had on students in later life. The results were amazing. The whole research was summed up by the final comment – *You can augment education throughout life, but you can never replace family life*.

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^{4 (}Fraser, 2002)

The survey highlighted that New Zealand area schools that integrate all ages of schools from a wide area was an extension of family life. Students who attended area schools conversed with their peers on a more adult level, and they had a much higher chance of getting a job when they left school.

Jane also concluded at the end of her report that not only are the students from these schools more employable, they are generally better people. They know how to interact with other ages both younger and older; the skills they have are more broad ranging and they are less afraid of the unknown and will make every effort to help others. This is a hidden benefit of agriculture that is very difficult to quantify across the sector.

How often do we as a sector recognise the skills we have as role models? The work farmers and farming related businesses do is quite staggering. Whether it is through young farmers, local councils and rotary groups the role model or mentoring time that is given to young people is staggering. If I think back at the help and support I got from other farmers it makes me shudder, their generosity and willingness to help me was humbling. Again is this a quality that farmers are reluctant to talk about? Modest to the end.

Recruiting to the sector

Enterprise education

There are many ways in which the industry recruits to the sector. These include Young Farmers, family contacts, colleges and careers days, that are run by colleges and schools.

According to Landex over 80 per cent of agricultural colleges have school liaison officers or someone similar to create a link with schools in their area – this is a really great way of engaging with the next generation.

There are also the government supported projects – Connexions, careers offices and a plethora of other quangos that help bridge the gap between education and agriculture. However, I met a really dynamic person from Buckinghamshire Education Business Partnership, Geoff Stubbs, who changed my perception of advisors linking education and industry. A real dynamo, he works as an advisor for Buckinghamshire County Council to encourage schools to engage with industry in a curriculum-related experience called 'Enterprise Education'.

This was initiated by Chancellor, Gordon Brown, in an attempt to influence reforms of the education system in 2005. He wanted to see a closer relationship and understanding between business and education. Enterprise Education encourages teachers to create an environment that highlights exactly what life is like 'on the outside'.

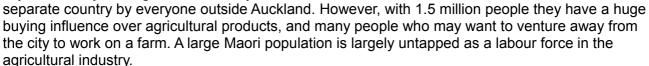
Through a combination of enthusiastic teachers and creative businesses, a range of exercises are created to help teachers deliver the programme. Business relished the opportunity of working through this mechanism to influence the education process. It has been compared to a business receiving 15 marketing plans from a group of potential customers – a great idea, and one the ag sector should really embrace, as it is cost effective, simple and effective.

'Outstanding in the Field' recruitment campaign

The process the New Zealand Meat and Wool sector has adopted to engage with 15-year-olds deciding on a career is called 'Outstanding in the Field'. It is simple, but effective. Find a local or city farm, find 10 people from industry, bring together college lecturers and 60 kids, and set up six

hands-on events for the kids to experience real farming scenarios, with the aim of sharing opportunities in the broader agricultural sector.

The day I attended was on a farm outside Auckland, which has a population of 1.5 million and is New Zealand's largest city. It has very little agricultural history, and is described as a



The six 'stations' for kids to get involved with were:

Soil sampling and GPS mapping – fertilisers – hands on

Meat processing – knife sharpening, cutting meat – hands on

Nematode analysis - science

Rural bank manager – what's involved – business

Livestock agent – weighing and grading sheep – hands on

Sheep shearing station – watching a sheep being shorn – hands on

About 60 kids from 12 schools in Auckland attended the day. All the kids were divided into different

groups and they went from station to station to meet with an industry representative, the fertiliser rep, the local bank manager, the local livestock agent or the local meat worker.

In each group the kids touched, felt, handled, pressed, looked at or held sheep or hand-pieces or GPS computers or microscopes, maybe for the first time in their lives.

As I watched one group move from station to station, the look on their faces, the change in their attitude, their engagement with the people sharing their working day and life with them, were really inspiring. Some of the kids really felt as if they had a future in the agricultural sector. I know of at least two people who were offered work placements on the back of the day, and five others who were seriously thinking about it. At the end of the day each kid took home a DVD of young people sharing their experiences with family members and showing parents what a future in the agricultural sector would be like.

At the end of the event, Joanne Taylor of TaylorEd, the facilitators of the day, handed out information on what the kids may want to do next, with details of work experience. To me, the most important part was that all the kids received an email address and a telephone number for Joanne at TaylorEd, so they could contact them for personal career advice and guidance – this was a great touch.

The NZ dairy sector's approach

Dexcel is the levy board for the dairy sector, and seems to be further ahead than the rest of New Zealand agriculture in its recruitment and sponsorship of people into the sector. I think the main reason is that there is more money in their sector compared to the rest of the industry, and that does help facilitate and deliver new ideas and initiatives.

There are two main projects I came in contact with, which were industry leading and delivering good results for the sector. Firstly the 'Windows to Dairying' initiative, and secondly the scholarship programme set up by Dexcel to provide students with funding towards their university education.

Windows to Dairying

The 'Windows to Dairying' campaign was created by the New Zealand Large Herds Association during a long period when young people weren't joining the sector and their members had to find a way of recruiting new people. Unfortunately I was unable to attend one of their event days, but I did spend a large amount of time with Shaun Wilson from the event organisers ATR Solutions. With a dairy background, Shaun and his business partner John Fagen give real energy to the events, which started in 1994.

The day aims to provide opportunities to:



- Speak with young people currently in the industry to find out what it's really about.
- Participate in interactive sessions to gain real insights into dairying as a career.
- Meet people involved in the local industry who can support you.
- Discuss how to go about entering the industry and how to make the right choices to succeed.

The events are held on farms in 10 different locations across New Zealand. Most of them are held in March each year. The aim of the project is to show students, teachers and parents what career opportunities are available in the New Zealand dairy industry. Five different mini-events are held on a farm, highlighting the broad range of careers across the sector. As this initiative has been running for longer than the Meat and Wool 'Outstanding in the Field' campaign, it doesn't use the 'Handson, Business and Science' categories for their workshops. I think that utilising the same broad headings would make it much easier for students, parents and teachers to understand what is

being offering across the industry, and in these instances the whole sector would profit from a more co-ordinated approach.

A number of local people who work in the industry also help out at each event. The day consists of a number of the following interactive sessions located around a farm, and dairy industry personnel talk with those attending on a range of topics:

Animal health – a local vet will talk about a wide range of animal health issues that farmers must be aware of during the course of the dairy season.

Milk hygiene – a discussion that focuses on milk as a quality food product, accompanied by a demonstration of the way the farmer and dairy company work together to meet the consumer's needs. Students also get a chance to help milk the cows.

Feed management – when feeding a cow, farmers are actually using knowledge gained from years of research. Students get to measure grass and assess a paddock for themselves.

Culling and breeding – attendees have to inspect a line of cows and decide which ones to cull. They are shown how farmers record key aspects of stock performance using high-tech tools to help them make this decision, rather than just guesswork.

Training opportunities – regional training providers are invited along in order to advise attendees about the wide range of training opportunities available both before and after they start work.

Financial management – a low-key look at what can be achieved if young people apply themselves to a career, and what they must learn if they are to be financially successful in dairying.

During the day attendees can speak with and ask questions of young people who have been in the industry anywhere from six months to six years. A final discussion brings together the information provided on the day to give an idea of 'where to next' for those who wish to enter this exciting industry. Attendees leave the venue with relevant information and the contact details of people they have met, including profiles of the young speakers.

The beauty of both these events is that they have long-term stability and a brand that is becoming recognised by schools and teachers in the areas where the events are run. This ensures that each event has the best possible chance of success in their region. From what I could gather, the quality of students attending the events was on the rise, and they were not of the traditionally lower level standard. I put this down to the longevity of event, the opportunities offered and the increased level of understanding by teachers about the industry.



Students on a Window to Dairying day in Auckland

Once in, how are young people encouraged to stay in the industry? This must be down to a number of factors; the major two in my mind are appreciation and opportunity. Appreciation has always been thought to be about financial reward, but is that the real picture? In the US section of my trip I attended a great conference titled 'Employee Management for Production Agriculture (EMfPA)'. One of the subjects of this conference was the management of overseas, mostly Hispanic, labour in the American farming industry.

I was really interested to learn how a foreign workforce is managed and what could be learnt from them. Very quickly I learned about the cultures and values of the Hispanic workforce, which are totally different to those of the US workforce. By that I mean that the Spanish like to chat at the start of the day, discuss the family network with everyone, as they have a very big leaning towards the family structure. The US method of 'doing business' is to be given instructions at the start of the day, get on with the job, finish on time and not much beyond, then go home to the family and never the twain shall meet. Basically the two cultures are diametrically opposed. Jorge Estrada of Leadership Coaching International Inc raised so many different issues about how to make people tick using cultural understanding as a basis, it was quite amazing.

Once the cultural constraints and opportunities of your workforce have been identified, what is the best way to encourage the staff to do what you as a manager require. Is it the carrot or is it the stick? Sarah Fogleman of Kansas State University emphasised that it wasn't necessarily finance that encouraged staff – simple praise can be the most effective way of encouraging people. Statistics show that 60 per cent of people leave their boss, not their company. This indicates that people management is the most important part of being an employer. Look after your employees and they will work for you.

John Deere's Training and Marketing headquarters in Kansas highlighted the technology they are deploying to develop people once they were inside the engineering industry. Already utilised in the US, and now being rolled out across the rest of the world, is the John Deere University. This is a central database of all John Deere employees and their current and future development requirements.

One of the mechanisms they use to train staff globally is an online interactive training programme, delivered from a training room in Kansas. Dealer staff around the world can listen to a huge range of training courses from technical to personnel and soft skills; it's really quite incredible what can be achieved through this system. If I worked for John Deere it would make me really proud of what I could attain for my personal development within the

company; it has to be one of the best retention tools available in the agricultural sector and is truly amazing.

Dean Mier from John Deere was scheduled to visit a national education show at the Kansas city exhibition halls – about 100 acres under cover! The show is attended by thousands of teachers from across the country, who pick up new items to help them deliver lessons and view details of new careers for students to aspire to. The show was great fun and a real insight into the US educational system.

Dean was also responsible for developing the John Deere apprentice training programme across North America, working with local colleges across the country. Their 'Power Up' recruitment campaign is really impressive, and their travelling teaching bus, costing £250,000, takes training to each state, so that dealers don't have to travel to a central John Deere location. Material was originally produced on DVD, but has now been moved online. The website is www.jdpowerup.com. The site provides much wider access especially to schools and colleges.



The Powerup website from John Deere

While in Kansas for a few days before the EMfPA conference, I stumbled across another conference for the National Association of Agricultural Educators (NAAE). It was an event where thousands of teachers who had an interest in teaching agriculture in US schools shared information on best practice and sharing resources. I only sat in on the last half day of the event, but it was truly inspirational that so many people in a country that could be perceived to be anti agriculture, or backward, or out of touch, put so much time, effort and money into learning about farming.

The other amazing idea was that industry put so much effort into giving support to their conference. Multinational companies were, or seemed to be, falling over themselves to offer sponsorship and support to these teachers – if only it could happen in the UK! The NAAE Creed is a good indicator of the passion and belief these teachers put into their jobs. (See Appendix A)

Visiting their website when I got back, I was even more impressed with their, NAAE, aims and objectives and their vision for the future. They have a detailed plan for growth by 2015, in which Doug Loudenslager, Chair of the 10x15 Management Team, says: "We believe that 10,000 quality agricultural science education programs can be in place by the year 2015. These programs will serve students through an integrated model of classroom teachings, laboratory instruction, experiential learning, leadership

opportunities and personal skill training. We call this our Long-Range Strategic Goal."5

Their report is well worth a read – there's nothing new in it compared to what is going on in other parts of the world, but it reinforces the message in a way that others don't.

Supporting the next generation

A few years ago Bill Barwood of Dexcel in New Zealand identified that each generation of young people entering industry would be different. He recognised that his generation was different to the previous one, and therefore the approach would be different, but he wasn't sure how initially. Then he came across a book, 'Generation Y: Thriving and Surviving with Generation Y at Work' by Peter Sheahan, an Aussie who wrote about his friends and what they did when at university and then on entering the workforce. The results are truly informative and it has formed a real platform and educated approach to engaging schools by both Bill and the dairy sector.

There is a saying: 'If you do what you've always done, then you will get what you've always got!' Bill realised that farmers were using the same approach to employing people as their fathers and their fathers' fathers; farmers didn't understand why they weren't getting much success! Recognising what makes the next generation tick was all-important.

Dexcel and to a lesser extent Meat and Wool New Zealand and others, provide scholarships to young people wanting to gain a degree in agriculture. Dexcel offers 50 scholarships a year at a cost of many thousands of dollars, and for the first time ever the number of applications has exceeded the number of places available. Increased competition leads to higher quality, because for the first time the dairy sector hasn't been seen as an easy option and therefore people are striving to get an award. The success story has been the retention rate of the students entering the industry. Ninety per cent of scholarship graduates stay on in the sector.



Potential graduates for the Dexcel scholarship scheme at a breakfast gathering before the national field day in Hamilton

Similar opportunities exist across the world I'm sure, but New Zealand is successful at making it work, as is the US through the Agricultural Future of America (AFA). The AFA has a Mission: to identify, encourage and support outstanding college men and women preparing for careers in the agriculture and food industry. And a Vision: to be a catalyst in the preparation of a new generation of agriculture leaders. Their 'Creed' can be found in Appendix A. K Russell Weathers is the Executive Director; he was really keen to learn about the work of Nuffield and wanted to communicate with us to see if there is any formal ground on which the two organisations can work together. It's his enthusiasm and knowledge that ensure that the organisation keeps feeding the

⁵ (National Association of Agricultural Educators, 2006)

industry with highly skilled graduates.

The AFA works with schools, colleges, universities and industry to meet and achieve these objectives and it does it extremely well. It is financed by industry off the back of a hugely wealthy benefactor, who provides funding worth many hundreds of thousands of dollars a year. This matches money raised by communities to help young people study agriculture and related subjects at their local universities. The process encourages really keen people to raise their own money to help themselves; it also allows the local community to be part of their studies and future career and only the brightest people apply.

However, the most enlightened aspect of the AFA is its conference. Very cleverly it has managed to get a large number of CEOs of multinational companies to give up one weekend to coach the students on various aspects of business. These include Monsanto, CASE IH, John Deere, Cargill and about 15 other major companies and trusts from across the US. The weekend involves the CEOs 'getting their hands dirty' by running short seminars on business tips, inspirational speeches, opportunities in agriculture and many others. By all accounts it proves to be truly inspirational, not only to the students, but to the CEOs too, as they get a really hands-on understanding of 'Generation Y' employees and their future 'Human Capital'. Internships are commonplace for the students after this weekend, as the CEOs are on the look-out for their next generation of staff. Again, this is a really simple approach, but hugely effective. Information on the supporters can be found in Appendix B.

I would like to think that a similar service could be offered through either Nuffield or YFC, to encourage the chief execs of Tesco, JCB, Sainsbury, John Deere and others to develop a system of personal development for Nuffield Scholars or other appropriate people.

Generation Y (Why?)

I mentioned earlier that Bill Barwood of Dexcel had introduced the concept of 'Generation Y' people to me. I'd heard of the grouping of the baby boomer generation, but both Generation X and Y had really passed me by. Appendix C has an outline of the people Generation Y represents – an interesting overview even though it has an American flavour!

Cater & Hotel Keeper magazine⁶ commissioned research into the effect this new generation would have on the future of the catering industry. In short there was a hunger among students to start their careers now and have a future, but they didn't want to hang around and earn it. However, the students were motivated for the future which surprised many, and more surprisingly money wasn't their main driving force; career development was.

The key to future engagement with the next generation is technology, like the John Deere University. This is a process that stimulates interest and desire in young people's minds, as they have the ability to handle this level of technology and convert this training into action.

Employers need to have an appreciation of the incoming workforce, as they are different to their own generation. While every generation is and will be different, they each bring their own dynamics to a business. An understanding and appreciation of general trends would be extremely beneficial to a business. Nothing major is required, just a short 'nugget' of information would help employers make better decisions when working with potential employees. From the 'Bible' written by Peter Sheahan, Trish Rodley (Team Leader) of the Marc Edwards Agency is quoted as saying about Generation Y: "They need stroking and nurturing. The 'sit down, shut up and do what you are told' approach does not work with Generation Y."7

⁶ (Partnership, 2004)

⁷ (Sheahan, 2005)

Managing the politics

Working together – for better, for worse.

I've mentioned the presentation made by Nick Beeby from Meat and Wool New Zealand, on how they had had a disjointed industry trying, unsuccessfully, to work with schools and recruit young people. Bingo, I thought, here is a country steeped in agricultural history and reliance on farming, yet the industry is having difficulty in recruiting people, it has recognised the issues and has come together as an industry to solve the problems. I had to go and learn how they solved these issues.

Human capability working group

This group was formed in 2002 on the back of the failure of New Zealand agriculture to recruit the number of new entrants it needed to maintain a successful industry. Around the table were the dairy industry, meat and wool industry, horticultural industry, industry training providers, government bodies from agriculture and employment, universities and farming unions. The group was brought together to work to an agreed aim, focused on encouraging young people from the age of 15 to work in the agricultural sector.

Attending this meeting two days after arriving was a baptism of fire. Not that I ever nodded off completely, even though I know my eyes closed for short periods! Carefully listening to the discussions each organisation was protective of its own position towards its industry sector.

As I learnt later, so many discussions had been held and not a huge amount of action had been taken. The need to achieve something – whatever the something was – was pressing. Levy payers who were funding the group across all the sectors were asking for results and answers to what the group was doing and its future plans.

Websites, promotional campaigns, advertising campaigns, training delivery and research were all discussed and generally dismissed, as each organisation had its own strategy in each of these areas.

In my opinion the greatest result of the meeting was the building up of trust between the organisations and the sharing of ideas and resources. The key decision makers now have a better understanding of what each was doing within their own organisations. Over time, the dairy industry's 'Windows to Dairying' campaign and the Meat and Wool sector's 'Outstanding in the Field' programme wouldn't be taking place in the same regions at the same time without prior planning. This frustrated schools, farmers and most importantly the careers officers in the regions. Neither sector was being supported properly and they were failing to impress potential new recruits. Through mutual understanding and trust, a plan has now been put together to avoid duplication of events.

The group now has a plan for the future. The dairy industry has a huge sum of money to make it happen in their sector; meat and wool are playing catch-up with less money, but with just as much enthusiasm and the horticultural industry is getting on with a great campaign in a much smaller sector with far fewer politics.

Working with employers

HR toolkit

The HR group identified that to help young people enter the agricultural sector, employers would have to be better equipped to deal with employing them. Working with Dexcel, the milk industry board, the HR toolkit was created to help farmers understand the rules and regulations governing employment in the modern world of litigation. The CD and manual were well received, but how much they will be used is open to debate. However, it is a really worthy initiative. The dynamics of young people, their wants and needs are considerably different to those of previous generations, and employers need to understand these trends. Bill Barwood, Dexcel's Industry Education Facilitator, has a really good understanding of that group and has played a part in developing this approach to engaging young people in schools and universities.

Work experience in New York state

As I mentioned earlier, AFA in the US has a really interesting way of working with employers on a national basis, which is great, but at a local level schools and colleges have to adopt another approach.

I was unaware that they had any agriculture in New York State, let alone agricultural schools, but a school there decided it wanted to work more closely with its local community. It realised it had a perception issue with a large number of local employers, but couldn't work out what the issue was. Creatively, they sent out students to the employers armed with a questionnaire, ready to carry out a face-to-face interview. In the past a questionnaire had been sent out by post, with some returned and some not, so a face-to-face interview was felt to be vital to its success. After a brief training course on the way to carry out an effective interview, in itself a valuable learning experience, the 15- to 18-year-old students had to interview five local employers each. With 30 students in the class, 150 businesses were interviewed. The results were staggering.

Over 75 per cent thought that all the school ever wanted from them was money, which was a big turn-off to engaging with the school. Sixty-five per cent would like to have work experience students in their business, but didn't know what to do, what to expect or how to get the best out of the system, therefore they didn't make the effort to engage. Eighty-five per cent would now do so, as a result of the research and meeting the students, which changed their attitude towards the school and got them more involved. I got the impression the remaining 15 per cent were giving a lot to the school already!

Feedback from the students about employers was equally positive: 85 per cent said they were more enthusiastic about going on an agricultural work experience programme, and that they understood more about what the employer wanted from it.

This simple piece of hands-on research revolutionised the manner in which the school engaged with local businesses. Only a small amount of extra cash came in, but the gifts in kind increased dramatically, so it was a really successful project all round. How could this type of project be utilised in the UK? Maybe not so well in urban areas, but in rural areas I'm sure there is a huge amount of scope, as long as the schools are given details of relevant local businesses.

Lantra SSC

Feedback to government is vital in whichever country the education system is being reviewed. In New Zealand it is the Agricultural ITIO that sets the standards for the industry to work to. In the UK it is the Lantra Sector Skills Council (Lantra SSC). One thing the education system requires at whatever level is stability.

Lantra SSC was formed in 2002 after a short period as Lantra NTO (National Training Organisation), and before that a short time as an Industry Training Organisation. In the space of 12

years government has forced changes in the structure of organisations that work with employers to generate the system for educational organisations to target. These changes have, in my opinion, led to a lowering of standards for the end user; the farmer. This may not be Lantra's fault directly, but it has a major role in the process. It may not be what they do that is the issue, but the way it is presented to the industry that causes concern and that, ultimately, reflects poorly on what industry thinks of the organisation.

Funding is the major issue: there's never enough of it! There are so many initiatives coming from government that industry doesn't know what is happening – all acronyms and no substance. From Sector Learning Partners to Sector Skills Agreements to Careers Advice and Guidance, Lantra has a huge role to play. Across 17 industries from flowers to farming to forestry, the 230,000 businesses involved may be getting a deal from them, but not a really good deal.

Despite criticism from me and from industry, Lantra does do its best to recognise what the industry needs. It not only has to keep industry happy, but government too – not an easy job! One document that caught my eye was the *Draft Model for Sector Information, Advice and Guidance Service*. This document sets out Lantra's proposed delivery of information, advice and guidance service (IAG) for the benefit of the environmental and land-based sector. It has been created in line with Lantra's Recruitment, Image and Careers Strategy (RICS), and research carried out for the Sector Skills Agreement (SSA)⁸. A very top level document, it outlines what should be done – how it is going to be done will be really interesting!

Lantra SSC has also been very instrumental in the formation of the Landbased Sector 14-19 Diploma. Yet again, this is another government initiative – great in theory and at the start of the process. However, after consultation with every industry involved in UK plc, the qualification has become so watered down that it is not going to be hugely valuable in comparison to what has been in the system before.

Agricultural ITO

Agricultural ITOs (Ag ITO) in New Zealand are similar to Lantra SSC. They develop and monitor standards, facilitate and distribute funding to training providers and encourage employers to undertake on farm training. They provide about 90 percent of the apprentice training to New Zealand farmers. New Zealand has seen an element of stability, funding is flexible and the process is somewhat similar. This has allowed training providers to grow and develop a product that the industry respects and likes.

The funding mechanism has changed to allow a private training provision to be created to 'compete' with the college-based and traditional approach through Ag ITO. While industry may not be fully conversant with the difference in the process, private entrepreneurial spirit creates efficiency and energy and ultimately the customer, the farmer, benefits.

Ag ITO has a sound structure and a huge resource in people out in the field. I spent a day with Margaret Rickard, to learn and understand what she did to encourage farmers to train. Issues are very similar to those in the UK, but the Kiwis have to be even more flexible to encourage people to train, as their economy relies so heavily on agriculture, but most people in New Zealand do not realise that!

^{8 (}Lantra, Septermber 2006)

Conclusions

Marketing

We need to change the way that the industry is sold as a career option in schools. Farmland and food is all around us; the opportunities are there to make better use of the resources we have. The industry is vast, needing a wide variety of people with a wide range of skills and youngsters should be sold a dream of working in the sector not as a sector of last resort. We have to compete against other very well resourced industries; the military and motor industry for example. We have more opportunities, more energy and more ways in which a real difference can be made – so lets sell it!

Levy boards

Structural changes to the UK levy boards mean that all five boards will come under one roof in 2007. This should not reduce the proportion of funds that are given to the education of children. Farmers should be made aware of all the great work that is undertaken by the levy boards in educating their customers. The levy boards in New Zealand are extremely supportive of their education initiatives; how much do producers know about their work?

Support funding

Money is needed by all sectors, in all countries to do everything. Lots of generalisations, but money makes the education world go round. School farms are the most practical way of recruiting to the sector; equally they are the shortest of funds. Loads of work is going to mechanically put constructive courses together, but resources are needed to maximise the benefits of the courses to both the students and the industry.

Working together

So much information, so many organisations and so many opportunities. Whichever country, the resources available are huge, the number of farms offering visits and trips is vast, the number of organisations creating material is massive. Where do customers go for information? Centralising information has to be key to industry giving clear messages, resources and opportunities to the general public. No country has really managed to find that joined up approach.

The joined up approach of working together seemed like a great idea in New Zealand, but I felt there were still vested interests and a lack of trust that, unfortunately, hampered their developments. A great start and will work if the efforts are continued.

There is no doubt that to meet customer, teacher, requirements, anything that is provided by industry has to link into the national curriculum. If it doesn't then it is a waste of time, effort and money. Teachers are so hard pressed to keep lessons refreshing and stimulating to meet their targets and success rates and if they have relevant materials then these targets are more easily met. That's they way to get customer engagement.

The Year of Food and Farming has to be single most important initiative that the sector has created for many years. The timing with regard to issues of health, obesity, local product sourcing, food miles, food safety and healthy eating, among others, ensures that government, industry and individuals are working in the same direction. The skills required by the organisers will be to steer everyone in a similar direction, not only for 2007-2008, but for many years beyond.

Catch them young

Getting children involved in the industry at an early age through the fun Agrikids and Dairy kids initiatives were successful and engaging with very strong brands that could be used in other parts of the world. Similar could be said for the Windows to Dairying brand.

Technology

The John Deere University system for engaging staff in their long term development is vital to

showing the workforce of tomorrow how much time, care and effort is being made to look after their future. Is there a way that the industry can come together to offer something similar to a wider audience? Individual people development has to be vital to maintaining the workforce of tomorrow, a process that has to start at an early age.

Appendix A

Agricultural Future of America Ag Teacher's Creed

I am an agricultural educator by choice and not by chance.

I believe in American agriculture; I dedicate my life to its development and the advancement of its people.

I will strive to set before my students by my deeds and actions the highest standards of citizenship for the community, state and nation.

I will endeavour to develop professionally through study, travel and exploration.

I will not knowingly wrong my fellow teachers. I will defend them as far as honesty will permit.

I will work for the advancement of agricultural education and I will defend it in my community, state and nation.

I realize that I am a part of the public school system. I will work in harmony with school authorities and other teachers of the school.

My love for youth will spur me on to impart something from my life that will help make for each of my students a full and happy future.

National Association of Agricultural Educators Creed

Growth happens on a scale that's larger than we can imagine.

It happens in fields. It happens in people. Our goal is to use the lessons learned in one, and apply them to the other.

We are dedicated to shaping and strengthening school-based agricultural education at all levels in the United States.

Appendix B

Agricultural Future of America structure taken directly from their website

Corporate Partners

Corporate partners are organizations and foundations that annually invest in academic and leader development of college age men and women preparing for careers in agriculture. The investment made by these partners support the annual leaders conference and leverage the investments made by community partners for academic scholarships.

Community Partners

A primary identification tool of talented young people interested in agriculture careers is **AFA Community Partnership**. AFA community partners provide scholarships, intern opportunities, and leader training as young people graduate from high school and enroll in agriculture-related degree programs. In addition to community partnership, scholarships are occasionally sponsored by corporations or associations with direct relationships to colleges, universities or areas of study. A community partnership is the relationship between AFA and a community whose goal is to identify and further develop outstanding young people that have a great leaders potential and a high level of interest in a career in the agriculture industry. The partnership is meant for donors and community volunteers who understand and believe that a relationship with AFA is an investment in access to opportunities and leader training that AFA provides. This investment leads to the future leadership of the agriculture industry and, directly or indirectly, the rural community from which they came.

AFA matches local funds to present scholarships to youth pursuing a four-year degree in agriculture, provides support to the establishment of intern opportunities within the community and beyond, and provides leader training to college students in a three-track personal and professional annual conference.

Community partnerships and matching funds are currently awarded in eight mid-western states including Colorado , Illinois , Iowa , Kansas , Minnesota , Missouri , Oklahoma , and Nebraska . AFA looks forward to the possibility of providing this opportunity to more communities as matching resources are available. AFA is actively seeking additional partnerships. If you are interested in visiting with a member of the AFA staff about scholarship opportunities or creating a partnership in your community or through your business, please email your name, community/company, and phone number to AFA.

\$100,000 and over – 1 sponsor

\$50,000 - \$99,999 - 2 sponsors

\$25,000 to \$49,000 – 4 sponsors

\$10,000 to \$24,999 - 6 sponsors

\$5,000 - \$9,999 - 8 sponsors

\$2500 - \$4999 — 30 organisations

\$500 to \$2,499 – 4 organisations

Appendix C

An overview of Generation Y characteristics as found by the Kellogg School of Management and vital statistics of what the US population will look like.

Very little research has taken place in the UK.

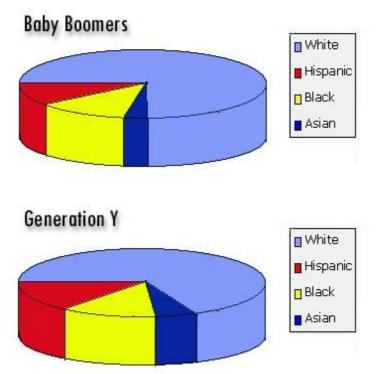


Generation Y-ers:

- are born between 1977 and 1995
- are aged 7 to 25 in 2002
- number 70 million and make up 21 percent of the population
- will exceed the number of baby boomers at their peak

The percentage of Generation Y-ers in the total population are expected to increase at twice the rate of the population until 2010, and by 2020 this percentage will have reached 32 percent.

Generation Y is an ethnically diverse generation. While minorities make up 24 percent of baby boomers, they form 34 percent of Generation Y. The two charts below illustrate the difference in ethnic make-up of the two generations:



And ethnic diversity will continue to rise among Generation Y. By 2010, Hispanics will be the largest minority group in the generation, making up 17 percent of the population.

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Embarking on a Nuffield Scholarship is a venture into the unknown in a way I haven't experienced before, even with the Young Farmers Scholarship. With out my Sponsor Ian Kenny at Nat West I wouldn't have been able to embark on this wonderful learning adventure.

To John Stones, advisor, encourager and prompter – thanks a lot for your patience.

To my previous employers – The British Agricultural and Garden Machinery Association (BAGMA) who allowed me the time to undertake the study tour.

To my hosts across the world, to everyone who gave up time to share with me their views on the way agriculture does and should engage with education. So many very special memories which will live with me forever.

And to my wife Tess who I met before I started the tour and has been a huge support and inspiration during the major changes which have engulfed me since I was awarded the scholarship.

What has happened post trip?

Almost six months after my trip life has changed a great deal. So what has happened since I returned from my scholarship?

- 1) Left full time employment after 12 years.
- 2) Got married within 6 months of getting back!
- 3) Expanded the work of the engineering industry's Careers Project.
- 4) Created the www.tractorman.biz website and have been nominated for a Farmers Weekly Farming Champion of the Year Award.
- 5) I am co-ordinating the Work Experience / Career links for the Year of Food and Farming.
- 6) Been asked to sit on the South East Region Year of Food and Farming strategy group.
- 7) Developing a range of training courses using applied psychology to help and influence the engagement of kids in the classroom.

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Index

AFA23, 24, 26, 30, 31	Human capability working group25
Agricultural Future of America23	lan Egginton-Metters15
Agricultural ITO27	lan Pigott6
Agriculture in the Classroom11	JCB24
Agrikids10	Joanne Taylor19
AgriKids4, 9, 11	Johan van Deventer14, 15
ATR Solutions10, 19	John Deere21, 22, 24
Bill Barwood23, 24, 26	John Fagen19
Buckinghamshire Education Business	John Wright14
Partnership18	Kellogg Scholarship16
CEVAS9	Landex18
CFE14	Lantra SSC26
Connexions18	LEAF9, 11
Countryside Foundation for Education14	MDC12
CountrysideLive14	Meat and Wool New Zealand5, 14, 25
DairyKids9, 10, 11	Mike Tomlinson14
Darfield High School14, 15	Milk Development Council12
David Miller5, 6	NAAE Creed30
Dean Mier22	National Association of Agricultural
Department of Primary Industries11	Educators22
Dexcel14, 19, 23, 24, 26	Nick Beeby5, 25
Diane Cannon12	Oathall15
DPI Landlearn11	OFSTED15
EMfPA21, 22	Outstanding in the Field18, 19, 25
Employee Management for Production	Peter Sheahan23, 24
Agriculture	Rex Smith15
Enterprise Education18	Robert Carter14
Estate days14	Sainsbury24
FACE7, 9, 11	Sarah Fogleman21
Farm Sunday6	School Farms Network15
Federation of City Farms and Community Gardens15	School milk campaign12
Fresh Start5	Shane Tilson10
Gavin Henderson14	Shaun Wilson10, 19
Generation Y23, 24, 32	Sheep Council14
Geoff Stubbs18	Sonja Tymms11
HR Toolkit 26	Taumarunui14, 15

Agriculture Engagement with Education – Ian Beecher Jones

TaylorEd	19	Windows to Dairying	19, 25
Tesco	24	www.jdpowerup.com.,	22
Tony Cooke	14	Year of Food and Farming	4, 10, 13
Warwick Lissaman	16		