

A CURRICULUM FOR FOOD, FARMING AND THE COUNTRYSIDE?

STAKEHOLDER SURVEY CARRIED OUT BY FARMING AND COUNTRYSIDE EDUCATION,
QUARTER 1 2017

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2. EXECUTIVE SUMMARY

2.1. BACKGROUND AND PURPOSE

In this study, Farming and Countryside Education carried out a survey, the aim of which was to invite individuals with a vested interest in food, farming and the countryside to describe their ideal 'curriculum' for schools – a 'wishlist' for the next generation.

Supposing that anything were possible (and a great deal is, given the breadth of subjects and teaching that takes place in our schools), we wanted to know what the farming and food production community believed were the critical knowledge, experiences and skills for each young person to acquire, given the need for:

- Improved connectedness with nature
- Consumers who can make informed choices
- Greater empathy between the public and UK farming
- Motivated and skilled entrants to careers in food and farming

It recognises that curriculum is a broad term, not necessarily applying to one or more National Curriculum specifications, but encompassing the totality of what children learn in their time at school.

Sitting in the nexus between agriculture and education, Farming and Countryside Education has led or participated in other research to identify such things as:

- Children's actual knowledge or experiences relating to food, farming and the countryside
- Mapping curriculum frameworks (e.g. GCSE specifications) to food and farming
- Identifying gaps in support for teachers and resources for teaching
- Labour market, careers and talent supply and demand
- Teachers' awareness, motivation and ability, in respect of teaching about/through farming and the countryside

This study was part of an ongoing listening exercise, testing the temperature of the industry, and understanding the needs and desires of one of FACE's key stakeholder groups. The findings of the research will be combined with insights and evidence from other research to inform our own work and the educational engagement of the wider farming industry. This will ensure that our work is relevant and of value to education, to farming and to society as a whole.

We asked respondents to identify themselves by occupation and the era in which they left school education. We then asked them to list separately the knowledge, experiences and skills which they would like young people to acquire, first at primary level education and then at secondary. We also asked them to tell us about exciting new developments in farming which they are keen to communicate as well as common misunderstandings, controversial issues and barriers to effective engagement with schools.

2.2. SUMMARY OF FINDINGS

The survey demonstrated that overwhelmingly, the basics of *where food comes from* and *witnessing farming at first hand* are not considered sufficiently understood and are a high priority for a range of stakeholder groups. The farming industry is concerned that young people should have hands-on experiences of growing/rearing and be able to see food production at scale.

Across all groups, respondents broadly saw the purpose of primary education to capture hearts and minds through experiences and knowledge and basic practical skills. At secondary, a much more detailed list of expectations emerged, recognising that young people are becoming active citizens and consumers and will also be starting to choose career paths.

Among the high-level findings, there were not too many surprises, though it was useful to confirm what we suspect to be the priorities and to recognise that while there is a lot of overlap, the relative priorities of different stakeholder groups are in many cases quite divergent.

What the survey has particularly highlighted is the different ‘perception filters’ that stakeholder groups experience.

The industry is keen to present the technical and scientific advances in food production, while at the same time feeling hampered by the media and public opinion. Meanwhile, those in teaching occupations were more likely to observe that a rise in public interest is in fact making it easier to communicate agriculture to young people.

People working in agriculture are considerably more concerned about the health and safety of young learners, than are those working in education who seem to be more relaxed about it. Farming representatives are also far more interested in the health benefits of food and farm-based education and are more keen to link farming with practical cooking and nutrition.

Farmers were particularly concerned about TB and badger culling as a controversial issue, while this did not register at all among those in education occupations. At the top of the list of controversial issues which are taxing all stakeholder groups are *Meat production, slaughter and animal welfare* and *Economics of farming including subsidies*, which probably reflect the contemporary level of public and media attention on both of these.

The language of the responses was also enlightening. Predominantly, people representing farming were enthusiastic about *telling* young people about farming and implied there is a canon of facts to be conveyed. Those representing education were more likely to describe the learning process in terms of questioning, critiquing and discovering.

All groups recognised that farming and food supply is global, complex, and deeply entwined with wider economic, societal and scientific issues. This complexity was seen both an opportunity and a hindrance.

3. DATA COLLECTION AND HANDLING

The survey was open for two months in February and March 2017. Responses were invited from anyone with a vested interest in the food and farming sectors. The invitation was widely circulated by FACE and by its partners including AHDB, NFU, Landex, Agri-Food Charities Partnership and the National Land Based College.

While the invitation was targeted to these networks, nobody was excluded from responding. We captured background information so that the data could also be analysed according to gender, employment status, age at which the respondent left secondary education, work role, and whether they are living/working inside or outside the UK.

101 people responded to the survey, of whom approximately one third have an agricultural occupation, one third educational and one third other occupation groups. Over half of them left secondary school between 1971-1990.

The questionnaire is replicated in Appendix A.

The majority of questions invited free form text answers to enable the richest possible responses. Most questions offered the possibility of giving up to five short text answers, which ensured that responses were short and specific enough to code easily and indicated that we were looking for multiple ideas.

Not every participant gave 5 answers to every question and there was a notable reduction in the number of responses per person towards the end of the survey. Participants were not asked to rank their responses, though the response fields were numbered 1-5, and it is clear from the data that popular issues tended to be 'top of mind' and therefore were more likely to feature in the first or second response.

All text responses were coded using a taxonomy that was developed after all the responses had been received and inspected. This was an iterative process, requiring several 'passes' of the data until the codes were meaningful, representative and of a number that could be easily presented and digested. The vast majority of answers fell into very natural groupings, with respondents often using identical or highly similar language to describe their ideas.

4. SURVEY FINDINGS

4.1. PRIMARY PUPILS

Respondents were asked to create a 'wishlist' of up to five items of knowledge, five experiences and five skills that children should have acquired by the time they have left primary school (age 11).

4.1.1. KNOWLEDGE

141 responses, 27.9% of the total, identified 'Where food comes from' as being something primary children should know. Other notable responses were How livestock/crops are reared/grown and about the Character and purpose of the countryside, although these were much less frequent at 10.7% and 6.9% respectively.

Although the survey didn't ask participants to rank their responses, there are interesting patterns to note, for example, that those mentioning Protecting the environment/nature were mostly likely to list it as their fourth or fifth suggestion (64.5% in these slots).

Similarly, although How livestock/crops are reared/grown was the second most popular response overall, no participant listed it as their first choice, with 63% participants listing it second or third. This hints at a hierarchy of knowledge even within the primary phase – first children must understand the role of the farm and follow this up with more detailed information of how farms produce food.

People in agricultural occupations were much more likely than those in education ones to cite How to be healthy as an important piece of knowledge.

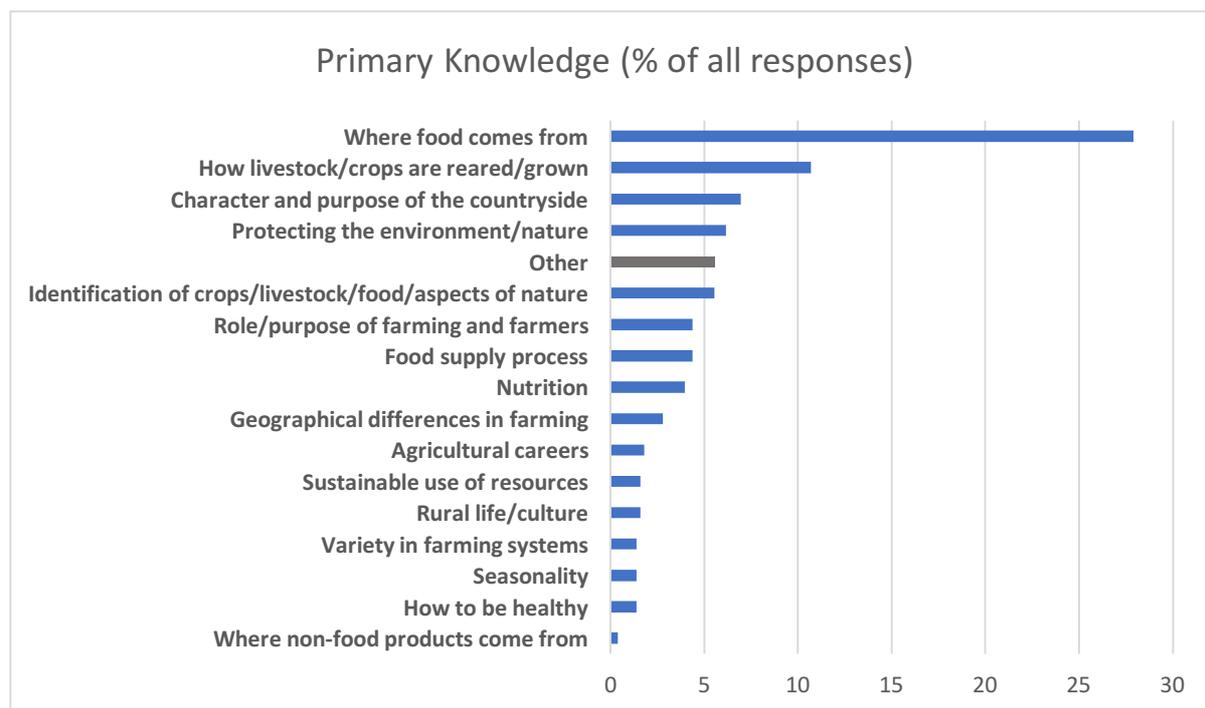


Figure 1 Primary School Wishlist – All Respondents: Knowledge

4.1.2. EXPERIENCES

111 responses, 22% of the total, identified **Witness farming first hand** as being something primary children should experience. The second most common response, at 11.5% was **Freedom in the outdoors**.

Across their five responses, many participants referenced the trinity of **growing food from seed**, **cooking meals from scratch** and **tasting new or a variety of foods**. Taken together, these three responses equate to 18% of the total and suggest participants are interested in children creating their own small scale farm to fork experience as well as witnessing farming at scale.

It is interesting to note that those in agricultural occupations are more likely to suggest that **Cook from scratch** is an important skill than those with educational occupations.

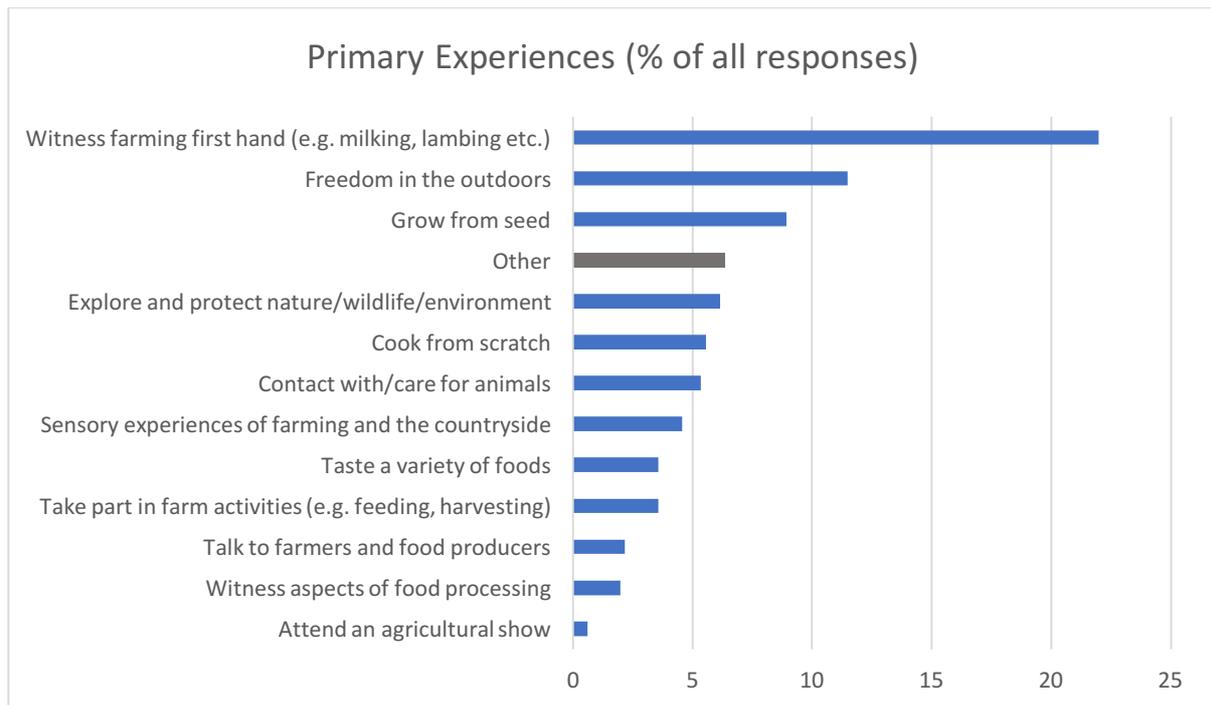


Figure 2 Primary School Wishlist – All Respondents: Experiences

4.1.3. SKILLS

92 responses, 18.2% of the total, cited **Identification of crops/livestock/food/aspects of nature** as a skill primary children ought to be able to have. Many participants suggested minimum targets for this skill, such as 'name 5 trees' or 'recognise 5 crops'.

Although this statement received the greatest number of responses overall, more participants opted for **Plant care/cultivation** as their first answer, hinting again at participants' desire for children to take part in farming at a small scale.

It was encouraging to see that although responses were related to the specific context of food, farming and the countryside, general/transferable skills were prominent such as **identification, skills for learning (listening, questioning, describing) and critical thinking**.

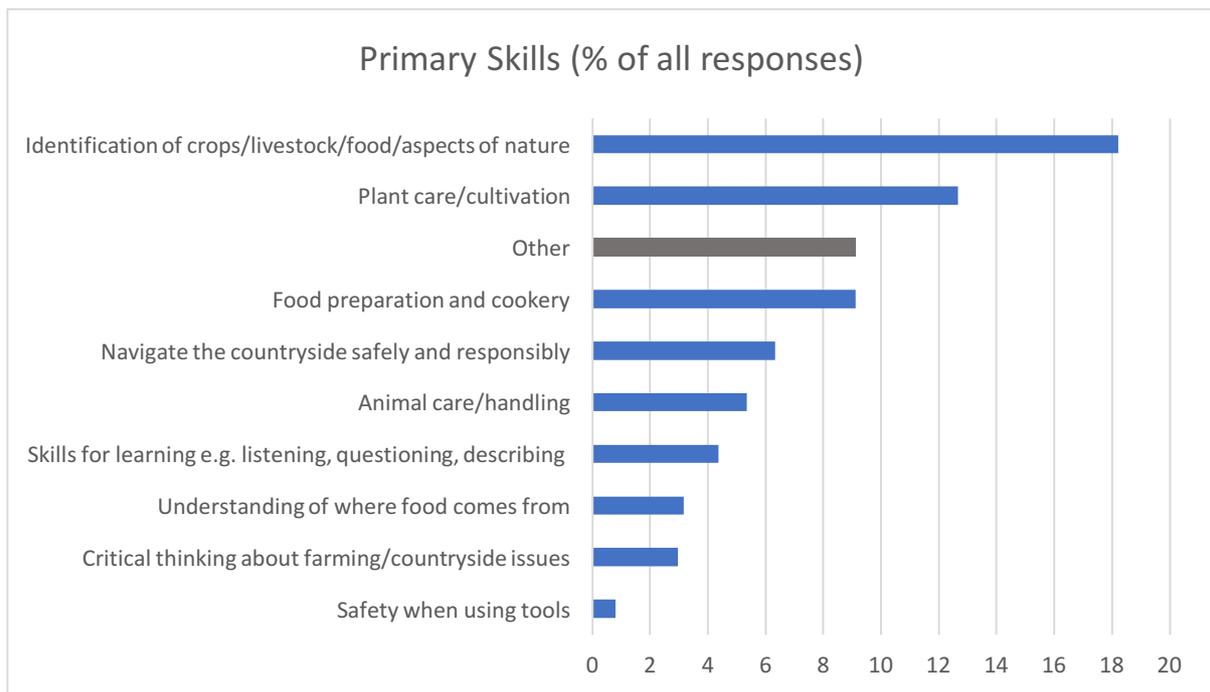


Figure 3 Primary School Wishlist – All Respondents: Skills

4.2. SECONDARY PUPILS

Respondents were asked to create a 'wishlist' of up to five items of knowledge, five experiences and five skills that children should have acquired by the time they have left secondary school.

4.2.1. KNOWLEDGE

Responses to this question were considerably more varied than primary knowledge, and although **Where food comes from** was again the most frequently occurring response, it lacked the overwhelming majority of the primary question.

Notable new responses were **Scientific aspects of farming** (33%) and **Meat production** (30%) and these are both picked up again in the later question *What do you think are the most misunderstood aspects of farming and food supply?* The indication is that participants feel the secondary age group is the right time to address the realistic, complex and controversial aspects of farming.

Another new response **Informed buying choices** (14%) suggests a recognition of pupils as current or potential consumers (or influencers of parent consumers).

Identification of crops/livestock/food/aspects of nature was mainly raised by those in agricultural occupations, whereas **Sustainable use of resources** was mainly requested by those in the educational occupation group.

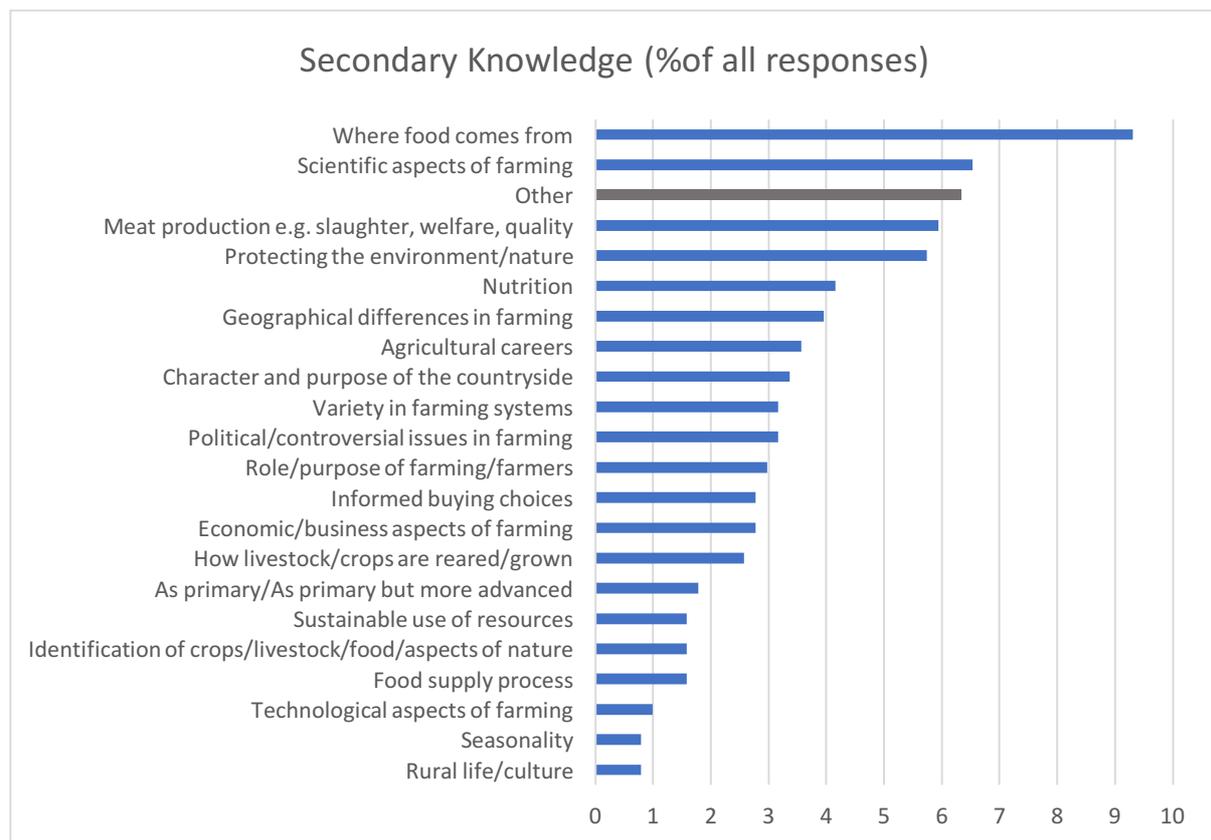


Figure 4 Secondary School Wishlist – All Respondents: Knowledge

4.2.2. EXPERIENCE

Responses were again varied but with the greatest number of references again being made to **Witness farming first hand** (13.1%). Interestingly, **Witness aspects of food processing** jumped to the second most popular response (7.9%).

Direct hands-on experiences of farming were most likely to be requested by people in agricultural occupations.

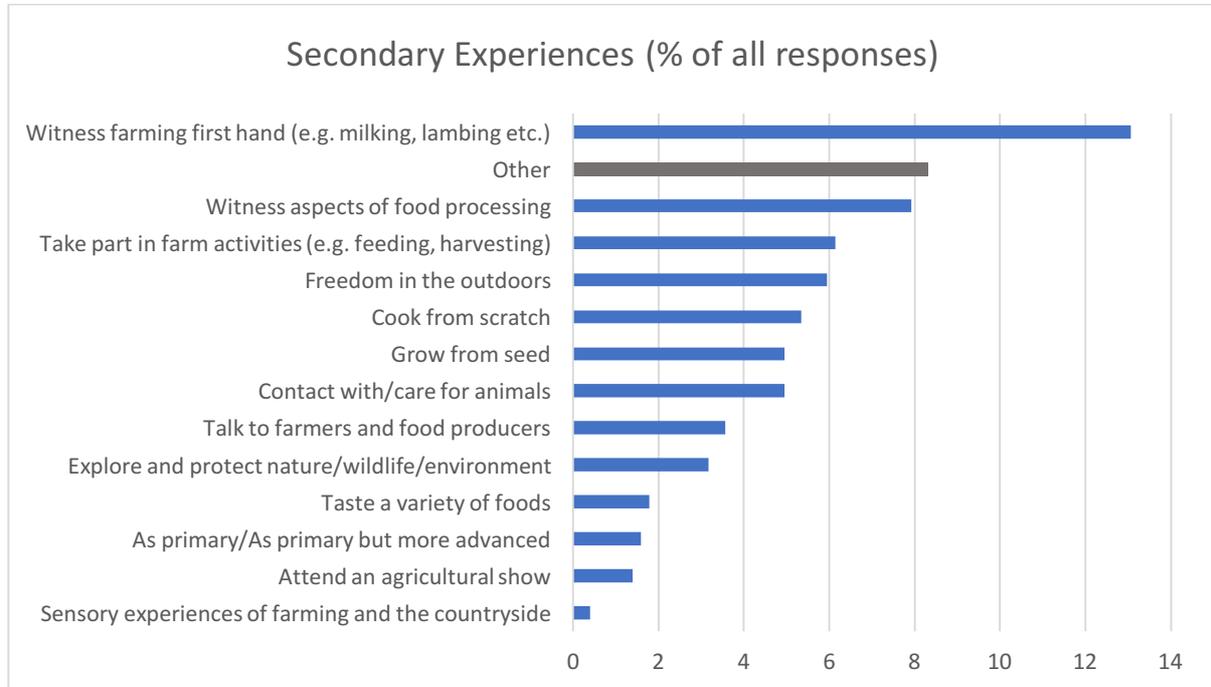


Figure 5 Secondary School Wishlist – All Respondents: Experiences

4.2.3. SKILLS

Food preparation and cookery (11.3%) overtook Identification of crops/livestock/food/aspects of nature (8.1) as the most common response, indicating an interesting shift in focus from pupils' ability to relate to food, farming and the countryside to their ability to manage their own lifestyle.

A new response was Make healthy, informed choices about food (5%), which again reflects the change from primary to secondary to view pupils as potential consumers and to be interested in their health/lifestyle choices.

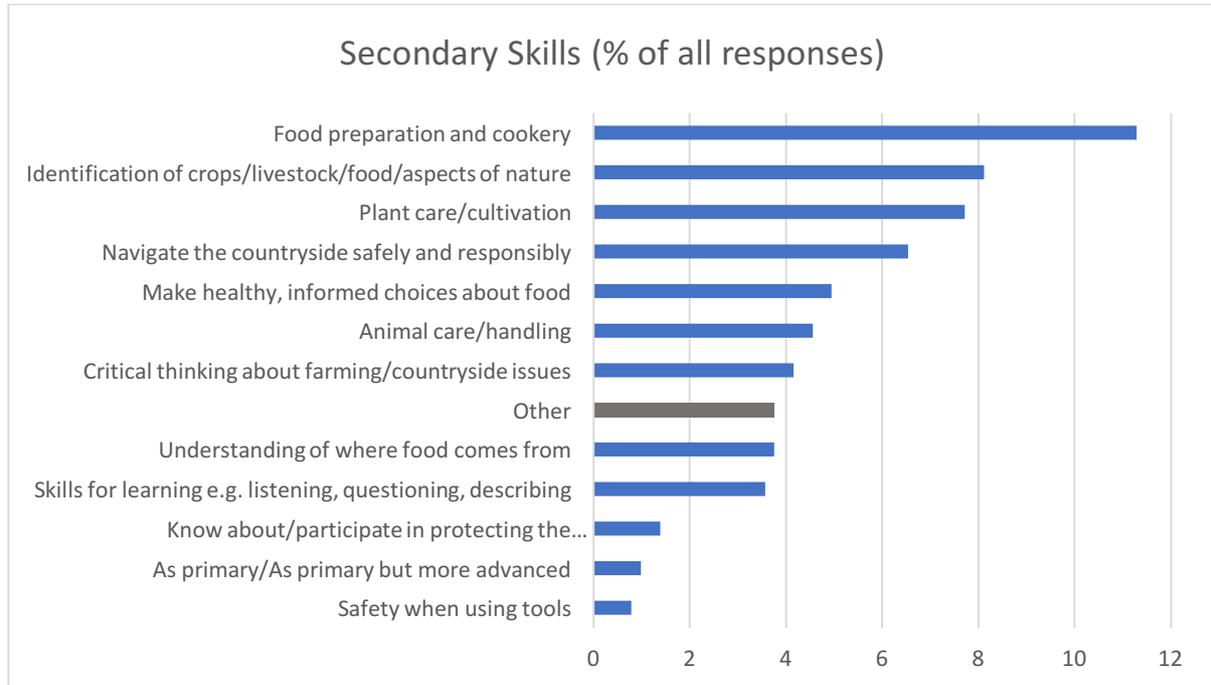


Figure 6 Secondary School Wishlist – All Respondents: Skills

4.3. COMMON MISUNDERSTANDINGS

The most common response to this question was **Interaction between farming and the environment/nature**, but a wide variety of responses means that the range between the least common response and the most common response is relatively small.

However, the next five most common responses, listed below, are all similar in that they relate to the day to day business of farming – how it works, the variety within it and the jobs available. This seems to suggest a general feeling that the very basics of farming are not well understood, and perhaps, appreciated.

- Connection between food products and farm production
- Variety in farming systems (size, type, wealth)
- Investment need to produce food (labour, time, capital, resources)
- How livestock/crops are reared/grown
- Career opportunities available for all skill levels

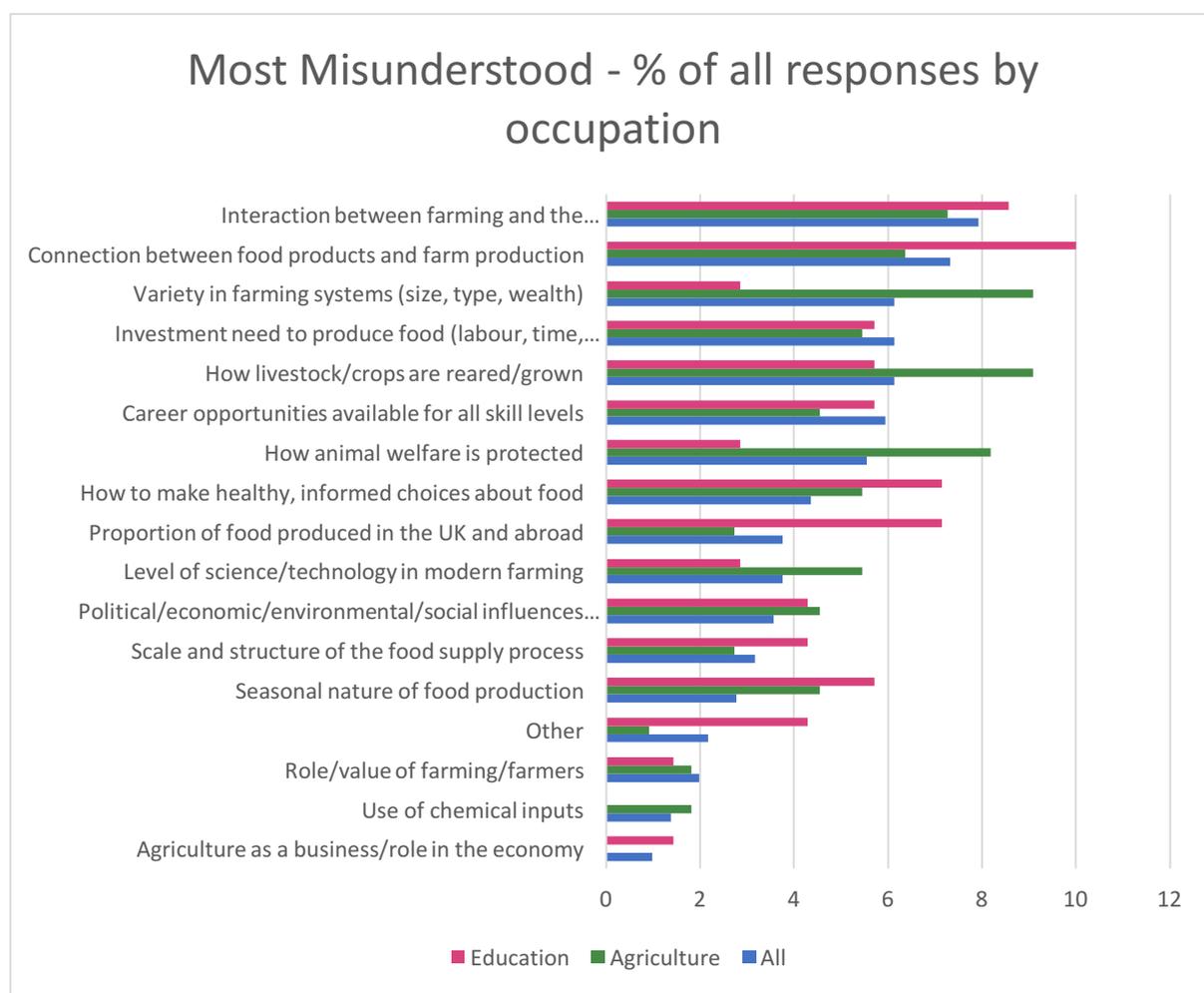


Figure 7 Most misunderstood issues - as perceived by respondents in agriculture, education or all occupations

4.4. EXCITING NEW DEVELOPMENTS

The most popular response to this question was **Advancements in STEM aspects of farming** (10.1%) and responses referring to three specific aspects of STEM **Developments in genetics/variatal selection** (7.1%), **Robotic/drone technology** (3%) and **Use of precision technologies** (2%) were common enough to warrant separate categories. Taken in total these accounted for 22.2% of responses.

There were a number of very specific developments cited which did not warrant their own categories, but are worth noting, including: micro-production; restoration agriculture; biotech revolution; insect farming; consumer trend analysis; gourmet specialist production.

Another prominent response was **Increased public interest, communication and engagement** (7.3%) and responses in this category were often emotional, expressing considerable hope for the future and sometimes citing social media as a positive driver of this change.

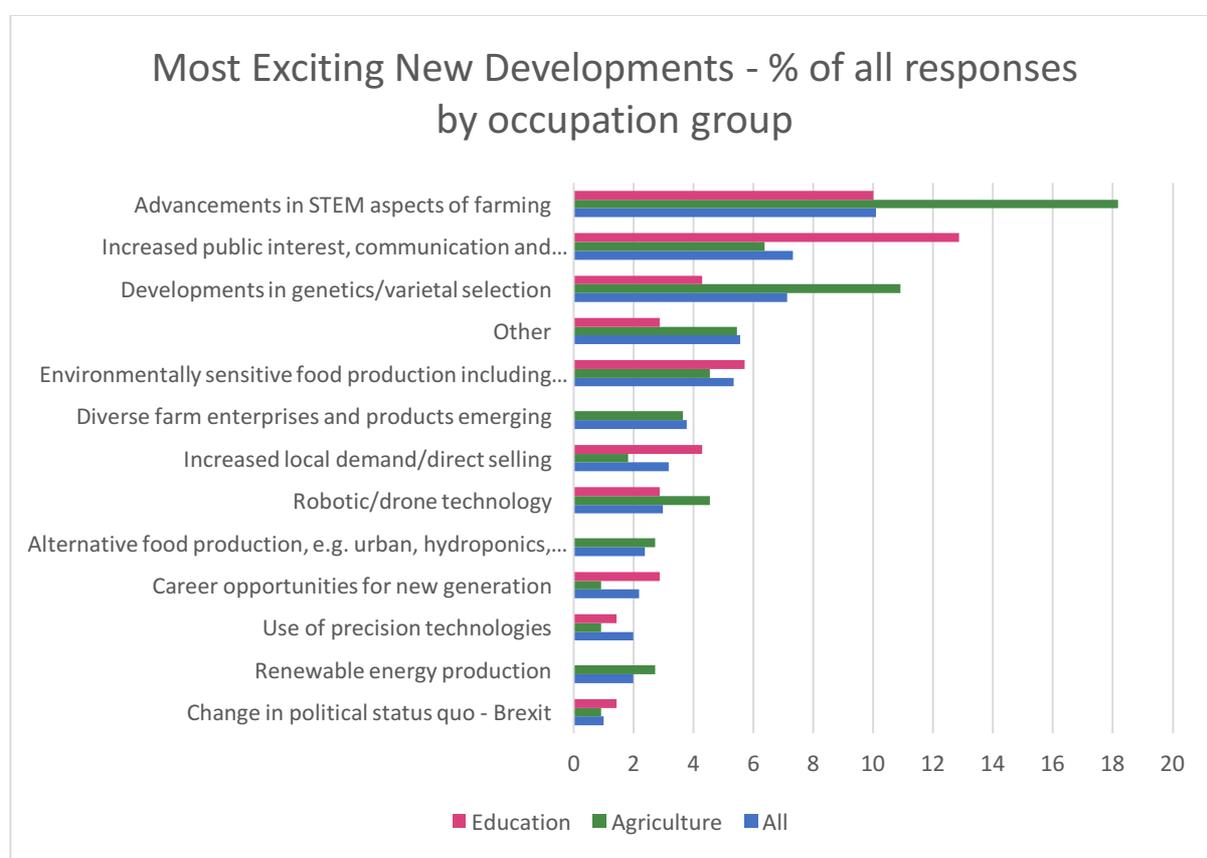


Figure 8 Most exciting new developments in agriculture - as perceived by respondents in agriculture, education or all occupations

4.5. CONTROVERSIAL ISSUES

The range of responses to this question were perhaps unsurprising and broadly reflect those issues which are widely covered in the farming and mainstream media, such as **GM** (6.5%), **Use of chemical inputs** (6.1%) and **TB and badger culling** (3.6%).

However, the most common response was **Meat production, slaughter and animal welfare** (9.9%). Some responses in this category made specific mention of **alternative diets** such as vegetarianism and veganism, which could be attributed to the increased visibility of meat-free and plant-based diets.

A number of responses alluded to the role that human over-population is playing, particularly in making food producers one of the major contributors to climate change.

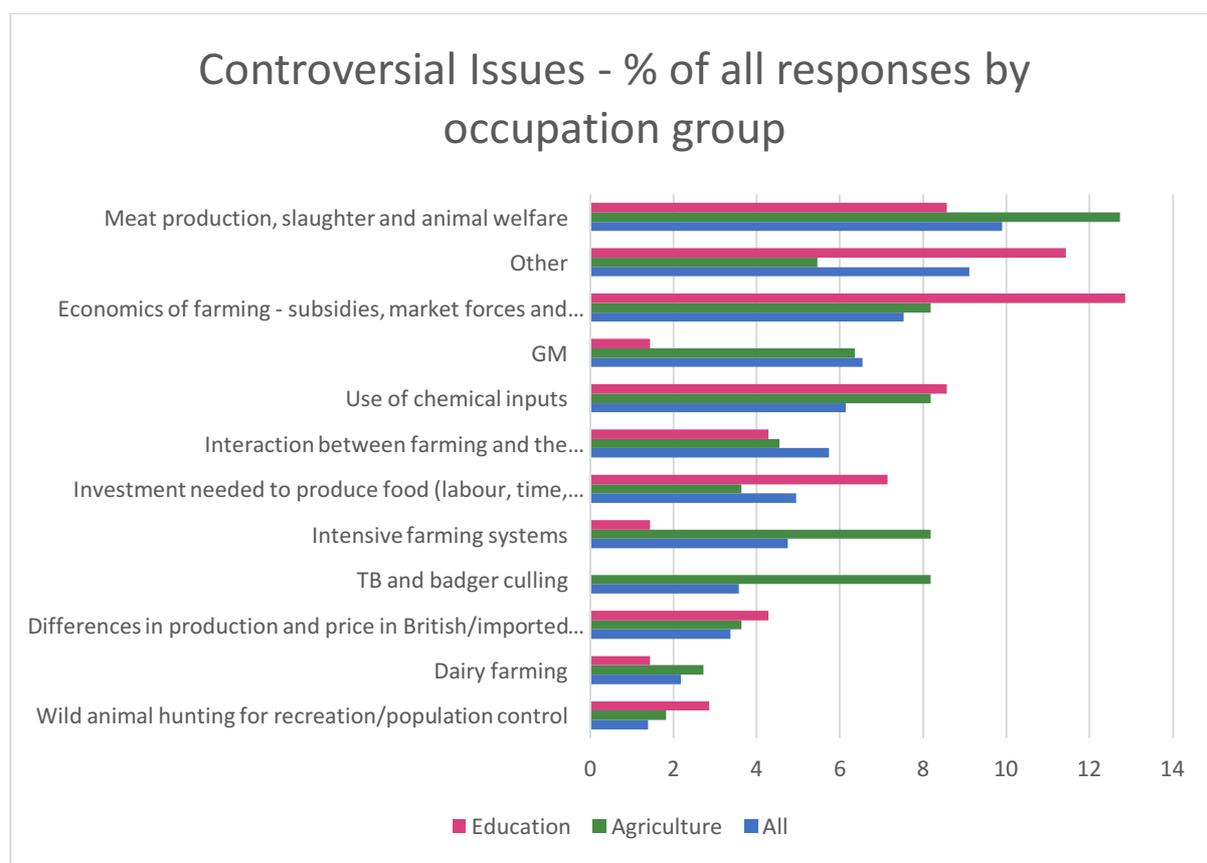


Figure 9 Most controversial (difficult to explain) issues - as perceived by respondents in agriculture, education or all occupations

4.6. COMMON BARRIERS

No access to/experience of the countryside (16%) was the most commonly cited barrier to children acquiring farming-related knowledge, skills and experience. Some respondents suggested increasing urban living and use of technology as possible reasons for this.

However, in half (49.9%) of the responses given participants perceive barriers to come from the adults responsible for them, rather than lack of interest from children themselves, for example in the following categories:

- Lack of interest/knowledge/approach from teachers (10.9%)
- Limited opportunities made available by farming industry (4.8%)
- Inexperience or prejudice of parents/peers (3.8%)

Interestingly, this question yielded the least varied responses and is also the only question to which responses categorised as **Other** were the least common (3.6%), demonstrating that participants were largely in agreement on a relatively small number of barriers.

However, this question drew some of the more pointed responses, including:

“The dumbing down of information to make it more palatable to the public just makes the truth more blurred”

“[the] lack of comprehensive and continuing effort from the food and farming industries together to explain the needs of the industry”

While other comments included complaints about *“vegan extremists”* and *“propaganda”*.

Fascinatingly, it also threw up some interesting discrepancies between occupation groups with farmers placing **Health and Safety** at the top of their list, and teachers seeing it as the least of their concerns.

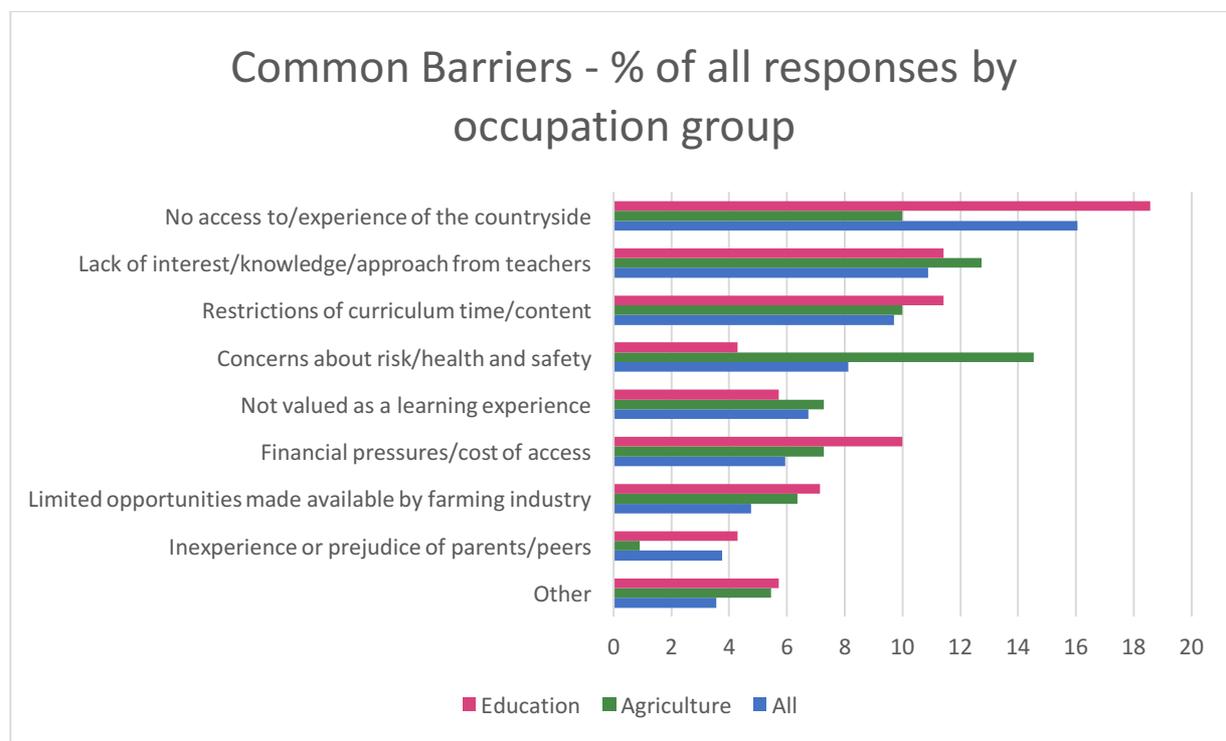


Figure 10 Common barriers to children and young people acquiring farming-related knowledge, experiences and skills - as perceived by respondents in agriculture, education or all occupations

4.7. TRENDS AMONGST AGE GROUPS

Of those participants who mentioned **Sustainable use of resources** as something primary children should know, 75% were school leavers between 1981-1990. This age group made up 28.7% of the total cohort.

The same group were more likely to suggest primary children should have **Sensory experiences of farming and the countryside**, accounting for 52.2% of responses in this category.

Despite only making up 2% of the cohort, participants who were school leavers between 1951-1960 accounted for 13.3% of responses citing **Critical thinking about farming/countryside issues**.

School leaving age did not influence how likely participants were to cite **Level of science/technology in modern farming** as one of the most misunderstood aspects of food and farming, with the same number of participants in brackets 1971-1980 and 2001-2010 giving this response.

School leavers of 1981-1990 were the age group most likely to reference **Changes in public perception and behaviour** as the most exciting new developments in farming and food supply. 50% of responses citing **Increased local demand/direct selling** and 40% of responses citing **Increased public interest, communication and engagement** fell into this age bracket.

40% of responses citing **Robotic/drone technology** as one of the most exciting new developments in farming and food supply were in the 2001-2010 bracket.

4.8. TRENDS AMONGST OCCUPATIONS

The majority (35.7%) of participants who thought primary children should know to **Identify crops/livestock/food/aspects of nature** were farmers and this was the second most common response given by farmers, after **Where food comes from**.

The majority of participants who thought primary children should experience **Cooking from scratch** were Farm/land-based educators.

Most participants who thought **Critical thinking about farming/countryside issues** was an important skill for primary children were teachers or educators.

45.5% of the participants who cited **Scientific aspects of farming** as something secondary pupils should know were farmers. 13.6% of all farmers who took part shared this response, in contrast to just 2.9% of teachers/educators.

A similar trend was reflected in the question on what experiences secondary pupils should have, with three times as many farmers as teachers/educators believing secondary pupils should **Take part in farm activities**. However, at this secondary level greater proportion of teachers/educators (17.1%) than farmers (12.7%) thought children should **Witness farming first hand**, whereas at a primary level the two groups were equal.

Farmers and teachers/educators also differed in their responses to the question 'What are the most exciting new/emerging developments in farming and food supply?', with most farmers (18.2%) citing **Advancements in STEM aspects of farming** and most teachers (12.9%) citing **Increased public interest, communication and engagement**.

Another significant difference between farmers and teachers/educators was that more farmers (14.5%) cited **Concerns about risk/health and safety** as a barrier to children from acquiring farming-related knowledge, experiences and skills than teachers (4.3%).

4.9. OTHER OBSERVATIONS

It was interesting to note the language and tone used in the responses. The survey enabled people to vent a number of frustrations, sometimes levied at their own kind (e.g. world of education, farming industry) but also quite a few complaints directed at another group. Comments indicated that some farmers are very concerned by teachers' apparent ignorance and unwillingness to engage. Whereas some teachers described farmers as unapproachable.

5. CONCLUSIONS AND NEXT STEPS

The agriculture industry and farmers have been given a well-advertised opportunity to have their voice heard by FACE, the leading organisation at the interface between the worlds of farming and education.

This has allowed them to set out the priorities as they see them, for the education of the next generation of citizens, consumers and employees. These data will be used to inform and guide the development of new resources, training, schools' engagements and awareness-raising activities led by FACE.

As the survey was also responded to by other groups including teachers, it has allowed us to look at the differences of opinion held by those groups, as well as drilling into variances between other demographics such as age.

This guidance will be taken together with the many other insights and pieces of evidence that inform what is needed by and realistic for schools.

These differences have been particularly insightful and describe a concerning level of 'talking past one another' or even antagonism. Fundamentally the important issues reported by each group are much the same, but the way in which they describe them are markedly different. It has highlighted a particular obsession by farmers that people 'must know where their food comes from'. Other sectors of society may be more ambivalent about focusing on definitive knowledge, but may nonetheless have a very keen interest in what food and farming can offer in creating a rounded education. Both objectives, of course, can be met through the same interventions, but there is a very real risk that there will be missed opportunities for schools and the industry to work together if they are not talking the same language.

There were also some interesting outliers in the data, such as the group of respondents who left school between 1981 and 1990 who were over ten times as likely as those from the decade before them to say that sensory experiences were an important aspect of learning.

There is much more data that hasn't been reported on, but as the sample size was relatively small, it would be inappropriate to draw further conclusions from. Treating this survey as a pilot, a repeat in 12-24 months with a larger group of respondents would be highly advised.

6. APPENDIX A – SURVEY QUESTIONS

6.1. INTRODUCTORY REMARKS

Your say: What knowledge, experiences and skills should every young person have, relating to food, farming and the countryside?

We are looking to produce a clear guide for teachers, government, resource providers and the food and farming sectors themselves so that ultimately, every young person can fully appreciate the important role that farming and food supply plays in their own lives and in wider society.

The national curriculum is full of opportunities to learn about food, farming and the countryside; whether through science, geography, maths, computing, arts or drama - you name it! That's because farming is a diverse, engaging, fun and practical context in which knowledge can be acquired and learning can be applied. The reality is that educators do not make as much use of the context of food, farming and the countryside in their teaching as they could, and many young people complete their education without having a clear and broad understanding of food sources and the farming environment. We believe it is the responsibility of our sectors to produce the very best content and learning experiences, and enable teachers to routinely choose the lens of food and farming through which to look at their subjects and to enrich the learning experience.

Greater insight into our sectors will encourage students to follow academic or vocational courses that prepare young people to work in farming, but vital though that is, we want our focus to be on the fundamentals - the things we believe every person should encounter as part of their upbringing - the things that will prepare them to be healthy, informed and engaged individuals and citizens.

Our questionnaire asks your opinion first about young children and then teenagers in secondary education, before asking for your thoughts as to the key issues and topics around food, farming and the countryside. We have phrased our questions as 'food, farming and countryside' – a very broad span - and these words may mean somewhat different things to each of you. Please respond by giving us your opinion from your perspective of this phrase.

Please answer as many of the questions as you are able and have time for. You don't have to be in education or farming to have an opinion.

Thank you for your help.

Dan Corlett and the FACE Team

About the questionnaire

All questions are optional. If you'd rather not answer the question, just leave it and move on. Be sure to press 'Submit' on the last page to send us your answers.

We think most people will complete the survey within 3-10 minutes. You can spend longer or shorter if you like.

In several cases, there is space to give us up to five thoughts or ideas. You do not need to complete all five - just as many as you can think of.

The next three pages deal with primary age education and the following three with secondary.

Each of these sets of three deals with one issue, which will be explained on the page. Please read the instructions before answering and just respond to the question being asked.

If the questions aren't asking what you want to tell us, there is space at the end to leave us any further thoughts you have.

6.2. SECTION 1 – PRIMARY CHILDREN

Q. Knowledge - tell us (up to) 5 things you think PRIMARY (age 5-11) children should KNOW

Please just focus on knowledge - there are upcoming questions about experience and skills

Q. Experiences - tell us (up to) 5 things you think PRIMARY (age 5-11) children should EXPERIENCE

Please just focus on experience - there are upcoming questions about what practical skills they should develop

Q. Skills - tell us (up to) 5 things you think PRIMARY (age 5-11) children should BE ABLE TO DO

Skills are different to experience. Skills mean the young person has acquired the ability to do something for themselves.

6.3. SECTION 2 – SECONDARY CHILDREN

Q. Knowledge - tell us (up to) 5 things you think SECONDARY (age 11-18) pupils should KNOW

Please just focus on knowledge - there are upcoming questions about experience and skills

Q. Experience - tell us (up to) 5 things you think SECONDARY (age 11-18) pupils should EXPERIENCE

Please just focus on experience - there are upcoming questions about what practical skills they should develop

Q. Skills - tell us (up to) 5 things you think SECONDARY (age 11-18) pupils should BE ABLE TO DO

Skills are different to experience. Skills mean the young person has acquired the ability to do something for themselves.

6.4. SECTION 3 – KEY ISSUES

Q. What do you think are the most misunderstood aspects of farming and food supply?

List up to five

Q. What are the most exciting new/emerging developments in farming and food supply?

List up to five

Q. What are the most difficult or controversial farming and food supply issues to explain to the general public?

List up to five

Q. What barriers most often prevent children and young people from acquiring farming-related knowledge, experiences and skills?

6.5. SECTION 4 – RESPONDENT INFORMATION

Please tell us about yourself

Q. Are you:

- Male
- Female
- Prefer not to say
- Other:

Q. What's your employment status?

- Employed
- Self-employed
- Unemployed
- Retired

Q. When did you leave secondary school education?

- 2011-Now
- 2001-2010
- 1991-2000
- 1981-1990
- 1971-1980
- 1961-1970
- 1951-1960
- Before 1951

Q. Please state your work role (does not have to be in education or farming)

e.g. farmer, primary teacher, agronomist, crop researcher, commodity marketing, retired, home-maker, itinerant musician ...

Q. If you are living/working outside of the United Kingdom, please tell us where:

What messages would you give?

Q. If you could tell a young person one thing about your role that might excite them, what would it be?

Q. If you could tell a teacher why you think food, farming and the countryside are vital to teach children about, what would you say?

Making it happen

Q. Do you have a farm/site that schools can visit that isn't yet listed on www.countrysideclassroom.org.uk ?

- Yes
- No

Q. Are you willing to go into schools and talk about your area of expertise?

- Yes
- No
- Maybe

Q. Do you or your business have content that could be used to help create learning materials?

Videos, case studies, photos, infographics, animations, data sets, simulations,

- Yes
- No
- Maybe

Q. If so, what can you offer?

Q. Can we contact you about it? If so, please give us your email address:

Have we missed anything?

Q. Would you like to say anything else as part of this consultation?

7. APPENDIX B – RESPONSE CODING

Primary Knowledge	Primary Experiences	Primary Skills
Agricultural careers	Attend an agricultural show	Animal care/handling
Character and purpose of the countryside	Contact with/care for animals	Critical thinking about farming/countryside issues
Food supply process	Cook from scratch	Food preparation and cookery
Geographical differences in farming	Explore and protect nature/wildlife/environment	Identification of crops/livestock/food/aspects of nature
How livestock/crops are reared/grown	Freedom in the outdoors	Navigate the countryside safely and responsibly
How to be healthy	Grow from seed	Plant care/cultivation
Identification of crops/livestock/food/aspects of nature	Sensory experiences of farming and the countryside	Safety when using tools
Nutrition	Take part in farm activities (e.g. feeding, harvesting)	Skills for learning e.g. listening, questioning, describing
Protecting the environment/nature	Talk to farmers and food producers	Understanding of where food comes from
Role/purpose of farming and farmers	Taste a variety of foods	Other
Rural life/culture	Witness aspects of food processing	Blank
Seasonality	Witness farming first hand (e.g. milking, lambing etc.)	
Sustainable use of resources	Other	
Variety in farming systems	Blank	
Where food comes from		
Where non-food products come from		
Other		
Blank		

Secondary Knowledge	Secondary Experiences	Secondary Skills
Agricultural careers	Attend an agricultural show	Animal care/handling
Character and purpose of the countryside	Contact with/care for animals	Critical thinking about farming/countryside issues
Economic/business aspects of farming	Cook from scratch	Food preparation and cookery
Food supply process	Explore and protect nature/wildlife/environment	Identification of crops/livestock/food/aspects of nature
Geographical differences in farming	Freedom in the outdoors	Know about/participate in protecting the environment/nature
How livestock/crops are reared/grown	Grow from seed	Make healthy, informed choices about food
Identification of crops/livestock/food/aspects of nature	Sensory experiences of farming and the countryside	Navigate the countryside safely and responsibly
Informed buying choices	Take part in farm activities (e.g. feeding, harvesting)	Plant care/cultivation
Meat production e.g. slaughter, welfare, quality	Talk to farmers and food producers	Safety when using tools
Nutrition	Taste a variety of foods	Skills for learning e.g. listening, questioning, describing
Political/controversial issues in farming	Witness aspects of food processing	Understanding of where food comes from
Protecting the environment/nature	Witness farming first hand (e.g. milking, lambing etc.)	Other
Role/purpose of farming/farmers	Other	Blank
Rural life/culture	Blank	As primary/As primary but more advanced
Scientific aspects of farming	As primary/As primary but more advanced	
Seasonality		
Sustainable use of resources		
Technological aspects of farming		
Variety in farming systems		
Where food comes from		
Other		
Blank		
As primary/As primary but more advanced		

Misunderstood	New developments	Controversial	Barriers
Agriculture as a business/role in the economy	Advancements in STEM aspects of farming	Dairy farming	Concerns about risk/health and safety
Career opportunities available for all skill levels	Alternative food production, e.g. urban, hydroponics, micro	Differences in production and price in British/imported food	Financial pressures/cost of access
Connection between food products and farm production	Career opportunities for new generation	Economics of farming - subsidies, market forces and pricing	Inexperience or prejudice of parents/peers
How animal welfare is protected	Change in political status quo - Brexit	GM	Lack of interest/knowledge/approach from teachers
How livestock/crops are reared/grown	Developments in genetics/varietal selection	Intensive farming systems	Limited opportunities made available by farming industry
How to make healthy, informed choices about food	Diverse farm enterprises and products emerging	Interaction between farming and the environment/nature	No access to/experience of the countryside
Interaction between farming and the environment/nature	Environmentally sensitive food production including organic systems	Investment needed to produce food (labour, time, capital, resources)	Not valued as a learning experience
Investment need to produce food (labour, time, capital, resources).	Increased local demand/direct selling	Meat production, slaughter and animal welfare	Restrictions of curriculum time/content
Level of science/technology in modern farming	Increased public interest, communication and engagement	TB and badger culling	Other
Political/economic/environmental/social influences and challenges	Renewable energy production	Use of chemical inputs	Blank
Proportion of food produced in the UK and abroad	Robotic/drone technology	Wild animal hunting for recreation/population control	
Role/value of farming/farmers	Use of precision technologies	Other	
Scale and structure of the food supply process	Other	Blank	
Seasonal nature of food production	Blank		
Use of chemical inputs			
Variety in farming systems (size, type, wealth)			
Other			
Blank			

When did you leave secondary school education?	Occupation
Before 1951	Administrator
1951-1960	Charity/public sector worker
1961-1970	Farm/land-based educator
1971-1980	Farmer
1981-1990	Other farm worker
1991-2000	Researcher
2001-2010	Teacher (FE/HE)
2011-Now	Teacher/other educator
	Wider agricultural industry worker
	Other
	Blank