

**School
Farms
Network**



The Living Classroom

**School Farms in the UK:
a mapping survey**

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School Farms in the UK: a mapping survey

1. Introduction

1.1 Background

This is a collaborative inquiry undertaken by a team from the Centre for the Study of Education and Training in the Educational Research Department, Lancaster University and the School Farms Network. While focusing specifically on the educational and social benefits of school farms, the issues it hopes to address concerning food sources, healthy eating and sensitising young people to food security and sustainability are also of wider relevance.

The evaluative research is focused on the practices associated with farms that are based within, or associated with school spaces. While the main focus will be on those schools that have active farming activities within school sites, it will also take account of the role of other types of learning opportunity offered to school children based on visits to working farms. The School Farms Network in the UK defines a school farm as "a teaching facility within school grounds or directly managed by a school that provides some of the following:

- Access to farm livestock
- The facilities and land needed for their up-keep, machinery, incubators or other farming equipment
- Small scale food growing or horticultural units, green houses or poly tunnels"

The interest in learning opportunities that are 'beyond the classroom' has a long history¹. It is underpinned by theories of learning that stress the way such activities (including engaging in problem solving in a wide range of 'beyond school' environments in work, volunteering and activity based experiences) enhance learning by directly engaging learners in 'active' or, in Bruner and Olson's terms 'enactive learning.'

The proposition is that involvement in these kinds of activities provides both personal and group 'cognitive momentum' (i.e. seems to aid learning by embedding 'sense making' in the semantic memory) so promoting short and longer term skill, knowledge and emotional learning. Internationally, the interest in farms based in schools has mushroomed (although throughout the 19th and 20th century, there are many examples of education policy that

¹ In a contemporary context see the work of the registered charity 'Learning Outside the Classroom' which exists to promote and champion learning outside the classroom so all children and young people can benefit from increased opportunities for high quality and varied educational experiences. The Council took over responsibility for the Learning Outside the Classroom Manifesto in April 2009. See <http://www.lotc.org.uk/>

includes a school farm element²). A particularly potent example lies in this concise statement of the potential of school farms from the Department of Education in Tasmania³, which is closely aligned with similar statements from the UK⁴. This statement argues that school farms provide advantages to their students and their local community through:

- maintaining and extending valuable educational programs for students in rural areas,
- becoming an integral component of the school's educational, enterprise and vocational related activities,
- catering for different learning needs, interests, circumstances and aspirations among the student population and the wider community,
- providing valuable links to school curricula and authentic learning environments in order to carry out extended study options in areas like ecology, biodiversity and food safety handling, expanding the post-school options for young people through successful educational programs with identifiable pathways to further education,
- training and employment and offering unique opportunities to forge closer links with other education and training providers.

The growing interest in the UK in learning which takes place beyond the classroom is suggested by the DfE sponsored website dedicated to such activities and the growing number of related case studies of analogous projects.⁵

School Farms Network in the UK⁶ outline the background to School Farms within the UK in their introductory paper, "School Farms: a vital resource". During the 20th century School Farms have ebbed and flowed in number, with some 2,500 school gardens in 1912 to a sharp decline during the 1980s to resurgence from the low point in 2006 when only 66 school farms remained. There are over 80 school farms registered with the Network as we write and others in preparation.

We argue that several factors have converged to explain this resurgence and will form the basis of some overarching propositions to be explored in the research:

1. There is a worldwide interest in sustainable futures in food production. This is in the context of both long term concerns about the distribution of food resources globally

² For an extensive review of such examples see Castles and Wustenbrg et al (full ref required)

³ See for example <http://www.education.tas.gov.au/school/educators/resources/schoolfarms>

⁴ "To enhance our children's understanding of the environment we will give every school student the opportunity to experience out-of-classroom learning in the natural environment." **Labour Party Election Manifesto 2005** "We believe that out-of-classroom learning is a key part of a good education, and will include the quality of out-of-classroom education in the criteria on which schools are inspected." **Liberal Democrat Election Manifesto 2005**

⁵ See the Growing Schools website for example <http://www.growingschools.org.uk/>

⁶ See <http://www.farmgarden.org.uk/education/school-farms-network>

and, more recently, in the way climate change might influence how and where food is produced. These concerns have been brought together under the generic term '**food security**'⁷. This growing political and social awareness has prompted a sharper focus on the need to sensitize young people to issues of food production, sourcing and distribution. School farms have the potential to provide a direct resource for this type of consciousness-raising by involving young people in the realities of producing food.

2. There is increasing understanding and interest in the way in which working in 'practice clusters' associated with wider communities (farming, food producers, other working environments) **enrich and embed learning effectively** in comparison with solely 'text based' or 'decontextualised' learning in classrooms. This is reflected in changes in the primary school curriculum and to emerging approaches to more flexibility in the secondary school curriculum.
3. There is an interest in healthy eating (Healthy Schools) as part of a brief to encourage broadly, **more healthy lifestyles**⁸. School farms can provide first hand resources for diet, food types and cooking techniques that can be integrated into school curricula.
4. The emerging practices of integrating or embedding **social and personal development** within 'general learning' processes rather than as a separate category of study, is in line with the support for emotional and social development gains often associated with working and learning with plants and animals.
5. Introduction and development of a cadre of **young knowledge workers associated with relevant disciplines**

2.0 Headline findings from the mapping survey

The purpose of these notes is to identify some preliminary findings from the survey of school farms that was designed to begin to explore these propositions. The analysis follows the structure of the original instrument (see appendix 1) and begins with a description of the schools that responded.

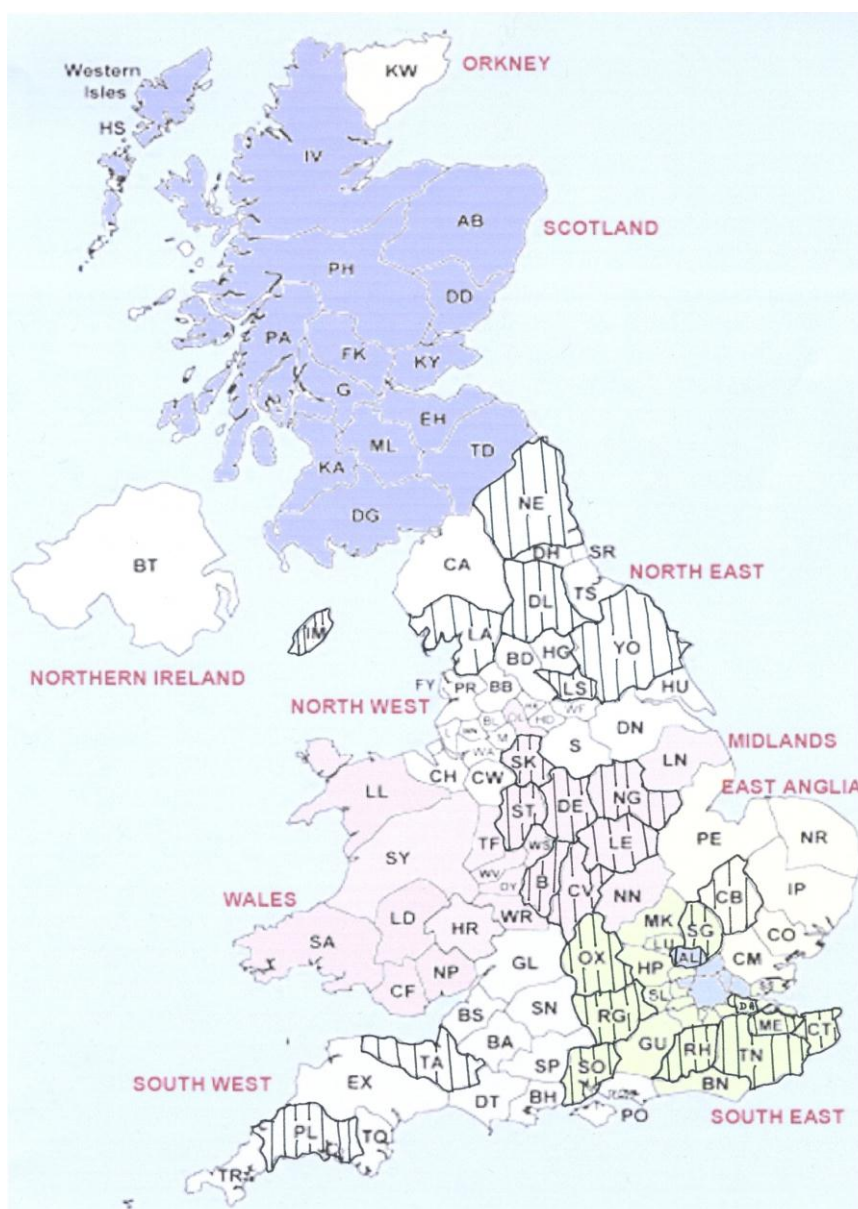
2.1 Description of the data base

The 38 schools that responded to the mapping survey are distributed geographically in the following post codes.

⁷ "Food security is as important to this country's future wellbeing, and the world's, as energy security. We need to produce more food. We need to do it sustainably. And we need to make sure what we eat safeguards our health," Hilary Benn, reported in the Guardian Newspaper, 5th January 2010.

⁸ See <http://home.healthyschools.gov.uk/>

Table 1 Location



(Revised version: add GL and W12)

The map shows the geographical spread of the those schools who have responded to the survey, however it does not show the total number of farm schools in Britain, a more comprehensive map would highlight area specific gaps in provision. Table 2 shows the range of schools that responded with the largest group falling into the state secondary category. This spread of characteristics represents a good range of experience.

Table 2 Type of School

Primary	Secondary State	Foundation or Trust	Specialist	Other
5 (13.2)	15 (39.5)	6 (15.8)	5 (13.2)	9 (23.7)

The schools are relatively evenly located between rural and urban or semi urban environments (see Table 3) although the urban/sub urban category is marginally better represented (55.2%).

Table 3 Type of community the majority of students are drawn from

Largely rural	Largely suburban	Largely urban
17 (44.7)	10 (26.3)	11 (28.9)

Over half the schools that responded had 800 or over students with the vast majority being mixed (94.7%)

Table 4 Size of school

Less than 300	301-500	501-800	801-1,001+
10 (26.3)	2 (5.3)	5 (13.2)	20 (52.6)

1 missing

Table 5 Gender

All male	All female	Mixed	No response
1 (2.6)	0	36 (94.7)	1 (2.7)

2.2 Land Use and Volume

Table 6 shows that nearly half the schools used land of between 1 and 5 hectares (47.1%) and most owned the land (approximately 80%)

Table 6 Farm size

Hectares	Owned	Long-leased	Additional rented
Less than 1	14 (36.8)	0	0
1-5	16 (42.1)	1 (2.6)	3 (7.9)
6-10	1 (2.6)	2 (5.3)	1 (2.6)
11+	2 (5.3)	1 (2.6)	4 (10.5)

Farm livestock: Small animals

All schools that responded kept chickens with an average of 23.5 per school. However, this figure does disguise some wide variations. One school, not included in this calculation, has some 400 which included both broilers and layers. This however was the exception. Three schools specialised in rare breeds. Five schools kept ducks averaging at about 9 per school. Other birds kept included a school with 20 quail, others kept some bantams, budgies, cockatiels, turkeys, peafowl and pheasants (one school in each case). 8 schools kept guinea pigs and/or rabbits (it was unclear whether these were kept as stock or as pets). Some open ended comments include:

Currently the "farm" unit is not in use as building work is about to take place. it is expected that the unit will be re-sited after work is complete

12 hens/cockerels

Hens - 35 quail - 20

Chickens Rabbits Guinea pigs Cockatiels Budgies

16 Free range Chickens

Chickens 20 rabbits 3 guinea pig 1

CHICKENS

Chickens, turkeys, geese, ducks are planned

Chickens, ducks, geese, peafowl rabbits, guinea pigs, quail budgies

20 hybrid laying hens, 4 decorative hens

30 layers Batches of 20-40 table birds through year

12 rabbits 3 chickens

Chickens 10 Ducks 6 Geese 4 Rabbits 6 Ferrets 3

Farm livestock: large animals

All but one school in the survey stated that they had some large animal livestock. 13 schools had cattle with an average herd of 23. Two of the herds (not included in this average) were substantial at 150 dairy cows on the one hand and 65 dairy and 45 beef cattle on the other. 16 of the schools had sheep with an average flock of 29 beasts. However, three of these flocks were over 50 including lambs with one school having a flock of some 100 beasts. 22 schools reported pig herds with the largest at 105 (sows, piglets and boars) with 5 schools with three or under. 13 schools had herds of around at around 12 or 13 animals. 5 schools had horses and 5 had small herds of goats and 2 had alpaca.

These numbers suggest a serious commitment to livestock with, in some cases, commercially viable numbers. Some schools reported that they regularly supplied the school catering departments with fresh meat.

For example:

We have 9 sheep 2 pigs 1 pony Herd of 150 dairy cows and associated calves, beef bullocks + a Charolais bull

On the farm we have 3 Pigs (sent to slaughter every 6 months) 2 Sheep from January to July who both have lambs at school.

4 ewes

5 goats 3 sheep

Goats: Anglo Nubian ~ 12 Sheep: Lley, Suffolk, Charolais and Leicester long wool ~ 80 Pigs: Gloucestershire Old Spot - 8 breeding sows + boar Cattle: 19 Dexter cow + bull and 3 Red Poll cows Horses: 1 Clydesdale gelding and 1 Suffolk mare, 2 donkeys.

Sheep 6 plus lambs 11 cattle 6 devons, 6 mixed breeds pigs 6, mixed breed

6 suckler cows=calves 10 to 15 fattening cattle 4 sows +1 boar. Piglets and fat pigs (numbers vary 80 to 100 per year 25 ewes + 1 ram 30lambs

7 pigs, 9 sheep

300 breeding ewes 12 sucklers 4 porkers - bought in twice a year as weaners We also look after 20-40 in-calf heifers and cows from local dairy farmer

Cattle 21 Sheep 30 Goats 1 Ponies 11 Pigs 3

2.3 Numbers and types of students involved

Table 7 Do all students in the school at some stage visit or take part in farm activities?

Yes	No	Other
26 (68.4)	10 (26.3)	2 (5.3)

Student selection criteria if used

Descriptions vary from school to school but loosely fall into the following categories. NB the categories are not mutually exclusive, for instance, students may be a member of a farm club and then chose a course or vice versa:

- Volunteers/individual interest: 6
- Formal farm club members: 7
- Course options: 6

One school teaches Agriculture and Horticulture as a compulsory subject at KS3. Another involves younger students as volunteers and then older for course work. More than one has to limit the numbers involved due to physical and supervisory capacities.

Some open ended comments include the following:

We are the only school in Britain to teach Agriculture and Horticulture as a compulsory subject at KS3. Option to take Environmental and Land Based Science as a GCSE subject at KS4

Volunteers in years 7-9 Science fieldwork years 7-11 GCSE ELBS groups Years 10-11

Selection is only used when courses are oversubscribed during the options processes to study our courses pre and post 16. CAT scores are then used.

Students visit from their own schools in class size groups as appropriate to their age and curriculum needs

Children go out to visit or feed as a class group as and when teachers have timetabled visit within their day

Children are able to access farm supervised in lesson times and animal care is organised by Animal Club which is voluntary and staffed by school staff, vet nurse and volunteers.

Interest, likely commitment and sometimes their best interest ie: if its their last chance we will give it a go.

Options at KS4 Gardening club Links with primary schools

Low ability, disaggregated from national curriculum subjects plus 2nd year 9/10 students who have shown interest in animal care club

There is an after school farm club. One class every day send a group to help teachers also use the farm with whole classes for a wide range of subjects.

Children choose as a wide range of activities are on offer

All year 9 students 1 lesson of Agriculture every fortnight but no real physical involvement in farm work opt in BTEC/DIPLOMA

Student involvement on a regular basis

The data on the numbers of students involved in school farm activities suggested wide variations in practice. Of the 38 schools who responded to this question, two schools said that all students were involved. At the other end of the scale, two schools reported involvement of between 15 and 30 students. The average number was 126. However, 6 schools reported involvement by more than 300 students. These figures are approximate but give an indication of the scale of involvement.

All students in the school have weekly agriculture lessons and also help on the farm before and after school. There are feeding duties and stockyard duties and also older students are Heads of Departments. Students all work towards vocational qualifications, previously NVQ 2 and now BTEC certificate.

30 Number limited due to staffing I cannot cope with more than 30 + animals

We have 100 members of our yfc club with 60 working before or after school on a rota basis. In addition 60 students from eight local secondary schools help on the farm on a one day per week basis

6ish twice daily

~50

Club numbers differ from year to year and throughout the year. On average 30 members help regularly but have anything from 50-100 members signed up.

750 children per week at KS3. Usually 60-80 children at KS4 per week.

students rotate responsibilities 20 students at a time

140 students are studying one or more of our Level 1 to 3 Land Based courses we offer

We have a farm club with over 40 student members and 10 adults who turn up every Thursday to help with the main clean out. The farm is run by families and the community at the weekends and holidays. We have over 50 families who take turns in looking after all the animals then.

I would guess at around 4 class groups of 30 children per day.

young farmers club-30 lessons every day on farm

65 BTEC animal care students; 75 Young farmers. All yr 7 and 8 students once a week (470 students), plus science students when doing topics on reproduction, genetics etc. We also have a two week period when all departments have to use the farm for at least 1 lesson a week.

2.4 Staffing issues

The numbers of staff with an interest in farming were clearly related to the size of the 'operation' in terms of livestock and production. The numbers involved ranged from 'none' in one case (volunteer) to 7. Seven schools had just a single interested staff member, and 7 had two interested members. Four schools had between 3 and five. Involved teachers had rural science or science backgrounds, two had a technician. Two schools said that all staff were interested in farming.

We also asked about teachers with a strong farming experience. Of the 22 responses to this question, three schools could not identify anybody with a strong farming experience, in one case, "many staff have farm connections or live on a farm". Of the rest (18), just one or two individuals were identified. Of those that responded (20), 11 had relevant qualifications. Examples of responses to this question are included below.

Head of farm trained as a teacher of rural sciences and has been a champion of the outdoor classroom and in particular a vocational approach to learning

Farm manager has a degree in Agriculture

Subject Leader BSc (Hons) Agriculture Bangor University. Two with

NVQ Level 3 Horticulture. Further Teacher is BA Geography.

a number of staff keep chickens of their own. members of staff do not have formal qualifications but have a wealth of knowledge from their own experiences

No specific Agriculture qualifications but I have a degree in Zoology and a PGCE in Science

Centre Manager also has relevant teaching & CEVAS qualification

Farm manager Assistant Farm Manager Horticulture tutor p/t

This data suggests that staff with qualifications with a specific agricultural dimension were in the minority. Ten schools were able to report staff with agriculturally related qualifications, which is about 30% of those schools that responded.

Interestingly however, it is clear from the data that schools were able to call upon a wide support from colleagues who either had an interest or felt that the farm was an asset to the school. The following responses give an indication of the range of support from technicians, TAs and others.

3 technicians

Teaching Assistant

2 Teaching Assistants responsible for feeding and cleaning out the animals and animal welfare.

All non teaching staff 3 YFC leaders who are part time stockmen + school agricultural assistant

Assistant TA

One teacher has transferred from pe undertaking RHS courses to qualify him to teach land based courses.

LSA with an interest in horticulture. Looks after animals day to day and in holidays.

The Farm Manager is a retired and has his own small farm, our Farm technician is an ex Agriculture student from the school

Support staff, TA, secretarial, site staff

We have very good LSA's who all help out on the farm. Some have taken small chicks home at weekends, some help with farm club and some have come in during lambing to help bottle feed at nights.

I look after the health and welfare of the sheep and look after them in general.

Support staff with interest and training caretaker-some training- parents-

Other teaching colleagues are involved, these may be from music, drama, etc if they are using the farm for productions etc.

one, yfc co coordinator

Have the support of one farmer (parent) and a relief office worker who has ADV dip in Agricultural and currently at Harper Adams doing degree

1 Trustee who is a farmer

1 FT technician 1 PT technician, both instruct and assess NVQ

2.5 Farming focus: production, volume and value (outputs)

A section of the questionnaire asked about the value and volume of outputs from the school farm. The range of responses suggests widely differing experience in this regard. For some schools, the produce was used within the school or sold commercially

Garden output is the common vegetables many are used in school dinners where we have days where the meat and veg are all from the college farm. Student involved in the vegetable plots then takes the vegetables home. Many bedding plants are grown and sold in college and large numbers of pot plants are used in college.

We have recently moved to a new £1M Farm and as result our finance is being adapted to suit our new resources and facilities. I can estimate that the farm generates £5,000 to 10,000 a year

Approx 63 duck eggs a week approx 84 chicken eggs a week we grow a selection of lettuce, tomatoes, peppers, chillies and other outdoor vegetables in our school plots, these are sold when ripe during the summer and autumn term.

Horticulture and farm output small with produce sold to the 40 staff at school or used in the school kitchens

Vegetables sold within school for donation. Money made goes towards general ELBS costs.

Of the remaining schools that responded to this question (One sent an annual report) nine did not consider the output significant enough to identify.

Sorry - not yet done. We started with animals 7 years ago and have only recently started to improve the growing area.

Too small for this at the moment

we don't have a report

Will send a copy of our Annual Accounts

All the produce from the Victorian Walled Garden, fruit garden, glasshouses is used in the school kitchen to teach and promote sustainable food production.

None

Currently no internal output report required for the education aspects of the farm

None

We don't as a rule do this in primary but rather produce a balance sheet and report

The livestock output was rather more extensive with data from 19 of the 34 schools who responded to the questionnaire overall. Three schools did not identify any output. Of the remaining 16 schools, the output from different sources followed the pattern below. The scope of the farming operation ranging from the sale of eggs that self financed the poultry to a turnover of £50,000

Normally 2 to 4 lambs slaughtered each year and approx 12 pigs. Children help weigh and sell the joints and sausages.

Sale of eggs keeps the poultry

Each year 4 Aberdeen Angus cattle 20 Hogs at least 10 pigs are reared and sold as meat in the college. Chickens produce eggs which are sold each week approx 5 dozen.

Children monitor number of eggs produced as part of their cross curricular work.

Producing 60 lambs, 120 pork pigs, 3 sows for sausage, 8 ewes for mutton burgers. 200 doz eggs

80 pigs for slaughter 20 Turkeys

pigs for pork (40-50 per anum) 20 lambs some for breeding some for meat

Approx. 40 pigs for ham/sausage/pork used in the school canteen 50'ish lambs sold for slaughter although some are to retained this year for school consumption. Beef cattle sold as stores for further feeding or breeding. Free range eggs used daily in the school kitchen.

Eggs sold within school. Money goes towards general ELBS costs.

3 pigs at a time are reared. the first lot have just gone for slaughter and the next lot arrived.

We have a suckler herd of 15 pedigree Red Devon Cattle (6/8 calves a year), we lamb 50 sheep, will have 3 to 4 litters of piglets each year and rear 50 turkeys

6 pigs a year 2 lambs a year

Fat pigs to market between 40 and 60. Pigs for home reared pork/sausages approx 20/30, this depends upon demand Lambs 20 to 30 to market or for home kill meat. Beef cattle varies according to year, usually 10/12, trying to do one home kill animal each month

Meat and eggs sold as donations to staff 4 pigs pa 20 lambs 3 cattle

Turn over approx £50,000pa

2.6 Accreditation and qualifications

Over half the schools offered nationally recognised qualifications to students (see Table 8), with approximately the same proportion offering non formal awards (see Table 9).

Table 8 Are there any nationally recognised qualifications to do with farming granted at the end of the course?

Yes	No	No response
21 (55.3)	14 (36.8)	3 (7.9)

Formal qualifications included the following types from the 12 schools that responded to the open ended question

Land based not taught at the moment BTEC starting sept2010

GCSE land and environmental science

GCSE env and land-based science a level env studies

GCSE ELBS

ELBS GCSE used to do a level 1 certificate in land based studies considering level 3 ELBS diploma

OCR GCSE ELBS

We currently use the farm to support our national curriculum subjects but look towards accredited qualifications

ELBS GCSE

AQA certificates

OCR GCSE ELBS

OCR environment and land based science GCSE

ELBS GCSE

In terms of future intentions, Table 9a shows that 10 schools were intending to offer BTEC 1st Certificate opportunities to their students in 2011.

Table 9 What qualifications, if any, do you anticipate delivering in 2011?

<i>BTEC First certificate</i>	10 (29.4)
<i>BTEC National</i>	2 (5.9)
<i>Edexcel Level 3 BTEC National Diploma in Agriculture</i>	0
<i>City & Guilds</i>	1 (2.9)
<i>NVQ (lower level)</i>	2 (5.9)
<i>NVQ (higher level)</i>	0
<i>Other qualifications not listed including Agriculture and Environment</i>	19 responses

Other responses include:- AQA, ELB Diploma, GCSE and GCE, A Levels, Apprenticeships, BTEC Diplomas.

Table 9a Do you offer any non-formal rewards or recognitions of learning?

Yes	No	No response
21 (55.3)	14 (36.8)	3 (7.9)

The informal awards were also extensive. Of the 22 responses to the open ended question, 8 schools included merit or reward activity for work on the school farm. Of the rest, internal school awards were given to students for the effort they put into school farm work. With 7 awarding recognition of skills and knowledge associated with farming.

We have offered merit and distinction certificates for lads who have done better than the basic Pass which NVQ offer.

School Farm awards are giving out each year at Speech Day along with other achievement awards.

School + YFC certificates for trainings

Certificates and prizes

Annual farm awards evening with certification, cups and trophies

In house certificates for practical skills

Various in house community awards

Students taking responsibilities are rewarded as well as a number of PSHCE skills developed through our farm

All of Year 9 attend lessons at the Farm as part of Science lessons and receive a certificate at the end of this time

Internal school awards

Certificate of attendance for the class

We have 2 young farmers of the year. We have tried to join the national young farmers association but we have contacted them 3 times and they have never got back to us.

Animal awards for children who care for the animals over the year....also star of the week for the best child on Animal care-

Reward system in school farm occasionally produces in house certificates to individual need

Students use the farm and animal care unit to carry out Duke of Edinburgh activities

Students take produce home to share with their family

Junior first aid

Own certificates

AQA Units for completion of tasks

2.7 Cross curricular uses of the school farm

We asked schools to identify other types of curricular or educational use of the school farm beyond activities associated with certification. This question yielded some interesting and varied responses including activity across the whole curriculum. Of the 31 open ended responses to this question, 11 identified its use in the arts and humanities (with three schools identifying drama and music), 10 schools identified its use with science, 7 explicitly with maths. Its therapeutic qualities were identified by 2 schools and several schools identified PSHE and citizenship objectives that school farms helped to achieve. Several schools identified the 'sensitising' possibilities the school farm offered in areas associated with healthy eating, cooking and wild life although these areas were not as represented as they might be. However, the richness of this array of uses suggests the range and scope of the educational value of school farms. Because of the richness of the responses we have reproduced them in full below.

It can be used in English and Maths sometimes as well as Science on occasions but not consistently.

Part of the schools inclusion policy

Used by TAs during PPA time. Voluntary farm club after school. Outdoor teaching areas on Farm used for teaching art, English, Numeracy, Citizenship and others.

Special needs Art

School farm produces plants for around the school site which has very positive effect on students. Our ground are also maintained to a very high standard and students do respect the gardens and they are a delight all year round.

Cross curricular links with science RE art history

No qualifications, used as part of our PSHE work with children who have BESD

Farm is used as a major resource and links to all areas of the curriculum where it is written into schemes of work

Work related functional skills. Lit/Numeracy/ Business studies/ PSD

All students in KS 3 do 1 lesson per week. Supports science curriculum. Team work. areas include

We have not yet worked out the other curriculum links, will do it when we get the time.

Farm used in various Science classes, by local schools/nurseries and for enrichment purposes in a number of curricula areas

Pond/ conservation area used by Science Stem club/ Eco committee use the farm and garden to teach Sustainability Community links-Renewable Ripley Open Day last September. Citizenship/Community Cohesion-Presentation at Transition City Lancaster Launch

ASDAN groups within the school, science and geography fieldwork.

Responsibility, care, all curricular areas from the national curriculum, enterprise, budgets

The Farm is used by Maths, Science, Design and Technology, History and Languages in order to enrich their lessons and learning. Further cross curricular links are being developed

Mainly work related learning and therapeutic uses

*Farming is an integral part of our outdoor learning curriculum. every class has a farm duty day and all areas of the curriculum are taught using the farm. Our last OFSTED report mentioned the farm the link is :
[http://www.ofsted.gov.uk/oxedu_reports/display/\(id\)/119249](http://www.ofsted.gov.uk/oxedu_reports/display/(id)/119249)*

The farm is used well and very significantly and as a leading sustainable school we use the farm deeply in our curriculum through science,PSE,visits from schools ,playgroups ,universities and leading head teachers

Year 7 ICT course assessed via project based around farm. Year 9 maths do pre-GCSE practices data collection and presentation exercise. English use for creative writing. Year 8 Science some of topics taught in applied manner on farm i.e.:

ultrasound, levers, genetics etc. Year 10 science - disease vectors, signs and treatment + prevention Art use farm resources throughout.

Year 7 lessons, science lessons, DT lessons

As above, all departments use the farm over a 2 week period in their subjects. Used for drama and music productions, art lessons, science lessons throughout the year

Promote student integration into the school during transition from Key stage 2 to key stage 3. Year 6 students visit the area to grow produce over a period of weeks. At the end they harvest their crops and cook a meal for their teachers Gardening club at lunchtime for all students who wish to take part students with behaviour related issues have time out of lessons to build resources such as bird boxes and benches for the college to improve communication and team work. Art classes visit the area to draw the growing area and animals Lettuce grown in the summer is provided to the kitchen free of charge to promote healthy eating.

Wildlife area used in the science curriculum (the environment). Animal care centre also used in science (adaptations, classification)

Maths calculating areas, growth rates, costing, art and drawing animals, ict using collected data

It is used to support our curriculum throughout. Including economic awareness, Art, ICT, Science, Literacy and Maths

Part of school specialist college status Science, Humanities with the rural dimension

The farm provides opportunities for students on a therapeutic level, and offers an enormous amount of learning opportunities to meet their potential in adult life

Have bees used in ks3 lessons and as part of activity weeks

Art history Geography Science Media Technology

Art, Food tech, Canteen (we won Cotswold Life Magazine Best School Food award 2010)

In biology and geography, occasionally art and technology , school and area cross country course

it is encouraged that every curriculum uses our farm

Used by Biology, Geography and Art departments for outside the classroom teaching.

2.8 Other agencies and support structures

Tables 10 and 11 suggest the wider community involvement school farms generate with approximately 70% of the schools in the survey offering opportunities to the wider community, 50% to

pre-school children and 50% for children with special educational needs. Importantly, while the facilities of the school farm appear to be well used, the users do not in general defray any of the costs with only 5% providing some financial support (see Table 12)

Table 10 Do you offer the farm facilities to other schools or agencies, e.g. ASDAN (for learning difficulties)

Yes	No	No response
27 (71.1)	9 (23.7)	2 (5.2)

Table 11 If you answered Yes to Q19 please indicate all the groups who benefit from the use of the farm

Other schools	Toddler groups	Children with learning difficulties	College/university placements
27 (71.1)	18 (47.4)	20 (52.6)	14 (36.8)

Table 12 Do you receive any funds from those others who use the farm facilities?

Yes	No	No response
2 (5.3)	31 (81.6)	5 (3.1)

An indication of this wider use of the school farm is offered below in the words of the respondents themselves.

The local special school come twice a week to take part in farm activities.

Attached pre-school visit at least once a week. children at our school with special needs make extra visits (e.g. one child with severe autism). other inner city schools from Plymouth have visited. volunteer groups with adults with learning difficulties come and voluntary work.

This is the main use of the new teaching facility. i am supposed to have at least 160 days of school visits per year

We have some local schools that use our farm every year for one of their visits. we work with Leicester university on their outdoor learning week where we are part of their curriculum. we have visits from a local secondary school speech and language unit which has children with autism in it. we also have a preschool on site who visit the farm every week.

Clubs ie: scouting movement

We have regular visits form primary schools ,especially the schools I work with in my role as an AST in rural and outdoor education. Nursery groups also visit. we also

have many requests around lambing time in march

Feeder primary schools visit the area during transisition.

Used by some feeder schools each week as an incentive. Irregularly by pre-school group.

Work experience for 15 yr olds and up. school with fewer facilities to deliver similar co

2.9 Decision making frameworks

Of interest is that under 1 in 3 schools engaged students in the decision making processes concerning what happened on the school farm (see Table 14). In terms of the link with citizenship and PSHE, this area may have scope for more development.

Table 14 Who makes most of the major decisions concerning the farm?

<i>A committee made up of staff directly involved</i>	15 (39.5)
<i>One person has overall responsibility, e.g. the Head or the main teacher</i>	22 (57.9)
<i>Steering group (e.g. made up of governors, teachers or parents)</i>	5 (13.2)
<i>Selected students help in the decision making process</i>	11 (28.9)
<i>Other</i>	12 responses

2.10 Land management: concerns or challenges

Of the 34 open ended responses to this question, 13 cited issues associated with land, mainly not near enough or not sufficient.

There is a likely situation where EDF will be taking some of the land and thereby making the farm not viable. We would love to have more money to update some buildings and expand the farm but that does not look at all likely.

Availability of more land locally

Many at the moment Sports College so very little grazing on site New ELBS classroom to be built soon with BSF

We do not have enough land and use every bit we have.

If we were to return to having larger animals we would need more space but as we are in a rural location research suggests this is possible

Funding

Not enough land

Need more land , we are only using an old walled garden and a small piece of woodland alongside it.

Difficult decisions as it is very much part of the school site

We are currently looking to develop the horticultural side of our farm and have just submitted planning permission for 5 poly tunnels

We have been lucky enough to secure all that we need (at the minute!)

*We need additional funding and more land to improve learning experience
Short term lease on the orchard we use - needs to be renegotiated for a longer time period*

The buildings and classrooms have been hugely neglected over the past 20 years. There is the occasional rumour of the county selling the land - the forthcoming cutbacks may hasten this decision

we need funding for an eco shed so volunteers and local community members can use toilets and have coffee making facilities

We have very old buildings which are now unsuitable for the livestock we rear. We also lack an appropriate teaching space.

The other main category of concern was with the development of the buildings and plant to more appropriately address learning needs.

New Nitrate Sensitive Area restrictions will affect use of some of the land, feasibility of retaining the dairy herd. Biggest challenge is the lack of funds available to schools for offsite teaching

Suitability of buildings is an issue especially for raising young lambs which we can't do. We have sufficient space but insufficient funds to provide power and such like to new barns. Currently we renovate old British railway carriages.

Struggling with red tape and bureaucracy to get new rural teaching centre built - can now see light at end of tunnel

Our buildings are in some cases very old and need updating. Land management especially of grassland is difficult as we have to rely on contractors coming in to fertilise, spray contractors, top . This means it cannot be done at the ideal time. Also grassland is not resown due to cost. When we could fund our own tractor in the past it was easier.

We would ideally require an outdoor teaching facility or a classroom suitable for

land based studies. We currently are attached to science so most of the work on the walls is scientific. I think students would benefit more from having their own distinct space to work in and feel comfortable in rather than feeling like their lesson imposes on another subject.

Buildings very old and tired and in need of drastic upgrade (they are mobiles about 45 years old!)

Rundown buildings were an obstacle - now being rebuilt. expert staff time

2.11 The Benefits of having a farm.

This section of the report are structured around open ended questions of a general nature in which we have analysed responses categorically according to the emphasis on one or more of the following categories. We have used quotes from the responses to illustrate the categories.

Positively informing and influencing the culture of learning and inclusion within the school:

There were references to learners engaging, being motivated, building confidence and self esteem, raising aspirations and achievement and achieving personal and accredited success were typical. Potential vocational learning pathways were also highlighted.

“The farm is seen as an asset by most students, a centre of vocational excellence and a fantastic link from field to fork. Students remain in education and progress as individuals as a result of their experiences on the farm. The farm enhances and enriches most curricular areas and can give students responsibility beyond their years. The farm has a very positive effect.”

Recognising the potential of school farms to use features listed (above) to address the needs of particular students:

These students include those with Special Educational Needs, disaffected learners and students who struggled with more academic work. It was also clear, however, that School Farms were seen, as indicated in A, as having high value and relevance for all learners, rather than being primarily an optional curriculum for less able or less engaged students.

“Although small, it projects a certain ethos to the school which extends beyond immediate users. At break times it provides a sanctuary for a number of students

that have social difficulties within the main school environment. It is also used for students who for various reasons might otherwise be excluded.”

“All our children are on the lower end of the autistic spectrum and have complex needs. Animals and the environment enhance the children’s lives on a therapeutic level and provide learning opportunities that cannot be learnt in a classroom.”

Contributing to community cohesion:

This category included links to parents, families and local organisations such as Young Farmers clubs helped to foster and sustain authentic involvement with the schools’ communities.

“It is integral to the school life since all students are given the opportunity to use it. It provides students with the opportunity to complete different courses, be a member of the YFC which encourages team work, making decisions for themselves and the unit through their own committee. Those completing the BTEC course excel and the girls in 2007 gained the best results in the country in the Good Schools Guide. The farm is also used for community events. In March each year we have a lambing day which attracts between 3000 to 6000 people, this being organised by the YFC and staff. Every school should have a farm unit as the benefits to students, the school and local community are vast.”

Engaging in a practical way with exploration of the local, regional and global food sustainability agenda:

“Very difficult to quantify but generally agreed that it contributes massively to the social, spiritual and academic well being of many children. It does give the children a more comprehensive understanding and appreciation of the choices they may make as consumers of the future. It provides the most amazing focus to teach the children the importance of sustainable food production for their future. The KS3 curriculum we have developed makes this possible.”

“As a school for students with moderate learning difficulties it allows them to develop life and work skills. To become more aware of the world and environmental/sustainability issues.”

Enhancing the environment for learning through the use of outdoor learning spaces:

“(The farm) has promoted a respect for animals and litter dropping has been reduced, especially around the animal areas. The experiences provided for many students could not be provided in a classroom environment and due to the cost could not be delivered as frequently by off site experts. I teach some students in the Agriculture group and in Science which is an academic course. I see a difference in

those students. Where they are learning in an applied fashion they work independently and as part of a team, whereas they find desk work more difficult and sometimes demoralising. All students should feel that they can achieve.”

2.12 The Disadvantages of having a farm.

Despite some of the challenges facing school farms 9 out of 26 respondents who replied that there were “None” disadvantages.

Responses included an emphasis on one or more of the following categories.

The additional time staff and other volunteers gave to ensure that animals were cared for throughout the year. It was, however, recognised by several respondents that staff enthusiasm and commitment ensured that cover was usually possible to arrange. Other respondents noted the difficulty of ensuring cover.

Looking after animals during weekends and holidays. Lots of work over the summer months when school empty. Budget!! Lots of money spent from the science budget.

The difficulty of securing additional funding and resources for a curriculum area whose value which may be not fully understood by councils and DFE was a particular concern in the current climate of encroaching austerity.

It is very expensive and the results are not always easily quantifiable and therefore what anyone in the school can see is a very good resource, those from outside looking in would not necessarily see that. There is constant pressure to produce results in line with other schools to fulfil government targets.

The time consuming nature of meeting health and safety requirements relating to School Farms were also identified

Very costly in terms of staffing in particular and health and safety issues can be a problem.

The constant pressure to ensure the effective balancing of priorities so that the School Farms are led and managed successfully whilst contributing appropriately to the effective meeting of learners’ curriculum targets.

Takes a huge amount of time. When you get to our size (48ha), it is a real balancing act to make sure there is enough farming to resource the curriculum needs but that it doesn't take over so that you don't actually have enough time left to deliver the curriculum.

2.13 Future Aspirations

Respondents included an emphasis on one or more of the following categories.

Developing facilities and/or extending provision to include additional accredited courses.

To continue to grow the usage of the farm on a daily basis. To improve the growing area on the farm by installing a poly-tunnel and allotments.

Hope to expand and develop vocational courses run on farm and I would personally like to see the ELBS diploma offered to students of all abilities and aspirations.

Developing a commercial arm which provided - although not usually explicitly stated – opportunities for Enterprise Learning and additional revenue streams.

We hope to open a farm shop in the very near future with facilities for local small holders to cut their own carcasses and to make sausage and burgers. We are building a new eco building with pressed earth walls and a living roof.

Wildlife and sensory garden: outdoor area covered with raised beds for horticulture; to extend our facilities to partner up with polytunnel and greenhouse; to start an enterprise of a farm shop.

- 1. Establish a regular production cycle with the pigs and do the processing of the carcasses ourselves.*
- 2. Improve the poultry flock to include some rare breeds.*
- 3. Expand and improve the allotments and make full use of the polytunnel.*
- 4. Build an ELBS lab specifically designed to deliver the course.*
- 5. Establish our new orchard and include grafting and growing cordons, espaliers etc.*
- 6. Fence a paddock and stock with sheep/cattle in alternate years.*

Succession planning, both as an individual school and on a profession-wide basis.

We are the only provider in the country (as far as we know) that are training teachers of land based studies to QTS. This will be built on and developed further in order to produce the staff required to teach in this vital area of education. Our courses will continue to develop as will our community and cross curricular links.

My future aspirations are to train up and develop my replacement as I am going to retire in 18 months time.

Contributing to local, regional and national educational policy and practice relating to sustainable development.

Further develop the KS3 curriculum to teach Sustainability. Develop/deliver level 3 diploma. Share experience with other schools/developing school farms. Promote teaching of sustainable food production nationally.

Securing funding to sustain existing work and support the aspirations outlined above.

To find the funding to keep the school farm open and broaden the range of courses/age ranges covered by visits.

To be a working farm for small livestock and to be able to fund a farm manager, other staff, offer qualifications and offer such placements from 'the comps'(local secondary schools?) for such an enterprise.

2.14 Finally

Respondents were asked if they had any other points they wanted to make. They included an emphasis on one or more of the following categories which showed significant overlaps with responses to the open ended comments above.

Recognising the value both of individual school farms and also of being part of the School Farms network.

The network is a sense of strength to individuals who are currently working alone. An opportunity to share best practice and to learn from each other's mistakes.

Anxiety about the demands of dealing with the bureaucracy relating to funding applications and health and safety.

Health and safety is becoming much more paper based and will become quite onerous. Could some computer program be developed or online program help in the production of risk assessments?

Provide access to funding opportunities that do not require you to spend many hours of form filling to make a bid.

Enthusiasm for sharing existing practice, both within and beyond the network.

I am the current chairman of the School Farms Network and am a national lead practitioner for the SSAT rural dimension. We are very proud of our large school farm and regularly help others to develop their own. I was involved in writing the 'Get Your Hands Dirty' resource and fully support the future development of school farms. Please come and visit us!

Suggestions for future priorities within the network.

*A central forum for the sharing of resources, posting of questions, discussion.”
“The increase in CPD courses is an excellent idea. More involvement with initial teacher training as well as land based student training?*

We are no longer a large school farm, rather a small animal care unit with an environmental studies area. The School Farms Network still provides us with useful information e.g. recent e-coli outbreak. I would like to see the following information clearly passed on in the magazine: 1. changes in law related to keeping animals 2. case studies of successful units 3. Grant availability 4. Enterprise suggestions for raising money 5. Practical tips on animal welfare. Perhaps more detailed articles on practical animal care/ horticulture

Pleas for further recognition for schools with specific circumstances.

We are in the extreme south west (Cornwall) and as a primary school do not have funding to attend meetings which are always a long way away. Maybe a sub division of primary school farms (if there are enough) could be formed and funding raised to help them get together and share ideas?” “To be granted specialist status for the rural dimension which currently prejudices our primary school as we cannot acquire such status?

3.0 Conclusion

We suggest at the outset of this report that there were five important ways in which school farms might make a significant contribution to both educational and social development (see pages 3 and 4 for the five propositions).

In terms of our first proposition that there is a worldwide interest in sustainable futures in food production, school farms show they have the potential to provide a direct resource for this type of consciousness-raising by involving young people in the realities of producing food. We contend that the evidence in this report demonstrates the way in which school farms might contribute to awareness raising concerning food security by its cross curricular potential and direct interaction with food production

Secondly, the data presented here suggest the way in which wider communities (farming, food producers, other working environments) enrich and embed learning effectively across the curriculum and in those areas which are directly associated with agriculture

Thirdly, it demonstrates the way in which school farms promote healthy eating (Healthy Schools) as part of a brief to encourage broadly, more healthy lifestyles. School farms provide first hand resources for diet, food types and cooking techniques that are integrated into school curricula.

Fourth, the qualitative accounts provide strong evidence of the way in which school farms can enable the integration and embedding of social and personal development within 'general learning' processes. The data suggests the way emotional and social development gains are made with working and learning with plants and animals.

Finally, the range of formal and informal qualifications suggest the way school farms contribute to a cadre of young knowledge workers associated with relevant disciplines to issues associated with food production and related disciplines.

Appendix: 1

the questionnaire

**Centre for the Study of Education and Training
Lancaster University**

School Farms in the UK: practice and development

Section 1:

Q1 **Name of School**

Q2 **Post code**

Q3 **Type of school**

- ☐ *Primary State*
 - ☐ *Secondary State*
 - ☐ *Community*
 - ☐ *Foundation or Trust*
 - ☐ *Voluntary-aided/ Voluntary-controlled*
 - ☐ *Specialist*
 - ☐ *Academy*
 - ☐ *City Technology Colleges*
 - ☐ *Community and foundation special*
 - ☐ *Faith*
 - ☐ *Grammar*
 - ☐ *Maintained boarding*
 - ☐ *Independent*
- Other, please specify*

Q4 **Type of community the majority of students are drawn from**

- ☐ *largely rural*
- ☐ *largely suburban*
- ☐ *largely urban*

Q5 **Size of school**

- ☐ *<300*
- ☐ *301-500*
- ☐ *501-800*
- ☐ *801-1,001+*

Q6 **Gender of students**

- ☐ *all male*
- ☐ *all female*
- ☐ *mixed*

Q7 **Age range of students involved. Please check all age groups that apply**

- ☐ *pre-school*
- ☐ *4-7*

- ☐ 7-11
☐ 11-16
☐ 16+

Land use and volume

Q8 Farm size: is the farm owned by the school or has a long lease, and do you rent additional land?

	<i>Owned</i>	<i>Long-leased</i>	<i>Additional rented</i>
<1 hectare	☐	☐	☐
1-5 hectares	☐	☐	☐
6-10 hectares	☐	☐	☐
11+ hectares	☐	☐	☐

Where possible, please can you supply us with either a site plan or an aerial photo of the school showing the location of farm buildings and land grazed and cultivated. Please indicate in the box which method you have used.

Q9 Farm livestock, types and numbers

Small livestock (e.g. chickens, ducks etc) _____

Large livestock (e.g. cows, goats etc) _____

Numbers and types of students involved

Q10 Do all students in the school at some stage visit or take part in farm activities?

- ☐ Yes
☐ No

Q11 If the students are selected, what criteria are used to select them?

Q12 How many students are involved on a regular basis?

Role of staff

Q13 Please give a brief description of the teaching personnel and curricular methods used

Teachers with an interest in farming _____

Teachers with strong farming experience _____

Teachers with relevant qualifications _____

Other relevant teaching personnel not listed... _____

Farming focus: production, volume and value

Q14 Most school farms produce an internal report each year on their farming outputs. *If you have a recent report and are willing to share it with us, please send a copy to the address at the end of the questionnaire.* If not, please can list the full range of outputs and approximate quantities.

Agricultural output

Livestock output

Section 2:

Accreditation and qualifications

Q15 Are there any nationally recognised qualifications to do with farming granted at the end of the course?

- ☐ yes
☐ no

Q16 If Yes to the above question, please can give the Course titles that go with each qualification

BTEC First certificate

BTEC National

Edexcel Level 3 BTEC National Diploma in Agriculture

City & Guilds

NVQ (lower level)

NVQ (higher level)

ELBS Diploma

Other Qualifications and Course titles not listed, including Agriculture and Environment.

Q17 Do you offer any non-formal rewards or recognitions of learning?

- ☐ Yes
☐ No

If Yes, please describe

Other curricula uses

Q18 Please describe how the farm is used in the curriculum in addition to delivering qualifications

Other agencies and support structures

Q19 Do you offer the farm facilities to other schools or agencies, e.g. ASDAN (for learning difficulties)

☐ Yes

☐ No

Q20 If you answered Yes to Q19 please indicate which groups benefit from the use of the farm

☐ other schools

☐ toddler groups

☐ children with learning difficulties

☐ college/university placements

Other, please explain and if necessary expand on your answers

Q21 Do you receive any funds from those 'others' who use the farm facilities?

☐ Yes

☐ No

Future plans

Q22 What qualifications, if any, do you anticipate delivering in 2011?

☐ BTEC First certificate

☐ BTEC National

☐ Edexcel Level 3 BTEC National Diploma in Agriculture

☐ City & Guilds

☐ NVQ (lower level)

☐ NVQ (higher level)

Other qualifications not listed including Agriculture and Environment. Please state

Decision making frameworks

Q23 Who makes most of the major decisions concerning the farm? *Please check all that apply.*

☐ A committee made up of staff directly involved

☐ One person has overall responsibility, e.g. the Head or the main teacher

☐ Steering group (e.g. made up of governors, teachers or parents)

☐ Selected students help in the decision making process

Other, please specify

Q24 Land management: please can you let us know about any concerns or challenges you have about the availability of land, the suitability of buildings etc that might be limiting your ability to make the farm learning experience available to more students?

Q25 Briefly, please give us your opinion of the benefits, material, academic and social, of having a small farm associated with the school

Q26 Briefly, please give us your opinion of the disadvantages, if any, material, academic and social, of having a small farm associated with the school

Q27 What are your future aspirations, both small and large, for the next three years?

Q28 Finally, do you have anything else you would like to share about your school farm, or what you would like to see the School Farms Network deliver?

Please send any accompanying documents, i.e. annual report, site map and any other supporting literature you might wish to add to:-

Dr. Murray Saunders, CSET, Educational Research, Lancaster University, Lancaster LA1 4YL

***NOW please click on the Submit button to send us your responses.
Thank you***