

The Provision of Educational Materials about Farmed Animal Welfare

A Comparative Report

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CONTENTS

	Preface	iii
Part I	Italy	1
1	Aims and Methodology	3
2	The National Education System	5
3	The Emergence of Animal Welfare Issues in Italian Society	7
4	Actors, Activities and Materials Related to AW and FAW: A Review	9
5	Didactic Farms: Experiential Learning of FAW	17
6	Electronic Survey Results	19
Part II	Norway	23
7	Method	25
8	The Public Authorities' Administration of Farm Animal Welfare	27
9	Animal Welfare in Basic School	37
10	Discussion	43
11	Postscript	55
PART III	United Kingdom	57
12	Introduction to Part III	59
13	Methodology	61
14	The Formal (State) Provision of Education about Farm Animal Welfare in the UK	69
15	The Non-formal Provision of Education about Farm Animal Welfare in the UK (by NGOs and other Organizations)	79
16	Conclusions to Part III	99
	Appendix	105
	Bibliography	115

PREFACE

This deliverable forms part of the output of sub-task 5.1.1.3 (School Materials). The ultimate goal of this sub-task is to use the knowledge generated in sub-projects 1 to 4 of the Welfare Quality® project to design teaching materials on farm animal welfare issues for schools and universities. Many of these materials will be delivered in the form of a dedicated website. The current report helps to prepare the ground for this website by analysing the current provision of educational resources in the UK, Italy and Norway. Indeed, it enables us to identify any gaps in the current provision of educational information about farm animal welfare and it enables us to avoid simply replicating the types of information and resources that are already available. In short, it enables us to understand how the Welfare Quality® project might best contribute to present farm animal welfare education. The research also enables us to gain some understanding of the broader involvement of NGOs within farm animal welfare issues and thus usefully supplements work conducted within subproject 1, which focuses primarily on the roles and concerns of consumers, farmers and retailers.

The report is divided into three separate parts. Part 1 reviews the availability of educational resources in the UK, Part 2 focuses on Italy and Part 3 focuses on Norway.

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Part I

Italy

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AIMS AND METHODOLOGY

The main goal of this survey is to assess the provision of educational materials, for school children and university students, about animal welfare, both in general and more specifically farm animal welfare. This encompasses provision by official educational authorities, such as those who set official syllabuses, write course textbooks, set examinations and decide on the curricula, as well as other organizations that provide more informal educational materials. The latter include non-governmental organizations (NGOs) with an interest in animal welfare, consumer organizations, retailers and farming groups. A secondary role of the survey is to enable provisional mapping of the nature and role of NGO involvement in animal welfare issues. This will facilitate integration within SP1, as subproject leaders have identified NGOs as potentially under-researched actors within Welfare Quality's current approach to the food chain.

Collection and analysis of data and information, according to the aims described above, has been conducted in the following ways.

An *electronic survey, administered through sending a questionnaire* to key actors (institutions, organizations, associations and single people), which, according to our knowledge and information, could play an important role in the provision of educational materials on animal welfare (AW) and farm animal welfare (FAW) in Italy.

Web-based research: we began with a survey using general keywords (such as AW, animal husbandry, etc.) and then proceeded to:

- 1. Examine learning material available on various websites (see references) that deal with AW themes and problems. Due to the large amount of material available, our survey has been focused on school subjects that are closely connected to AW, especially the sciences, geography, and environmental studies.
- 2. An examination of various web sites from actors involved in agriculture, the environment, or animals, who are simultaneously involved in teaching or otherwise disseminating information about AW through the provision of educational material. For the most part, this includes animal activist associations, farmers' trade associations, farmers' associations, environmentalist associations, consumers' organizations and so on. The educational material surveyed is mainly composed of books, brochures, posters, PowerPoint presentations, games etc.

Interviews with key actors: initial contacts were made by telephone, supplemented with follow-up face-to-face interviews where possible.

THE NATIONAL EDUCATION SYSTEM

To understand some aspects about the diffusion and provision of AW educational materials to Italian students, it is necessary to describe the current education system.

The most recent general reform of the education system was carried out in 2003¹ (Law 28 March 2003, n.53) which has redefined the educational structure as outlined in Table 2.1.

2.1 INSTITUTIONAL AND NON-INSTITUTIONAL PROVIDERS OF EDUCATIONAL MATERIAL

The Ministry of Education, University and Research (Ministero dell'Educazione dell'Universita' e della Ricerca – MIUR) defines, for all subjects, the general objectives of the educational/training process and the specific learning objectives of students, as well as various other matters that comprise national curricula requirements. Scholastic

TABLE 2.1 Structure of current educational system in Italy.

<u> </u>		
Age of Pupil/Student	Duration	Compulsory?
3 to 6	3 years	Not compulsory
6–14	8 years	Compulsory
6–11	5 years	
11–14	3 years	
14–19	5 years c.a.	Compulsory
	•	
14–19	3+1+1 years	
14–19	2+2+1 years	
	-	
	5 years	
19–22	3 years	
22–24	2 years	
	3 to 6 6-14 6-11 11-14 14-19 14-19 14-19	3 to 6 3 years 6-14 8 years 6-11 5 years 11-14 3 years 14-19 5 years c.a. 14-19 3+1+1 years 14-19 2+2+1 years 5 years 3 years 19-22 3 years

Source: Elaboration on MIUR (Ministry of Education) data

¹ However, the newly incumbent Government (from April 2006) is carrying out a structural revision of different aspects of this reform.

institutions operate in coherence with such objectives and with the general indications given by the Ministry.

Schools, however, do have a level of autonomy as regards curriculum content in relation to their local cultural, social and economic contexts. They also manage:

- professional and cultural training of teaching staff;
- innovation in teaching methods;
- research on the value of information and communication technologies and their integration into training processes;
- development of educational material and its distribution to school children;
- exchanges of didactic material, information and experiences with other schools or other public and private organizations.

MIUR, including its constituent parts, alongside schools and universities, comprise the sites and the institutional actors that play the basic role in the elaboration of student training and on the choice of educational material that will be provided.

In this context an important role is also played by:

- pre-school operators and teachers;
- Headmasters, Deans, Professors and teachers who work inside different schools, as well as university departments and institutes;
- parents and students committees.

In addition, various Public Administration Offices and Departments (Regions, Provinces and Municipalities/Communes, Local Health Authorities – ASL) play an important, though less central, role in providing educational material.

Together with these public stakeholders, there are private sector operators who provide educational materials:

- trade operators (learning centres, school suppliers, distributors, etc.);
- private organizations that operate inside the social and not-for-profit sectors;
- freelancers (psychologists, pedagogues, etc.);
- professional training centres;
- various other organizations and associations.

THE EMERGENCE OF ANIMAL WELFARE ISSUES IN ITALIAN SOCIETY

In Italy, as in many other European countries during the last 20 years, various 'food scandals' have emerged in relation to the animal production sector (BSE/CJD, dioxins, salmonella infection and recently avian flu). In concert with other factors, these have caused an increase of concern with the health, security and quality aspects of food. Media campaigns have played a fundamental role in this period in influencing public opinion and especially in increasing consumer concern.

This process has also led consumers to pay much more attention to farming, including FAW issues, although they have not reached the level present in other northern EU countries.²

The results of an EU research project on AW, 'Consumer Concerns about Animal Welfare and the Impact on Food Choice' (henceforth Animal Welfare)³ carried out in Italy from 1998 to 2001, underlines that at that time, Italian consumers seldom spontaneously put FAW among their concerns about food. Such concern mainly emerged in the context of the relationship with human health and food safety issues.

Recently under the ambit of the EU Research project 'Welfare Quality', a sample of Italian consumers were interviewed through a telephone survey ('Survey' – 2005/06, a sample of 1,500 respondents, randomly selected, aged between 18 and 80 years). This suggests that although many respondents think that the general conditions of animals are not currently

² In addition to the current literature on these themes, a survey was carried out in the EU at the end of 2005, through an on-line consultation. The aim was to collect information on European citizen awareness and behaviour towards AW issues. From the results it emerges that Germany (with 25.3% of the total answers) has given the greatest contribution to the survey, followed by the Netherlands (12.7%) and then France, Finland, Belgium, UK, Denmark, Spain, Austria. Italy placed 10th with just 3% of answers. Although it is not possible to give these results an effective statistical value representative of European thought on AW issues (for example the sample was strongly influenced by the tool used – the internet), the different levels of spontaneous participation lead one to suppose a stronger participation by people already aware of these themes in northern European countries, compared to Italy.(M.Lulli, Aiab; on EU Commission data http://ec.europa.eu/food/animal/welfare/sum_response_stats_en.pdf).

³ (EU Project Research FAIR983678 - Fourth Framework Programme) – General Project coordinator: Dr. Spencer Henson (Centre for Food Economics Research, University of Reading - United Kingdom); Scientific Coordinator of Pisa University research team: Dr. Mara Miele.

so good, more then half (59%) believe that farm animal welfare has improved over the last 10 years.

In the same project, a series of focus groups were conducted in some northern Italian cities in 2005. From these it emerged that Italian consumers have acquired a higher awareness on FAW themes and problems, compared to the position that emerged during the first Project. The provision of better information in respect to the past (although consumers think it is still lacking) and the increase of organic farming with associated references to FAW, have probably contributed to this change.

However, this 'higher' awareness has not substantially modified the basic concept/vision of FAW for most consumers, which still remains anthropocentric and mainly related to the safety of animal products, or their quality and taste, rather than to real life experiences of farm animals.

Interest in, and the approach to, AW and FAW topics in Italian society are obviously not uniform. In schools, AW in general as well as FAW is a topic that at a formal level is almost absent or treated in a superficial way. Reading the *National Indication of Teaching Disciplines* (edited by the Ministry of Education) both for primary schools and secondary schools (even for specialist schools such as technical and professional Institutes of Agriculture), we found that AW matters in general and more specifically FAW, are given little space. It seems that institutions pay more attention to environmental, health and food education, but among these subjects AW in general, including the human (child)-animal relationship, is barely covered at all. This also may explain the scarcity of specific official educational material on AW. In other words, it seems that at institutional level the attention addressed to these themes is very low. Only within universities are these topics covered in depth, under the ambit of specific disciplines (see Chapter 4).

It is possible that, given the existence of a relative 'school autonomy' in the Italian school system, individual teachers can address AW and FAW issues in depth, working within the general guidelines of the Ministry, but also offering personal courses on AW themes to their students. However, the presence or absence of this kind of work and the materials being used, if any, are very difficult to verify.

ACTORS, ACTIVITIES AND MATERIALS RELATED TO AW AND FAW: A REVIEW

We have already mentioned some actors which formally operate in the education system at an 'institutional level' and others which play the same role at an 'unofficial level', but at a similar level of competence and importance.

Within this chapter we extend our examination to include those actors which try to promote and address AW and FAW issues in schools and in society in general.

4.1 MAIN OFFICIAL EDUCATIONAL MATERIAL PROVIDERS ON AW TOPICS

Firstly, we will report on the activities of the main institutional bodies involved in Education/Training/Scientific dissemination at the national level that are also involved in AW issues. We have already discussed the Ministry of Education, so here we focus on the Ministry of Public Health and the Ministry of Agriculture (MiPAF).

4.1.1 MINISTRIES

The Ministry of Health devotes a large space on its web site to AW issues, with discussion of improvements in Farm Animal Welfare mainly focused on the topics of transport and slaughtering regulations (http://www.ministerosalute.it/alimenti/benessere/benessere.isp).

However, it is not possible to say a lot about the provision of education on AW issues to schools by the Ministry.

Generally the approach of the Ministry of Agriculture (http://www.politicheagricole.it/default.html) to AW issues consists of informative campaigns and projects addressed to schools as well as to society in general. However, references to the 'animal's world', to

human relations with farmed animals, or to AW concepts are few and far between in these initiatives. These topics are touched on within themes that focus on agriculture (e.g. typical production methods), environmental issues, and/or food education (e.g. hygiene or dietary habits).

Our research indicates that AW topics are usually covered only in the context of descriptions of the farming and rearing methods adopted in organic farming.

4.1.2 APPROACH TO AW ISSUES BY SOME INSTITUTIONAL ACTORS: SYNERGIES AMONG SCHOOLS, REGIONS, LOCAL HEALTH AUTHORITIES (ASL)

Often institutional actors promoting educational projects focused on different themes in cooperation with schools and with other actors (e.g Regions, environmental authorities and so forth). We report some of these initiatives to describe the way in which they are articulated from a didactic point of view in general and the approach to different AW and FAW issues.

It is important here to highlight the part played by vets, for their professionalism and their experience acquired working with animals, in synergy with other qualified people such as teachers, pedagogues, psychologists, parents and other family members, such as grandparents.

Among these projects are examples in which AW topics are covered, but it has to be stressed that, as in the case of Ministries, the approach adopted by the institutional actors which promote these initiatives, e.g. the Regions, ASL, etc., is primarily focused on food, hygiene, health and environmental education.

Nevertheless these projects provide an important opportunity to disseminate educational material about the life of farm animals.

4.1.3 Universities

Internet research identified about 20 taught courses on AW topics offered by several Italian university structures, such as departments, institutes, research centres, or specialization schools. These structures are involved in the agricultural, veterinary medicine or life sciences sectors, and provide their students with different types of learning material appropriate to the particular specialism. However, we believe that there is probably a greater number of these types of courses available than we were able to discover from our internet research.

In analyzing these activities and courses, we recognized different approaches to AW: topics are mainly treated within a broader context of ethology, with a focus on describing behaviours, especially of companion animal (pets), and less so of farmed animals. It seems that veterinary medicine faculties have a deeper approach to AW than agricultural faculties, covering the following topics: the science of AW, AW regulations, the welfare of

companion animals and the rearing of wild animals. In many of these cases, the scientific approach is described through assessing AW using chemical, biological, or physiological parameters.

Educational material is mainly composed of notes from course providers, books, and audiovisual support.

4.1.4 OTHER SPECIALIZED SCHOOLS AND RESEARCH INSTITUTES

Other schools and research institutes work on AW, to offer specific professional advices to breeding companies and animal farming industries. This usually takes the form of providing updated and deeper knowledge of different ethological animal needs, in order to improve their adaptation to farming conditions and to optimize their productivity.

This type of research and information addresses what is perceived as an increasing consumer interest in the quality of animal food products and a more general concern for animal farming to be respectful of the AW parameters accepted by society at large.

4.2 MAIN NON-OFFICIAL EDUCATIONAL MATERIAL PROVIDERS ON AW TOPICS

4.2.1 Publishing Houses and Books

'Docet', which during the lifetime of the research on which this report is based was held in Bologna, 26–29 March 2006, is described by experts as the greatest show of educational materials in Italy. Through the Docet web site (http://www.docet.bolognafiere.it), we reviewed the web sites of different publishing houses that specialize in textbooks or other educational material for schools and children of 6–18 years of age. From their catalogues we recognized some examples that could be related to AW topics; nevertheless, this kind of material is in general very modest in scope.

These books are adopted by teachers as teaching tools during their lessons (probably within science subjects) or proposed to students as additional reading.

We also found material on human-animal relations, mainly focused on companion animals, as well as textbooks on applied zoo-anthropology.

Applied zoo-anthropology (AZ) started and developed between the end of the 1980s and the beginning of the 1990s as a theoretical—methodological perspective on human-animal relationships. It focuses on the implications of these relationships in terms of 'production'. On the basis of theoretical work, AZ develops innovative assumptions in respect of

previous knowledge and practice and, on a practical level, develops a new methodology for further research and 'production' practices.

4.2.2 Animal Protection Associations

Some of these associations have become well-known and are even somewhat recognized at the institutional level. The two most significant are: the Anti-Vivisection League (LAV), which is the main animal protection association in Italy (with 85 local bases); and the National Association for Animal Protection (ENPA). In the following sections, we will discuss the educational activity and related school materials supplied by the LAV and ENPA.

LAV – Lega Anti Vivisezione (Anti-Vivisection League)

The Education Sector of LAV (LES) promotes school activities designed to disseminate better and deeper knowledge of animal's experiences and animal rights. LES co-operates with individual teachers who wish to include this kind of material within their own lessons. LES produces learning materials, promotes training courses for teachers and works on projects in collaboration with single schools and institutes, with the Ministry of Education, the Ministry of Environment, with local authorities and with the EU.

On 11 March 2003, LAV, as the largest NGO in this sector, has agreed a draft statement with the Ministry of Education with the aim: 'to promote knowledge diffusion and improvement about the themes of education to the respect for every being, in schools of every order and level'.

In light of this, LES has produced learning materials to help teachers raise students' awareness of the experiences, needs and preferences of other animals and to encourage a more benevolent attitude towards them.

LES provides a 'Learning Kit on Animals' to every school (primary and secondary) that requests it. Each kit includes:

- an information pack;
- description of activities to be carried out in a workshop/laboratory;
- some follow-up activities (after laboratory experience);
- 'Piccole Impronte' (Small Paw Marks): a magazine on AW produced by LAV for children it is an important educational instrument and a useful learning support for the classroom.

There are also more specific materials provided, according to school age group or specific AW issue. Some examples follow.

Pre-school Materials for this age groups are designed to encourage open-mindedness towards animals, building on the self-awareness that children have of their own bodies,

needs, characteristics and emotions and extrapolating from that towards understanding how other animal's may experience themselves and the world.

For primary school students (age 11–13) learning units again draw on likely real life experiences among children: the circus and the zoo. Other issues are also covered, including the use of animals for fur production, animal's needs and rights, animal abandonment, the Universal Animal Rights Declaration and intensive animal farming. Information on these topics is provided to teachers to support their lessons. The educational aims of these topics are not only to disseminate information and knowledge, but also to develop awareness and engagement and, ultimately, to affect attitudes and behaviour.

For secondary schools, a range of literature and audiovisual material are available. The video 'Il loro Futuro è nelle tue mani (Their Future Is in Your Hands)' is an immediate, clear and stimulating tool for parents, teachers and educators in general willing to open a discussion on animal rights. 'This is a documentary of hope; it invites everybody to find out how to have a better relation with other people, animals and the environment.' The video carries a commentary by 'Red Ronnie' (Red Ronnie is one of the most popular figures among young people in Italy, he is well-known as a music journalist, author and anchorman of various innovative and successful TV programmes). Different aspects of animal exploitation are analyzed from an ethical, environmental and economic point of view. A translation of Paul McCartney's Video 'La Terra divorata' (Devour the Earth),⁴ which covers the environment, animal exploitation and the reasons for vegetarianism, is also provided. Number 3 Audiovisual on animal topics titled "Animals" (furs, vegetarianism and vivisection).

LAV's awareness campaign against intensive poultry rearing

In 'La verita' sull'allevamento dei polli da carne (The Truth about Broiler Chicken Farming)', LAV describes how intensive farming practices cause intense pain and severely damage the welfare of 'broiler' chickens. The following aspects are covered:

- farming conditions: problems caused by high density housing (inactivity and lameness, skin disease, curtailment of natural behaviours, stress linked to high temperatures), by the environment and the use of artificial light (sleeping sickness and stress, leg and eye problems);
- the genetic selection of 'broilers' (selection for 'productivity' entails increased chances of suffering, cause by a higher likelihood of lameness and skin diseases);
- the final phases of capture, transport and slaughter;
- the use of antibiotics:
- avian flu.

A pamphlet is publicly distributed on the streets in Italy and is available on the LAV site (http://www.infolav.org/nn-home-page-ie.htm).

⁴ The video with Italian subtitles is available at http://www.youtube.com/watch?v=WWoS8WkQ0os>.

ENPA – Ente Nazionale Protezione Animale (National Association for Animal Protection, http://www.enpa.it/)

The ENPA is conducting an initiative called 'Delfini Enpa per le Scuole elementari (Dolphins Enpa for Primary Schools)' in primary schools, focusing on classes III, IV and V (age 8–11). It is based on the provision of tools to encourage thinking about human-animal relations. Learning material is distributed at the school's request. Some examples are prresented below.

'Nemici Amici (Enemies Friends)' is a textbook in which a friendly pit bull dog (who is characterized as having previously been a fighting dog) takes an ironic overview of our current practices and proposes a better structuring of human—animal relationships. This book works with children's imagination and their capacity to put themselves in the 'other's' shoes and encourages them to think about the needs of other animals.

Information pack for teachers: this covers the most important examples of animal use, including farming for food and fur, the use of animals for scientific research, the use of animals for entertainment (including zoos and aquariums) hunting, the trade in 'exotic' animals, and the abandonment of companion animals.

Other Material

There are many other animal protection NGOs in Italy, presented in the Table 4.1. A bibliography on FAW is also provided by the web site 'Ciao-pet' (http://www.ciaopet.com/risorseSottoSezioneH.asp?IDSottoSezione=1020).

4.2.3 OTHER ASSOCIATIONS

Together with animal protection NGOs listed in Table 4.1, other important groups are active in the field of human–animal relations.

- AISEAB Associazione Italiana Specialisti in Etologia Applicata e Benessere Animale (Italian Association of Specialists on Ethology and Animal Welfare, http://www.etologia.it/).
- ASETRA Associazione di Studi Etologici e Tutela della Relazione con gli Animali (Association of Studies on Ethology and Preservation of the Relation with Animals), http://www.asetra.it/). ASETRA works to develop awareness of applied ethology, especially through zoo-anthropology, with the goal of improving AW and improving human–animal relationships.
- Esopo is a project which draws on the activity and the studies of different people (including ASETRA) involved in animal issues, such as ethologists, teachers, vets, experts in animal behaviour and animal regulations. It is designed for teachers and children aged 8–14, and is based on the assumption that respect for the other animals and for biodiversity is fundamental to human dignity. The origin of life and the evolution of animals are presented simply, but with scientific rigor. Animal companions are used as the main vehicles for communicating the key learning

TABLE 4.1 Animal protection NGOs in Italy.

Animalisti Italiani-PeTA http://www.animalisti.it http://www.animalisti.biz/ Animalisti.biz Animal & Nature Conservation Fund http://www.ancf.it/ Anpana-Assoc. Nazionale Protezione Animali http://www.anpana.it Natura Ambiente AVDA Veterinari per i diritti animali http://www.avda.it/ http://www.vegetariani.it/ A.V.I. Associazione Vegetariana Italiana http://www.campagneperglianimali.org Campagne per gli animali Collettivo Animalista http://www.collettivoanimalista.org C.S.A. Comitato Scientifico Antivivisezionista http://www.antivivisezione.it Coordinamento contro i bocconi avvelenati http://selvatica.supereva.it http://www.conigliosolidale.it/home.html Coniglio solidale Coordinamento mucca 103 http://www.mucca103.org/ E.N.P.A. Ente Nazionale Protezione Animali http://www.enpa.it/ F.I.N. Fondo Imperatrice Nuda contro la http://www.antivivisezione.it/F.I.N.html sperimentazione animale Gaia Italia http://gaiaitalia.it/index.php LAV Lega Antivivisezione http://www.infolav.org/nn-home-page-ie.htm LIDA Lega Italiana dei Diritti degli Animali http://www.lida.it http://www.oltrelaspecie.org Oltre la Specie http://www.novivisezione.org No Vivisezione Promiseland http://www.promiseland.it Sai Cosa Mangi http://www.saicosamangi.info http://www.scienzavegetariana.it/ Scienza Vegetariana Sezione Italiana IVU International Vegetarian http://www.ivu.org/italian/ Union Un happy animal Vegan 3000 http://www.unhappyanimal.org/ http://www.vegan3000.info http://www.viverevegan.org/ Progetto Vivere Vegan VIVO Comitato per un Consumo Consapevole http://www.consumoconsapevole.org/index.html

outcomes of the project. The CD-ROM of Esopo, (promoted as a convenient learning tool weighing only 85 grams, but containing 12 volumes worth of material) aims to help teachers both with animal topics and in innovative learning technologies in general.

Scuola di Interazione Uomo-Animale (School of Human–Animal Interaction)

DIDACTIC FARMS: EXPERIENTIAL LEARNING OF FAW

Didactic farms (DF, in Italian: 'Fattorie didattiche') are dedicated to children growing up in urban contexts who have little direct experience of nature, agriculture, farming and the environment in general, especially those living in large cities. This initiatives addresses the important social, cultural and technological changes that have characterized industrial societies in recent decades, and have created a distanciation between rural and urban life.

DFs are not to be confused with city farms, which are typically located in the city, with the express aim to enable city children to see and being with farm animals, plants and the soil. City farms are generally built on public property, but they are most often managed by NGOs' volunteers. City farms are mainly found in the countries of northern Europe.

Instead, DFs are real farms are welcome school children or other interested groups; they aim to put into direct communication farmers and citizens and to offer the opportunity to farmers for alternative forms of farm-income (i.e. by providing educational farm tours, food catering etc.).

DFs offer an opportunity for an encounter between the 'city' and the 'countryside', they enable the young urban generations to know more about animals' lives and the origins of food products, as well as stimulating their critical spirit and curiosity. DFs are therefore multifunctional. They facilitate interactions with schools, teachers and students, encouraging the latter to engage in active participation through 'learning by doing'. The assumption is of a strong socio-cultural value in visiting DFs, which are taken to represent a precious opportunity for learning and growth.

DFs or 'school at the farm' have strongly developed in Italy in recent years. They grew from the first meeting of 'Agriscuola (Agri-school)' in 1997, organized by Osservatorio Agroambientale (Agroenvironmental Observatory) with the participation of the European Federation of City Farms (http://www.fattoriedidattiche.net).

An up-to-date total number of DFs is not available, but 444 were recorded in the last census in 2002 (Osservatorio Agroambientale). However, among farms that subscribe to the DF model, there is a prevalence of organic farms. In 2003 there were 253 'organic' DFs, while currently (the end of 2005) there are 411, showing an increase of 62% on a national scale (BioBank Data, Regional Census).

Emilia Romagna is the Italian Region in which DFs are mainly diffused. As early as 1999 this Region promoted DF networks in all of its provinces, through the project 'Fattorie Aperte e Fattorie didattiche (Open Farms, Educational Farms)'. This is one of the best examples in Italy in terms of the spread of the initiative, the synergy among public and private bodies, and the number of schools and students involved.

Several of these kinds of projects have been developed at regional or local level, with the contribution of public administrations, schools, teachers, parent's committees, farmers, consumer associations, and structures involved in the dissemination of educational material on environmental and food matters.

DF activities and services consist of a variety of educational opportunities: guided visits, 'learning journeys', participation in farm activities, laboratories on food processing and naturalistic tours. All these activities are supported by different educational materials. Topics covered include: agriculture, ecology, knowledge of the countryside, knowledge of food and food processing (such as pasta, olive oil, cheese, bread). Stress is placed on rural culture, traditions and jobs.

The approach to farmed animals is initially focused on direct experience, first through general observation and later through direct touch, accompanied by an explanation of the anatomical and physiological aspects of the animals. The farming system of the DF is described, with particular attention to animals' feed and any treatments that they need.

It is among these activities that references to FAW sometimes emerge. Although the issue is not treated in any depth among the materials we found, DF can be a useful tool for the diffusion of AW topics among children.

Having a farm system with a low environmental impact and with sensitivity to AW is a fundamental requirement for all farms wishing to become a DF. However, it is not well specified as to which are the parameters that define AW for DFs. The most likely framework is derived from EU rules on organic farming.

As mentioned previously, there are different structures that operate in providing educational materials for DFs: in this report we describe the activities of two of them: the Agroenvironmental Observatory, Osservatorio Agro-ambientale (http://www.osservatorio agroambientale.org/>) and AIAB (the Italian Association of Organic farming http://www.aiab.it/home/">).

AIAB, for example, offers 'Percorsi del biologico (Organic Itineraries)' – a publication that sets out the principles of organic farming and related issues, for its own organic DF network. AW issues are covered in the context of information about organic breeding.

ELECTRONIC SURVEY RESULTS

From our survey of educational resources provided for students, it seems to us that in Italy, at present, the provision of specific informative and didactic/educational material on AW issues is in general rather limited. The material is even poorer if we consider FAW specifically. Therefore, the relatively low levels of awareness and interest shown towards these matters in Italian society may be partly attributable to this lack of educational focus on AW and FAW.

The ethologist Marchesini (2002) underlines how human–animal relations have been characterized in recent years by a profound shift, due to several socio-cultural phenomena, which, little by little, have moved humans away from habitual contact with the world of animals. A the same time, the same changes have promoted a large reconsideration of human/nonhuman animal relations. In particular humans have become increasingly separated from domesticated animals. This decline in human–other animal contact has profound consequences for the educational, emotional and psychological meaning that nonhuman animals assume for children and adults too.

As an example, the following approach to AW of a public institution is instructive: the Veterinary Service of the Local Health Authority in Bologna conducted educational projects among children aged 3–11 in a sample of schools within the city, which aimed at the diffusion of knowledge about, and the appropriate behaviour towards, other animals, initially dogs and cats. During the project, an indiscriminate fear towards animals was discovered among many children. This fear often resulted in negative behaviour, which was analysed though questionnaires and conversations with children. Childhood fear of other animals was associated with poor knowledge of animals and their world, and with irrational fears passed on to children by adults.

Despite findings such as this, attention on these topics still remains low. In order to address this cultural gap, different actors, from public institutions to private associations, single educators and teachers, are nowadays becoming more involved with actions aimed at the diffusion of knowledge about other animals and towards tackling related behavioural problems.

As The National Committee of Bioethics (2001) underlines, 'the welfare of domestic animals can't be simply promoted taking their physiological, ethological and behavioural needs into account, because the central point of their welfare is based on their capability to get pleasure from a balanced and respectful relationship with humanity'. In this respect it must be recognized that improvements are happening, through the development of

disciplines such as applied zoo-anthropology, the growth of new schools of thought and of new skilled figures aimed at consolidating human-animal relations. However, these initiatives remain marginal in the context of general debates about animals.

6.1 COMPANION ANIMALS: DOGS, CATS AND OTHERS

Particular attention is due to activities carried out by institutions and animal protection NGOs in respect of animal companions, because of the importance they assume in many of the educational initiatives previously mentioned, as well as for the fact that, after all, they are the animals with whom it is possible to have regular contact, even for urban children. As a consequence, Italian society appears to have a particular reaction to AW issues in the context of these animals. We have observed that these topics are emphasized more among children and in the context of schools, they are largely addressed in the educational material provided by animal protection NGOs in particular. The main AW topics that are treated are: stray dogs, feral cats or abandoned animals; animal mistreatment (cruelty to animals); and other topics that readily catch children's attention, as in the case of zoos and circuses. At the same time, as already mentioned, knowledge of welfare for animals like dogs and cats is defined in terms of their nutritional and behavioural needs.

6.2 FARM ANIMAL WELFARE

Our survey results show that, although this topic is not totally ignored, it is covered only indirectly or within more general discussions contexts. FAW issues are the subject of attention among adults especially in the context of food consumption, relative to the nexus of livestock-production-health and food safety. This kind of approach also seems to be reflected in the way FAW issues are proposed to young students. In Italy, the food theme, incorporating cultural, geographical and historical traditions, is particularly strong and noticeable in educational materials. Public institutions, schools, consumer and farmer associations and many others, are thus very active in the diffusion of these matters among young people, through integrated projects and information campaigns.

For an example, we can refer to the web site of the Emilia Romagna Region DF network, which provides a great number of references to learning material (produced from 1996 to date by the Ministry of Environment, Region Emilia Romagna, Provinces of Emilia Romagna, ASL, Schools, DFs and Professional Training Centres). This material is comprised of hundreds of items of literature (books and other publications) as well as

21

digital material (CD-ROMs, audio and video). However, all of this material is focused on the issue of food education. This example shows the importance given to this theme. The great majority of learning material is mainly focused on food, health, safety, and on the connection between food production and the environment. It is in this context that FAW topics are usually addressed.

However, a direct reference to FAW is almost missing within official documents and formal educational materials aimed at pre-school and the first years of primary school. They mainly focus on familiarity with and recognition of farmed animals. According to some experts, this is due to the fact that urban children often don't know animals associated with rural areas (such as cows, pigs, chickens and rabbits):

'Our children have a better knowledge about the behaviours and aspects of distant exotic species, also thank to TV documentaries; while they know very little about the farmed animals in the countryside, also because their presence is not observable along the landscape around our city; you can't see cows and pigs grazing in the plains around Bologna' (Health Agency of Bologna).⁵

Lessons acquire more specialist and technical characteristics at higher scholastic levels; they deal with physiological and anatomical aspects of animals and the environments in which they live (at middle school) and issues concerning production and technical-economic parameters (in studies following middle school).

The diffusion of specific FAW information at school seems to be left to the activity of animal activist NGOs, together with other actors involved in scientific and environmental dissemination and through the adoption of a specific draft agreement with appropriate Ministries (Offices). The educational material they provide mainly deals with problems related to the adoption of intensive farming systems, and, as a consequence, on the characteristics followed in organic farming systems that address the welfare of animals (AW as a general concept).

In this context DFs are performing a fundamental role in Italy: they can be seen as a place in which it is possible to connect children and students to other animals and in which it is possible to start talking about some of the important themes of AW.

Specific topics about AW and FAW are substantially covered in several courses at different Universities, including courses relating to Agriculture, Veterinary Science and the Natural Sciences; educational material provided within this context is varied: it encompasses recognition of the complexity of biological systems, with a particular attention being paid to the interaction between farms, farming and territory, and on knowledge of the anatomy and physiology of animal companions and farmed animals. AW topics in these courses are covered on a more concrete basis, for instance by describing the easiest to implement and most effective indicators for defining levels of AW and demonstrating instruments and methods to improve the conditions of farmed animals.

⁵ This is due also to the predominance of intensive farming systems adopted in these areas, in which animals are confined in limited spaces.

Part II

Norway

by
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METHOD

This study aims at exploring to what extent the topic of farmed animal welfare (FAW) is being taught in Norwegian basic schools (1–10 grade). This is in the context of governmental guidelines on the transfer of information about FAW to the public.

In order to obtain a better understanding of the governmental perspective on FAW and knowledge transfer, I have analysed central political documents from the last decade that are concerned with consumer, food and animal welfare (AW) policy. This time frame was chosen because White Papers about all three political areas have been released in this period.

One central aim of the analysis was to get an understanding of how consumer policy is seen in connection with AW policy. This was achieved by first identifying all occurrences of common political concepts related to the three subjects, and then examining the occurrence of connections between the political areas, on the basis of each document's main political area(s). The political concepts in question were: consumer knowledge, consumer information, the consumer role in relation to food production, consumer trust, consumer focus on ethics, consumer's social responsibility, food quality, trust in food, livestock production and AW. In addition, the government's view on trust in food and food quality was examined in the documents, since these two concepts are commonly used in national politics and cover all the three areas in question: consumers, food and AW policy.

When analysing the educational resources the findings were sorted into different categories of topics, as shown in Table 7.1.

TABLE 7.1 Categories used in the analysis of educational resources. In the parentheses in the second column there are suggestions for relevant subjects.

Main topics:	Subtopics:
Breeding	Domestication, artificial selection, comparison with wild ancestors
Health	Mental health (behaviour problems, depression, positive feelings)
	Physical health (diseases, preventive health care)
Physical environment	Restrictive (tied up, cages)
•	Free range (indoor or with access to outdoor areas, on pasture)
	Thermal comfort
Social environment	Mother-offspring relationships (pre- and postnatal environment, weaning)
	Group behaviour (stocking density, interaction, play, social facilitation,
	socialisation)
Management	Inspections and care (individual care, human-animal relationships, feeding)
	Transport (loading on and off, means of transport, duration)
	Slaughtering (lairage, slaughtering procedures)
Alternative production	Alternative livestock production, (for example organic) which often are more
•	AW-friendly. Either already existing in Norway or with potential for initiation.

THE PUBLIC AUTHORITIES' ADMINISTRATION OF FARM ANIMAL WELFARE

In this chapter we start with a discussion of, firstly, how the Government views the Norwegian consumers' role in relation to AW, and secondly, the Government view on what consumer information about FAW should be like. Subsequently, we discuss the consequences of this policy for the transfer of information about FAW in primary and secondary school.

In order to get a better understanding of the current situation, Section 8.1 opens with a summary of the historical development of AW politics in Norway, followed by an overview of the central political documents concerning AW and consumer policy the last decade. This period is chosen because central policy documents have been released in all three areas: agriculture, consumers and food policy. The documents are analysed in order to find statements concerning consumers' relation to AW and consumer information about AW. In addition the public authorities view on the concepts food safety and food quality is examined. These two concepts are of current interest since both are regularly used in political discussion concerning consumers' relation to food policy.

To examine to what degree the political goals discussed in Section 8.1 are reflected in compulsory education, Section 8.2 compares political documents with the national curriculum for primary and lower secondary school. Chapter 8 ends with a discussion of the analysis, concerning how policy is reflected in the actual situation of how the curriculum focuses on consumers' relation to FAW.

8.1 CONSUMER POLICY AND FOOD POLICY, IN RELATION TO ANIMAL WELFARE POLICY

8.1.1 THE HISTORICAL DEVELOPMENT OF NORWEGIAN ANIMAL WELFARE POLITICS

During the 1990s there was a growing interest in AW in Norwegian society, which contributed to increased political commitment in this area. Several factors contributed to this trend. The focus on AW in the rest of Europe influenced how the topic was placed on the political agenda in Norway. In Sweden a new Animal Welfare Act was passed in 1988, as a direct consequence of criticism of the welfare problems associated with livestock production (Engstrøm and Rytthammar, 1990). In the EU, AW achieved a new status during the 1990s. Important events were the Maastricht declaration in 1993, where all the member countries supported placing a greater priority on AW in the future, and the Amsterdam protocol in 1997, in which animals were recognised as sentient beings (Mossberg, 2005). After the BSE crisis, trust in food became part of the political agenda in Norway, which indirectly increased the focus on FAW (St.m. nr 40 (1996–1997)).

The establishment of the Council for Animal Ethics was a part of this international trend (Inst.S. nr 226 (2002–2003)). The Council was charged with the important task of initiating and leading public debate concerning the use and treatment of other animals in Norway. In addition the Council has functioned as an 'antenna' for attitudes and views on AW in society. During the Stoltenberg government in 2000–2001 several important resolutions were passed concerning AW. Agricultural minister Bjarne Haakon Hansen focused on an increased consumer orientation towards food policy and considered AW issues to be an important part of this field (Press release No 28, 19 June 2000). Based on the fact that a long period had passed since the last thorough political discussion of animal care in Norway, he invited society to debate the issue of AW in general (Press release No 49, 1 December 2000). This invitation revealed a broad interest in the issue. During the work on St.meld. nr 12 Regarding animal husbandry and animal welfare (White Paper) many consultative statements were received from the general public and special interest organisations (Personal conversation repr. Ministry of Agriculture, 20 January 2006).

8.1.2 POLICY DOCUMENTS OF THE PUBLIC AUTHORITIES

In this section, an overview is presented of central official political documents concerning AW, food and consumer policy, with the main topic of each document and the Ministry responsible shown. These documents are used in the analysis in Section 8.3.

St. meld. nr. 40 (1996–1997) Food Quality and Consumer Safety (White Paper)

The Ministry of Agriculture presented this document in the light of a greater diversity of imported goods and increased global trade. The objective is to present a holistic approach to secure safe food for consumers.

St. prp. nr 1 (1998–1999) Concerning the Budget Period 1999 (Royal Proposal)

The Ministry of Children and Equality explains the objectives in consumer policy. The main objective is defined as both contributing to a common mobilization of consumer responsibility and awareness and also in ensuring that the interests of consumers are supported and obtain approval.

St. meld. nr 40 (1998–1999) Concerning Consumer Policy and the Organisation of Consumer Institutions (White Paper)

The Ministry of Children and Equality presented this document based on the fact that it had been 20 years since the last general discussion concerning consumer policy. Several topics are mentioned as the main challenges: the structural reorganization of the market place, changes in purchasing power and consumer responsibility for policy.

St. meld. nr 19 (1999–2000) Concerning Norwegian Agriculture and Food Production (White Paper)

The Ministry of Agriculture made this document due to the necessity of change in agriculture and food production. According to the report, important objectives are: increasing the orientation towards consumer perspectives in agricultural production and promoting coordination between different authorities in the food chain. Other objectives are: safe food, the development of new production methods and services and multifunctional agriculture.

St.meld. nr 12 (2002–2003) Regarding Animal Husbandry and Animal Welfare (White Paper)

The Ministry of Agriculture presented this document based on the fact that it had been more than 30 years since a general review of all animal husbandry in Norway had been carried out. Other motivations for this document are the political strategy of increasing recognition of the consumer perspective in food production and the need to relate to the food chain in a holistic way.

St. prp. nr 1 Tillegg nr 8 (2002–2003) Concerning the New Organisation of Food Administration (Parliamentary Bill)

The Agricultural Ministry explains, as a part of the reorganization of food administration, how the Government acts according to the conditions for and consequences of a new food safety authority.

Innst. O. nr 36 (2003–2004) Report from the Standing Committee on Business and Industry Concerning the Food Act (Legislative Bill)

This statement from the Standing Committee is about the Government's proposal for a new Act concerning food production and safety. The objectives of the Food Act are to

secure the health-related aspects of safe food and to promote other relevant interests such as quality, consumer and market considerations, and also animal and plant health.

The Action Plan for Consumer Orientation of Food Policy (2004-05)

The objectives of this action plan are to strengthen consumers' opportunities to influence the development of food policy, and through information strengthen consumers' opportunities to make an informed choice based on personal preferences, whilst at the same time strengthening consumers' confidence in food.

8.1.3 THE CONCEPTS OF FOOD SAFETY AND FOOD QUALITY

In St.meld. nr 40 (1996–1997) food quality is defined as a product's ability to satisfy the needs, demands and expectations of the consumer, and suggests a division into objective and subjective dimensions. While the objective factors are measurable and distinct, the subjective factors deal with emotions and perceptions. Examples of the subjective quality dimension are attitudes, values and ethics. In these categories AW can be one among many other factors. In other words: AW belongs in the subjective dimension, along with other factors like flavour and appearance.

According to the report, food safety is about to what degree the consumer feels safe in respect of the risk aspects of food. Even though the report first and foremost focuses on health-related risk factors, risk is defined in more general terms as an expression for the possibility for and the consequences of unwanted events. In St. prp nr. 1 Tillegg 8 (2002– 2003) a point is made on active communication and information as important instruments to achieve food safety.

8.1.4 ANALYSIS OF DOCUMENTARY DISCUSSION OF THE CONSUMER AND OF ANIMAL WELFARE

In order to explore to what degree AW is an integrated part of consumer and food policy, the documents outlined in Section 8.1.2 were analysed, looking for occurrences where the three political fields are seen in connection with each other. This was achieved by taking as a starting point what defines each document's main political field(s) and then noting every occurrence of topics related to the other two political fields. An overview of the findings in the documents is given in Table 8.1, with the topics looked for shown in the vertical column.

Table 8.1 shows that in the documents dealing strictly with consumer politics, consumer knowledge and consumer information are central topics. In these, emphasis is also placed on the responsibility consumers have for implementing policies by shaping the market. Typical areas of consumer responsibility which are referred to are, for example, common values in society in general, ethics and sustainable development. AW, on the other hand, is not mentioned as one of the values that consumers are responsible for. Holistic consumer responsibility is neither mentioned in the documents concerning AW policy, food policy,

TABLE 8.1 Overview of occurrences of different topics in each document.*

	St.meld.	St. prp.	St. meld.	St. meld.	St. meld.	St. prpr.	Innst. O.	Action
	nr 40	nr 1	nr 40	nr 19	nr 12	nr 1 Till. nr 8	36 nr 36	plan
	(1996-97)	(1998-99)	(1998-99)	(1999-00)	(2002-03)	(2002-03)	(2003-04)	(2004-05)
Main Political	cons.,	cons.	cons.	food	animal	food	food	cons.,
Field ¹	food				welfare			food
Food safety								
Food quality					v			
The consumer	•			V	V		V	
in connection								
with food								
production Consumer	V			V	V	V	V	V
trust	V			V	V	V	v	v
Consumer	V			V	V		V	v
demands for	•							·
ethical								
production in								
general								
Consumers'		V	V					
social	,							
responsibility ² Consumer			***	**	**		**	**
knowledge	V		V	V	V		V	V
Consumer	V	v	v	V	V	v	V	v
information	•	•	•	•	•	•	•	•
Farmed								
animal								
production								
Animal								V
welfare								

Notes: * Grey cells indicate the respective document's main political fields; ¹ cons. = consumption; ² citizens' responsibility for the public and environmental consequences of their actions.

nor food and consumption policy. However in most of these documents the consumer demand for general ethical production is mentioned and this is seen in connection with food safety. In other words, a dimension outside the consumer's own needs is included by emphasizing the responsibility for shaping policy by choosing one product rather than another. Consequently consumers' social responsibility can be seen as a societal demand, while ethical consumption, which can include concerns with AW as one of many food safety dimensions, is a demand from the consumer perspective.

For example, in St.meld. nr 12 (2002–2003) consumer behaviour is pointed out as a key factor in achieving an ideal level of AW: 'Consumer trends and the consumer willingness to pay [...] will play a central role in the future level of ambition for animal welfare' (St. meld nr 12 (2002–2003) Ch. 9.4.4).

In contrast to the documents concerning food policy, neither livestock production nor AW is mentioned in the documents concerning consumer policy in general. In the food policy documents, consumption is mentioned in connection with trust, willingness to pay, demand for ethical consumption and also AW. As for example in the statement of the committee concerning the Government's suggestion for the new Food Act:

'In the food industry a key question in the time to come is consumer trust and safety both to food production and the food itself. [...] There seems to be a tendency of consumer demands increasingly being focused on documented and recorded production, environmentally friendly production, traceability, animal welfare and ethics' (Innst.O. nr 36 (2003–2004) Ch. 1.2.1).

The political guidelines for how to place emphasis on consumer information varies depending on which political field it is referring to. While 'openness and access' is emphasized in consumer information about livestock production, 'creating attitudes' is not referred to as an objective of information transfer in this area. The purpose of consumer knowledge about food production and AW is, on the contrary, to ensure consumers' willingness to pay. In connection with consumer information in general, "creating attitudes" is pointed out as an important strategy to achieve awareness about consumers' social responsibility.

The choice of shape of knowledge transfer concerning livestock production and AW can be seen in connection with the government's view in general on consumers' relation to AW. As previously described the governmental focus is only on consumer demand and not on consumer responsibility. Consumer information is thus only relevant as far as citizens request it themselves or if the authorities find it important as a part of ensuring consumers' food safety. Consequently the authorities focus on factual information only, and not attitude-creating information. Through openness and accessibility the Government wishes to stimulate increased willingness to pay and thereby adjust the market in favour of more AW-friendly products.

8.2 ANIMAL WELFARE IN EDUCATION POLICY

This section begins with a description of the organisation of the Norwegian education system. We focus on basic school (equivalent to primary and lower secondary school; 1st-10th grade) and general teacher education. Subsequently there is a review of the national curriculum, examining the occurrence of articles about AW in general and also in connection with consumer behaviour.

8.2.1 ORGANISATION OF THE EDUCATION SYSTEM

The Ministry of Education and Research is responsible for implementing national education policy. Parliament and the Government define the goals and decide the budgetary frameworks for education. The Norwegian Directorate for Education and Training (homepage: www.utdanningsdirektoratet.no) is responsible for the development of primary and secondary education. The Directorate is the executive agency for the Ministry of Education and Research.

A common standard is ensured through legislation and through national curricula. Children start formal education at the age of six, and basic education covers a ten-year period of compulsory primary (1st-7th grade) and lower secondary schooling (8th-10th grade). In recent years considerable responsibility and decision-making authority has been delegated from the central Government to municipalities and county authorities. Individual municipalities are responsible for running basic schooling, while county authorities have responsibility for upper secondary schools (11th-13th grade). Within the framework of statutes and national curricula, municipalities, schools and teachers are allowed to decide what learning materials to use and what teaching methods to adopt. Primary and secondary education is regulated under the Education Act. According to this Act, the object of basic school is to give pupils good general knowledge so that they may become useful and independent human beings at home and in society. Upper secondary education aims to develop the skills, understanding and responsibility that prepare pupils for life at work and in society. Basic education aims to provide a foundation for further education and for lifelong learning and provide support for a common foundation of knowledge, culture and basic values, and a high general level of education in the population.

In 1997 the curriculum reform known as L97 was introduced in primary and lower secondary education. At the present, in 2006, a similar reform named Knowledge Promotion (homepage: www.kunnskapsloeftet.no) is taking effect. New syllabuses have been worked out for all subjects at basic school by the Norwegian Directorate for Education. Each school and their teachers are in charge of the interpretation of the articles in the syllabus (Pers. comm. repr. Norwegian Directorate for Education and Training, 2 December 2005).

General teacher education trains teachers at pre-school, primary and lower secondary school levels. In the curriculum for general teacher education (Norwegian Directorate for Education and Training, 2003) comprehensive knowledge is emphasized as a main part of the profession. In addition to scientific knowledge in each subject and pedagogic qualifications, the teacher should also function as a tutor, serve as an example and impart cultural understanding. It is requested that kindergartens and schools should absorb and adapt to tendencies and trends in the society.

8.2.2 Consumer Topics in L97 and Knowledge Promotion

During the 90s a comprehensive integration of consumption topics was carried out in both primary and secondary school. Therefore consumption is a common topic in both L97 and Knowledge Promotion. Sustainable consumption and awareness of responsibilities associated with purchasing are central approaches to the topic. In L97 the interaction between people's everyday life and nature is described:

'We live in a time where the interaction between economy, ecology and technology cause great challenges in insuring sustainable development both in moral and in knowledge perspective. Therefore the education should lead to broad knowledge about the relationships in nature and the interaction between mankind and nature.' (L97, p. 47).

Being an interdisciplinary topic, consumption is an integrated part in many subjects and grades in both curricula. Neither in L97 nor in Knowledge Promotion is AW mentioned in connection with consumption.

8.2.3 Animal Welfare Topics in L97 and Knowledge Promotion

In L97 there is one artice concerning animal husbandry, in the 3rd grade subject Science and Environment: 'Learning about and getting to know some common animals, for example pets and farm animals. Talking about the relationship between humans and animals' (Science and Environment 3rd grade). This article allows choosing animal companions instead of farm animals as the centre of attention, which means that the article only partly concerns farmed animals.

In Knowledge Promotion, which takes effect in autumn 2006, this article is removed. Instead a new article directly concerning AW is introduced, in the 4th grade: 'The pupil should be able to tell about animals and talk about the meaning of animal welfare' (Science and Environment 4th grade). The new article includes all kinds of animals, which implies choosing between, for example, animals used for research and wild animals, as well as farmed animals and animal companions. With this article, the concept of AW is introduced for the first time in the curriculum for basic education. The single reason for using AW in the formulation of the article, was due to distinct appeals in the consultative statements from four stakeholders: the Agricultural Ministry, the Norwegian School of Veterinary Science, the Green Youth Party and Dyrevernalliansen (Norwegian Animal Welfare Alliance) (Pers. comm. repr. Norwegian Directorate for Education and Training, 2 December 2005). Except for these two articles, there are no articles in the curricula concerning AW, animal husbandry, animal ethics or livestock production.

8.2.4 Consumption and Animal Welfare Topics in the Curriculum for General Teacher Education

There are no articles concerning AW or animal husbandry in the curriculum for general teacher education. Consumption, on the other hand, is a main topic. The curriculum describes living in a consumer society as one of the main challenges for general teacher education. According to the curriculum, students shall take part in critical discussions concerning consumption and learn how to transfer knowledge to the pupils about alternative perspectives, attitudes and values. Through giving the pupils this education the aim is to prepare them for functioning in the consumer society.

8.3 DISCUSSION AND CONCLUSION OF THE ANALYSIS

In the analysis of the main political documents it is shown that consciousness-raising concerning consumers' own social responsibility is a distinct political objective, and that the means to achieve this is through consumer information (St. prp. nr 1 (1998–1999) and St. meld. nr 40 (1998–1999)). Holistic consumer responsibility involves ensuring common societal values, which includes for example sustainable development. AW is however not one of the values mentioned in connection with such responsibilities, in any of the documents. In other documents (St. meld. nr 12 (2002–2003) and the Action Plan (2004–2005)) the consumer role is directly seen in connection with AW. But the consumer is not seen as an active factor in AW policy, except for a prospective willingness to pay higher prices. Instead the focus is on AW as one of many possible consumer demands: ensuring AW is then an objective only as far as it is included in any of the subjective dimensions of consumers and food safety.

In the Education Act it is emphasized that pupils' abilities, perception and responsibility shall be developed in order to support the common societal values. Sustainable development and the concept of a responsible consumer are therefore central topics in consumer education in basic school. Consumer issues connected with AW are, however, absent in the curricula both for basic schooling and for general teacher education. An article concerning AW has been included in the new curriculum, but this is only due to direct requests in consultative statements. The authorities in charge of the curriculum, The Norwegian Directorate for Education and Training, had in other words no intention to include the topic of AW themselves. Even in the included article, AW is not seen in connection with livestock production or consumption issues.

In St. meld. nr 12 (2002–2003) (White Paper) society is defined in a holistic perspective as being responsible for AW, with one exception: 'The whole society has an ethical responsibility for animal welfare, to the extent that actions and precautions directly have influence on the animals' circumstances of life' (St. meld. nr 12 (2002–2003) Ch. 9.4).

In order to understand the Government's view of citizens' responsibility for AW, it is important to define what 'to directly influence the animals' circumstances of life' implies. If consumption of products from animal origin cannot be defined as direct involvement, consumer's knowledge about AW problems is probably not included as part of their responsibility either. If this is correct, it means that AW is not a part of consumers' social responsibility.

In St. meld. nr 40 (1996–1997) it is pointed out that the consumers' expectations concerning food quality is influenced by their previous knowledge. The authorities are referring to the increasing concern among citizens about AW (St. meld. nr 40 (1996–1997) and St. meld. nr 19 (1999–2000)). In this context it is natural to point out that it is a common understanding that when food is healthy it implies good AW (MMI survey, 2002).

If, in the future, this view is less prominent among the public, it raises the risk of declining consumer demand for AW. In order to ensure AW it is therefore unfortunate to only focus on AW in the context of food quality or food safety.

The authorities' view on the citizens' role in AW policy can be summarised into two aspects: AW is a consumer demand to the extent that it is a subjective factor in the individual perception of food safety. Citizens can influence the development of livestock production with better welfare standards by being willing to pay higher prices.

ANIMAL WELFARE IN BASIC SCHOOL

According to the Education Act, basic education is intended to give us good general knowledge so that we may become useful and independent human beings at home and in society. In order to get an understanding of Norwegians' general knowledge of FAW, this chapter aims at giving an overview of the educational resources related to livestock production and AW.

In the basic school of today, the curriculum gives the general guidelines for education, while each school and their teachers are allowed, to a great extent, to decide how they want to carry out the actual teaching. Therefore, to obtain an understanding of teachers' interpretations and execution of the curriculum articles, a representative from general teacher education was interviewed. A summary of this interview is given in Section 9.1.

Although web pages and additional literature are increasingly in use, the traditional syllabus textbook is still the main educational resource (Pers. comm. repr. Norwegian publishers association, 31 January 2006). Visits to city farms are also common. In addition several external special interest organisations offer educational materials to schools. An analysis has been conducted of the content of syllabus textbooks in Science and Environment, 1st–10th grade, based on the finding that both the article in L97 and in Knowledge Promotion concerning AW are within this subject. Also, relevant web pages made for Science and Environment have been analysed and the phenomenon city farm visits have been investigated. In addition, the conditions for the teachers' interpretation of the articles have been examined.

Farming organisations and AW organizations are the two groups of external stakeholders which offer educational materials to schools. All the resources contributed by these organisations have been analysed using the same method as for the textbooks.

9.1 TEACHERS' INTERPRETATION OF THE ANIMAL WELFARE CURRICULUM ARTICLE

Due to the local responsibility and authority for running basic schooling, each school and their teachers are in charge of interpreting curriculum articles (Pers. comm. repr.

Norwegian Directorate for Education and Training, 2 December 2005). As described in Section 8.2.4, the general teacher does not obtain any direct knowledge about AW or livestock production through their training. In order to be competent in teaching according to the new curriculum, students are now supposed to be attending an introduction in how to teach about AW. To get an understanding for how this is being dealt with in the education system, an interview was conducted with a representative from a general teacher education faculty. The informant is a teacher at the Tromsø University College, and the interview was carried out on 22 March 2006.

According to the informant, the AW article is more about changing attitudes than knowledge transfer. This is similar to other articles in Natural Sciences and Environment, for example articles concerning the management of natural resources. The informant had two different suggestions for how teaching connected to the article can be done. One option is, as a starting point, to talk about the management of nature in general, and then focus on AW issues connected with the management of animals. Another option is to solely have the animal as the centre of attention. Through getting a better understanding for an animal's behaviour and needs, pupils will achieve a better understanding of animals in general and therefore a deeper understanding of the concept of AW. At the informant's faculty there is no teaching about AW or livestock production for the time being. Animal ethics has been a topic in connection with the management of nature in general, however not in the context of farmed animals. The informant believes the situation at her faculty might reflect a common situation at general teacher education institutions, since there are such a great amount of topics to be covered in the curriculum.

When asked how she imagines a typical teacher's choice of how to fulfill the task, the informant suggests a situation where the teacher chooses to mention AW on several relevant occasions. Such a situation would involve teaching about animals, and could be during a walk in the forest or a visit to a city farm.

9.2 THE COVERAGE OF ANIMAL WELFARE IN EDUCATIONAL RESOURCES

9.2.1 Analysis of Syllabus Textbooks in Primary School

In connection with the reform L97, syllabus textbooks had to go through a process of final approval, by the National Centre for Educational Resources (Norsk Læremiddelsenter).

The new syllabus textbooks released as a part of the Knowledge Promotion reform, on the other hand, do not have to get official approval from the authorities (Pers. comm. repr. Norwegian publishers association, 31 January 2006).

Many schools have still not yet invested in new textbooks ('Kunnskapsløft med gamle bøker', 9 August 2006, published online http://www.utdanning.ws/templates/udf _____13011.aspx>) and the L97 textbooks are still on sale ('Får ikke solgt skolebøkene', 14 July 2006, published online http://forbruker.no/jobbogstudier/article1388656.ece). Also, the publishers have not yet finished all the volumes in their book sets. Some publishers, like Cappelen Forlag, might complete the book set in two years time (Pers. comm. repr. Cappelen Agency, 20 September 2006). This makes it impossible to conduct a complete anlysis of Knowledge Promotion textbooks. Therefore this analysis will only deal with L97 textbooks.

Over previous years, three books have dominated in primary schools Terrella (2–7 grade), Regnbuen/Globus and Fritt fram/Yggdrasil (1–7 grade), as shown in Table 9.1 (Pers. comm. repr. Gyldendal Agency, 23 January 2006).

In textbooks, teacher's manuals included, all mention of livestock production and AW was noted. The findings were then analysed. Firstly, any connections to consumer issues were recorded. Secondly, the analysis looked at whether AW was treated at a general level or whether a critical perspective was used. The latter means that the text either focused on problematic areas in animal husbandry or performed comparisons with alternative production methods such as organic farming.

Farmed animals are mentioned in all the examined books, but there is a great variety in the extent and the choice of topics (see Appendix 1). In Terrella the only topics discussed are sheep farming and conflicts with wild predators, and these are in 4th and 5th grade only. In Regnbuen/ Globus livestock production is mentioned only in the 3rd grade, but hens, cattle, farm management and also AW in general are covered. Fritt fram/Yggdrasil stands out as the books which have the most extensive coverage of AW topics, encompassing the 2nd, 3rd, 4th and 5th grades and including: laying hens, chickens, sheep, pigs and cattle, as well as organic farming and animal ethics. In total there are five different kinds of farmed animals that are mentioned in the textbooks, as shown in Figure 9.1. The number of mentions is generally quite equal, except for pigs that have slightly less coverage. A general trend is that there is no coverage of fish or fur farming. Both these are among the most intensive production methods and both have a relatively short history in Norway. Fish farming is now the greatest form of farmed animal production in Norway. Even though there is no mention of goat or turkey farming, this must be viewed in light of there being coverage of other poultry and ruminant animals. No instances of the consumer role being connected to either livestock production or AW were found.

TABLE 9.1 Market leading L97 syllabus textbooks in Natural Science and the Environment for basic school.

Publisher	Book title	Target group
Cappelen forlag	Regnbuen	1st–4th grade
	Globus	5th–7th grade
Damm forlag	Terrella	2nd–7th grade
Aschehoug forlag	Fritt fram	1st–4th grade
	Yggdrasil	5th–7th grade

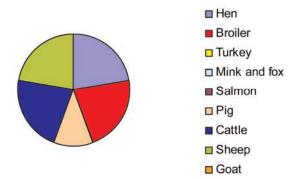


FIGURE 9.1 Total number of incidents of farmed animals being discussed in all textbooks, divided into different types.

Note: The diagram is based on Table A1 in Appendix 1. An 'incident' is defined as a chapter containing mention of the farmed animal in question. There is no incidence of turkeys, goats, farmed fish nor minks and foxes. The diagram is only meant for illustrative purpose, as the data set is too small for statistical analysis.

The quality and the perspective of the material differ between the textbooks, but some general trends are apparent. In each incidence of coverage of farmed animal production, only a few topics are mentioned. Breeding and the physical environment are most commonly mentioned, as shown in Figure 9.2. There is some discussion of social environment topics, like group behaviour and the relationship between mother and offspring. Neither health (physical or mental), transport nor slaughtering is given any coverage.

In coverage of animal breeding, no AW problems are mentioned. However, in coverage of the physical environment, old-fashioned small flocks of hens are compared to the modern practice of confining huge flocks indoors (Terrella, 5th grade).

In all mentions of ruminants, the text focuses on summer pasture. This is reflected in photos that on the whole show animals in outdoor surroundings. In general there are no realistic pictures in any of the textbooks, showing anything but 'pleasant' situations. For example, the only photo of broiler production shows the farmer holding a tiny chicken in her hand (Fritt fram, 4th grade).

In general, the analyses of textbooks show a great variety in the choice of farmed animals and the extent of coverage. The information is usually technically correct, but it does not reflect reality, since the coverage of topics is fragmentary and problematic issues are to a high degree absent.

9.2.2 Analysis of Official Educational Resources on the Internet

According to the Norwegian Directorate for Education and Training, there are no official statistics as to which extent web pages containing educational resources are being used by schools (Pers. comm. repr. Norwegian Directorate for Education and Training, 28 February 2006). Due to the difficulties connected with doing quality assurance of all the available web pages, the Norwegian Centre for Natural Sciences in Education <a href="http://www.normediance.com/representation-represent

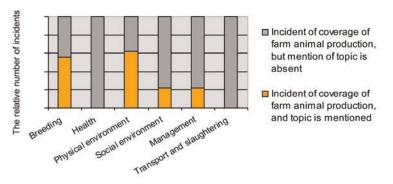


FIGURE 9.2 The incidence of coverage of different AW topics. *Note*: An 'incident' is defined as a chapter containing information about farmed animals. The diagram shows the total coverage of all topics, independent of which kind of farmed animal is being discussed. The diagram is based on Table A1 in Appendix 1. The diagram is only meant for illustrative purpose, as the data set is too small for statistical analysis.

.naturfagsenteret.no>) has constructed the web page http://www.naturfag.no. The objective of this page is to be the main place for Natural Science teachers (1st–13th grade) to search for educational resources and information. The web page is still under construction. Another web page from the Norwegian Centre for Natural Sciences in Education is http://www.viten.no. This page contains suggestions for education programmes with secondary schools (8th–13th grade) as the target group. Neither http://www.aturfag.no nor http://www.viten.no has any coverage of livestock production nor AW.

The Research Council of Norway (http://www.forskningsraadet.no) has a science knowledge project named Nysgjerrigper. The word 'nysgjerrigper' translates as 'Curious George'. As a part of this project the web site http://www.nysgjerrigper.no offers articles on different topics, 'animals and nature' being one of them. However, the web site contains no articles on AW. There is just one article related to livestock production, about fish farming (Stenstad (2004) Fiskeoppdrett i Norge, published online http://www.nysgjerrigper.no/Artikler/2004/november/1100003201.42).

The article outlines the procedure of fish farming, but there is only one piece of information related to AW: 'In order to ensure the fishes' well-being, food has to be appreciated. In Norway much research is conducted on how to develop food that is both affordable and nutritious for the different species' (Fish Farming in Norway). This article is the single incidence of any text mentioning FAW or AW on http://www.nysgjerrigper.no.

Skolenettet (<http://www.skolenettet.no>) is the Directorate for Education and Trainings's portal on the Internet and is designed for pupils, teachers, school administrators, parents and others interested in schools and education. The aim is to offer information and educational resources to target groups. AW is absent on Skolenettet, and the same goes for livestock production with one exception: a link to the internet game Melketid (<http://www.synkonsept.no/melketid/melketid.html>) and an article about a primary school which has its own barn (Barneskole i fjøs, <http://www.skolenettet.no/templates /News.aspx?id=12370>). In none of these cases are livestock production or AW mentioned.

The general conclusion from analysis of web pages containing educational resources for Nature and the Environment is that information concerning livestock production and AW is almost non-existant, and that there are no incidents where the consumers' role is connected to AW or livestock production.

9.2.3 A STUDY OF VISITS TO CITY FARMS

In order to learn about farmed animals and farming in general, visits to city farms have been a tradition in basic school for several years. Since there are no official reports on a national scale about the number of city farms, or the frequency of visits by school classes, this study concentrates on getting an understanding of all the different actors involved in this activity. Additionally, participant observervation on visits to three different city farms in the Oslo-area was conducted in the spring of 2006. In these case studies I analysed the information given to pupils about animals using the same method as when analysing textbooks and other education resources. To get information on the national situation for city farm visits, representatives from the Departement of Education in Oslo municipality and from the different city farm stakeholders were contacted. In addition, when organising the case studies several conversations were conducted with representatives from city farms, which provided useful information on the different ways city farms are organised in Norway.

General Information on the Extent and Organization of City Farm Visits

The national authorities have never administered school visits to city farms. Instead each municipality has chosen independent ways of organising the visits. In some municipalities the local authorities run their own city farm. There are also local authorities that cooperate with private organisations on running city farms. A third variant is privately owned city farms, with each school being in charge of organising their own visits.

On national level there is only one organisation, 4H Norway, which is involved in the administration of city farms. 4H organizes their city farm activities in a sub-organisation called FNG. A 4H-farm is tailored to the demands of being open to the general public. There are several criteria to get approval as a 4H-farm (FNG, 2005). One criterion is that the farm, to the largest possible extent, reflects both modern and old-fashion Norwegian farming. Another criterion is that the animals shall be involved in farm production. The pedagogic aim for farm visits is to transfer knowledge about and understanding of ecological relationships, food and food production, animal husbandry, nature and the environment. Through these activies 4H hopes that children and young people will develop enthusiasm for work, commitment to society and for becoming responsible citizens.

'The farm as a pedagogical resource', GSPR (<http://www.gspr.no>) is another organizational umbrella for co-ordinating city farms and school visits. This project is about utilizing the farm as a pedagogic arena, and developing methods for learning the curriculum through active participation in daily life on the farm. In other words, in GSPR the farm is not seen as an opportunity to disseminate information about farming or about agricultural work and life, but focuses only on the pedagogical aspects of farm visits. The

project lasted from 2002–2004, and the actors in charge were the Resource Center Staup in cooperation with the County Governor in Nord-Trøndelag. Today several municipalities in Nord-Trøndelag are still involved in GSPR, and in other counties similar projects are being initiated (Pers. comm. repr. GSPR, 7 December 2005).

The economic contribution from the local authorities differs in each municipality, depending on the formal organisation of the city farm. Therefore there is great variation between municipalities, with extremes ranging from municipalities where pupils get several free invitations to city farms during their education, to municipalities where the pupils are charged if they choose to go to a farm. In the latter case, the schools in question often do not prioritize going on farm visits (Pers. comm. repr. FNG, 10 February 2006).

The organization of knowledge transfer on the city farm seems to be dependent on the actor in charge of the daily running of the farm. On city farms owned by the municipality there are often specially hired educators, while 4H has developed their own pedagogic material. Most pupils seem to only participate in an independent visit lasting a couple of hours, and do not participate in a program where the pupils are active participants in farm work. There are also variations in pedagogic organisation. For example there are programs where pupils return to the same farm several times during the year, in order to gain a better understanding of farm production (Pers. comm. repr. Lindeberg city farm, 23 January 2006). The amount of animals and the extent of farm production also vary. Some farms only have a few animals which are kept only as companions, while other farms have several different kinds of farmed animals and both organic and conventional production.

Case Studies of City Farm Visits

All the cases were independent visits, where the stay at the farm lasted a couple of hours, and the visitors were a group of 3rd grade pupils together with their teacher. During the visits there were several activities, a guided tour in the barn being one of them. In all cases this tour lasted approximately 45 minutes.

Losby city farm 28th February

The farm is situated in the Lørenskog municipality, and the municipal authority runs the farm. In the barn there are sheep, calves, sows, hens, ducks, geese, horses and rabbits. A teacher has designed an education program adjusted to schools and kindergartens. The visit was a free offer from the municipality to local 3rd grade classes. The guided tour was conducted by the educationalist, who spoke about hens, sheep, calves and sows. The class use the textbook Fritt fram, and planned to make a mind map together after the visit.

Hauger 4H-farm 7th March

The farm is organic, and aims to have several different kinds of farmed animals. At the time of observation, they had sheep, goats, pigs, rabbits, horses and a calf. The visit was part of the general education plan for the school, which fortunately was in walking distance from the farm. The farmer herself, who knew several of the pupils from previous visits,

conducted the guided tour. The class use the textbook Regnbuen, and planned to watch the video Pål sine høner after the visit.

Bogstad city farm 3rd May

The farm is owned by the Oslo municipality. On the farm were cattle, pigs, sheep, goats and hens. The visit is part of a general education plan at the school, and the manager at the farm conducted the guided tour. Previous to the visit the class had been watching Pål sine høner, but they did not have any plans for further teaching related to their experiences at Bogstad. The class uses the textbook Fritt fram.

The guided tour and the style of knowledge transfer were generally similar on all three farms. Also the choice of focus was alike: Pupils were told about the physical and social environment and about farm management. Typical topics were the daily cleaning and feeding routines. Neither breeding, health, transport nor slaughtering issues were mentioned. On all three farms the flock of hens consisted of 20–30 individuals and were kept in a room that allowed a low stocking density. During none of the three visits did the guide inform the pupils that the animal husbandry on show did not reflect the reality in Norwegian livestock production.

All three visits started off with some information about avian flu, and explaining how this influenced the management of the farm. AW aspects were not mentioned in connection with this issue. In fact, no problematic AW issues were brought up during any of the visits. On one of the farms, there was an obvious example of poor AW, but the guide nor any one else pointed this out. The problem in question was a bull calf kept in a small pen by himself. The farm had only this single calf and no other cattle, which gave him no opportunity to mingle with fellow member of his species, which would be part of his natural social behaviour.

An interesting common feature during all three guided tours was how pupils were told individual animals' names and also about their personal traits. At the same time the guide talked about which products originate from the different farmed animals. This combination of on one hand giving the animals status as individuals with personalities and on the other talking about them from a production perspective is an important aspect of consciousness-raising about the fact that each livestock 'unit' consists of a unique individual. However, it was not pointed out that the barn did not reflect typical farmed animal production. The quality of the animal's environment provided better welfare and no problematic issues connected with farmed animal production were mentioned.

9.3 EDUCATIONAL RESOURCES PROVIDED BY EXTERNAL STAKEHOLDERS

9.3.1 AN OVERVIEW OF FARMING ORGANISATIONS

The farming organizations providing educational resources are:

- Geno is a co-operative owned by Norwegian dairy farmers. The organization is a breeding and artificial insemination association, mainly focusing on cattle breeding.
- Gilde BA is the main co-operative for Norwegian meat producers. It organizes the slaughter of farmed animals and the processing and marketing of meat.
- Norsvin is the co-operative of Norwegian pig producers. It organizes breeding schemes and artificial insemination.
- NSG Norsk Sau- og Geitalslag is the trade organization for sheep and goat producers.
- Bondelaget is the Norwegian farmers' union, and is the leading organization for agricultural business and politics.
- Landbruksamvirke is the federation of Norwegian agricultural co-operatives.
- Laksefakta is the generic marketing organization for Norwegian fish farming and sea food production. The organization is run by the Norwegian Seafood Federation, the Norwegian Seafood Export Council and the fish feed producers EWOS and Skretting.
- OEH Opplysningskontoret for egg og hvitt kjøtt is the generic marketing organization for Norwegian poultry production.
- Prior BA is the main co-operative for Norwegian poultry producers.

9.3.2 EDUCATIONAL RESOURCES FROM FARMING ORGANIZATIONS

Visits to Schools: School Pig

The project School Pig was initiated as a part of Norsvin's marketing strategy in the mid-1990s, in the county of Østlandet. The target group is 9th grade classes, who receive a visit from a farmer and sometimes also a person working in the meat industry. During the visit they get to see meat being cut up and receive information about meat production. The main topics are transport and slaughtering, but a brief description of pig production on the farm is also given. AW is not the primary focus, but is often mentioned (Pers. comm. repr. Norsvin Østfold, 13 March 2006, and repr. Norsvin Trøndelag, 22 March 2006):

'In Norway pig production consists of small, scattered farms. This gives few incidents of diseases, good health conditions and little stress for the animals.[...] Fortunately there are strict rules concerning animal husbandry in Norway. Among other things it's not allowed to use antibiotics or growth hormones as feed additives. Nor is tail-docking or restriction of movement allowed. The pigs are kept in spacious

pens, in fresh air, well lit and with plenty of straw. That's why the Norwegian pig has a curl on its tail' (School Pig project pamphlet).

For the time being the project is running in the counties Nord-Trøndelag, Sør-Trøndelag, Troms and Østlandet. In each county initiation of the project is dependent on funding from the headquarters of Norsvin and local commitment.

Material: Green School

Bondelaget's main information project with schools as target groups is the Green School. The objective is to help build long-term postive attitudes towards farming (Bondelaget, 2001–2005). When developing education material, the organisation has aimed at giving an average impression of Norwegian farming (Pers. comm. repr. Bondelaget, 29 September 2005). The material consists of the video På min gård vil jeg ha, the booklets Dyra på garden, Griseboka mi, Kuboka mi, Geiteboka mi and Saueboka mi. The project also has a web site about dairy farming, named Fra kalv til kvige til ku (http://www.bondelaget.no/skole/kalv/).

Material: Pål sine høner and Øko-egg

The educational video Pål sine høner was released in 1999 by OEH in cooperation with Fjørfelaget. The material consists of a 20 minutes video, a booklet and a teacher's manual. OEH also offer to schools the brochure Øko-egg, about organic egg production.

Material: Dyrevelferd.info

Dyrevelferd.info is an Internet portal with information about AW in Norwegian livestock production. Landbrukssamvirke is in charge of the web site, in collaboration with Tine, Gilde, Prior, Geno, Norsvin and NSG. According to the web site the objective of Dyrevelferd.info is to impart knowledge about the situation for AW in Norwegian livestock production. The web site was launched in January 2006, and has information about poultry, fur farming, cattle, sheep, goats and pigs.

Material: En glad laks

Laksefakta distributed, free of charge, the video En glad laks to all the primary schools in the country, in February 2006. The title means 'a happy salmon' in Norwegian, but is also a Norwegian expression 'a right cheerful bloke'. This video was the first ever education material about fish farming available for basic schooling. According to Laksefakta, the objective of the video is to contribute to creating positive attitudes towards Norwegian fish farming (the article 'Kjøp film – støtt Laksefakta', published online http://www.laksefakta.no, 30 January 2006)

3.3.3 EDUCATIONAL RESOURCES FROM ANIMAL WELFARE ORGANIZATIONS

In Norway there are three main animal welfare organizations:

- Dyrebeskyttelsen (Norwegian Society for the Protection of Animals) was founded in 1859. The secretariat works with lobbyism and information to the media and the public. The organisation has 25 local groups that focus on practical AW work.
- Dyrevernalliansen (Norwegian Animal Welfare Alliance) was founded in 2001, in connection with the preparing of St. meld. nr 12 (2002–2003) Regarding animal husbandry and animal welfare (White Paper). As well as public authorities, other target groups are industry, the general public and the media.
- NOAH for dyrs rettigheter (the animal rights organisation NOAH) was founded in 1989. The organisation's main focus is animal rights and ethics. NOAH has several local groups.

Dyrebeskyttelsen's School Visits

Traditionally the local groups of Dyrebeskyttelsen used to visit schools to inform pupils about AW. However the extent of such visits has varied through the years, and today they are a rarity. One of the main reasons are new restrictions on schools concerning marketing from external stakeholders (Pers. comm. repr. Dyrebeskyttelsen, 9 March 2006).

Material: Dyrebeskyttelsen's pamphlets

The folders and articles used as the main sources of information for the public can either be sent by mail or downloaded for use in shools. There are folders about laying hens, broilers, sheep, cattle, farmed fish, mink and foxes. The folders were last updated in 2000.

Material: NOAH's pamphlets

As a part of their information resources to the public, NOAH has made a series of pamphlets about different farmed animals. These can be sent by mail and are also distributed on stands. Fri som fuglen?, Som kua på den grønne eng? and Fruens mink? are about poultry, dairy cows and fur farming respectively.

Material: Dyrevernalliansen's fact sheets

Dyrevernalliansen mainly impart information to the public through their web site, which includes several fact sheets about laying hens, broilers, turkeys, fur farming, pigs, cattle and farmed fish. These were last updated during the period November 2005–January 2006.

Material: Broiler.no

In spring 2005, Dyrevernalliansen released the web site http://www.broiler.no. According to the organization, the objective is to impart basic information about welfare problems in the broiler industry (Pers. conv. repr. Dyrevernalliansen, 26 April 2006).

As a part of their anti-fur campaign, Dyrevernalliansen launched the web site http://www.pelsdyr.info in 2004. The objective is to contribute to creating attitudes and to give a general picture of the welfare problems in the fur farming industry (Pers. conv. repr. Dyrevernalliansen, 26 April 2006).

3.3.4 Analysis of Educational Material from External Stakeholders

The analysis of the educational material from the AW and farming organisations was conducted using the same method as when analysing the educational material from the public authorities and textbooks: it was examined as to the coverage of different kinds of farmed animal production, AW in general and consumer issues in connection with FAW.

There is a great variation in which aspects the different stakeholders choose to focus on, as shown in Figure 9.3. Both AW and also farming organizations offer material about laying hens, cattle and sheep. However, material about broilers and fur farming are mainly offered by AW organizations. And farming organizations are the only group that has made material about goats.

There are great differences in which topics the two groups of stakeholders have chosen to mention. The distribution of different topics, independent of what kind of farmed animal, is shown in the Figures 9.4a and 9.4b. AW organizations have to a greater degree a more holistic coverage of livestock production, compared with farming organisations. The latter group has especially scarce coverage of health (both mental and physical), transport and slaughtering. While mental health issues are never mentioned in the material from farming organizations, these issues are frequently mentioned by animal welfare organizations.

The two groups of stakeholders have a distinctly different focus on AW problems. The AW organisations consequently use a critical perspective, except for when mentioning alternative, less intensive production methods, or being on pasture. The critical perspective

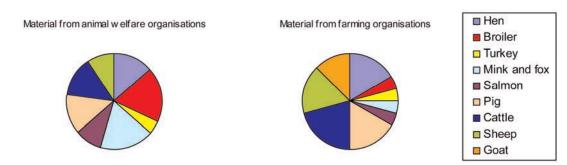
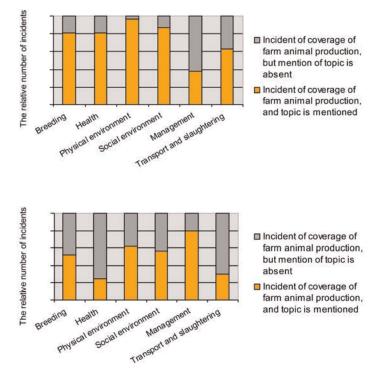


FIGURE 9.3 The coverage of different farmed animals, by AW and farming organizations respectively.

Note: While the AW organisations only have material about eight different farmed animals, the corresponding number for the farming organisations is nine. The diagram is only meant for illustrative purpose, as the data set is too small for statistical analysis.



FIGURES 9.4a (top) and 9.4b (bottom) Distribution of topics by two groups of stakeholders: animal welfare organizations (9.4a) and farming organizations (9.4b)

An "incident" is defined as a pamphlet/booklet/ fact sheet about farmed animal production. The assertion of the analysis is that all of the topics on the x-axis should be mentioned in order to give a holistic image of livestock production. The diagram is based on Table A1 in Appendix. The diagram is only meant for illustrative purpose, as the data set is too small for statistical analysis.

is reflected in their use of illustrations, which for example show high stocking densities. Farming organisations, on the other hand, mention few welfare problems. The illustrations used in their material often show animals being outdoors, even when this is not a realistic situation in the livestock production method in question. An example of the opposite perspective in the illustrations is shown in Figure 9.5. This is a comparison between the illustration in Dyrevernalliansen's fact sheet about pig production and the cover illustration to *Griseboka mi* by the Green School.

When farming organizations do mention problems with AW, it is most often related to social and physical environment. Care and management are topics which in general are prioritised in their material, but no AW problems related to these topics are mentioned.

The professional quality of the material is generally high in both groups, although there are occurrences of misleading information. Some of the AW organizations' material has not been updated, which means they are referring to issues that are no longer relevant (Dyrebeskyttelsen's pamphlet about pigs and about poultry, NOAH's pamphlet about pigs). There are also two occurrences of misinformation in the material from the AW organizations. In NOAH's pamphlet about livestock production, it is wrongly stated that there is no upper restriction for transport duration in Norway. The other occurrence is in Dyrebeskyttelsen's pamphlet about cattle: 'Colostrum is very important for the calves'

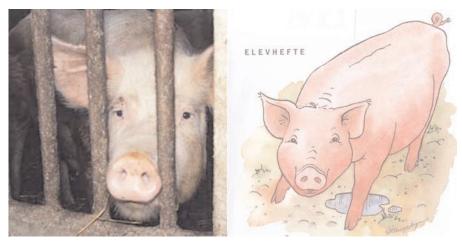


FIGURE 9.5 Comparison of an illustration in Dyrevernalliansen's fact sheet about pig production and the cover illustration to *Griseboka mi*, which is one of several booklets in the project the Green School.

immune system. Deficiency of colostrums therefore makes the calf more susceptible to diseases' (Dyrebeskyttelsen's pamphlet about cattle).

Technically speaking this is correct, but it is clearly misleading since deficiency of colostrum is not an AW issue in dairy production. The material from farming organizations, on the other hand, is updated and does not contain any specific occurrences of technical misinformation. However there are two common weaknesses in all the material: AW problems are not mentioned, and high yield is equated with good AW. Neither AW organisations nor farming organizations ever mention consumer issues in connection with AW.

3.4 DISCUSSION AND CONCLUSION OF CONTENT ANALYSIS

The general conclusion after examining the educational material from public authorities and textbooks is that AW and livestock production are not integrated topics in basic education. The variety in both extent and focus clearly indicate there is no defined framework for the imparting of knowledge concerning this area. The information resources from external stakeholders have a greater extent of coverage of different kinds of farmed animals and different topics in livestock production, compared with syllabus textbooks.

There are distinct differences and similarities when comparing public and external educational resources. The coverage of AW issues varies to a great degree. Two extremes are the AW organizations' critical perspective and the farming organizations' general neglect of AW issues. Somewhere in between are textbooks, which have a higher frequency

of mentioning AW issues than farming organizations. However the actual number of mentions of AW is low, as the total occurrences of text about farmed animals in general is so low.

A common tendency is that the prensentation of livestock production is fragmented. An exception is AW organizations, which to a great degree give holistic coverage. Breeding, mental and physical health, social and physical environment, care and management are topics that often recur in the material from this stakeholder group. The reason for the consistently critical perspective in their material is because it is not made specifically for educational purposes or as a primary introduction to farmed animal production in general. Instead it is meant as a critical supplement to the general picture created by the media, textbooks and other information souces.

The topic health is seldom mentioned by farming organiszations and not at all in syllabus textbooks. Animal health is a fundamental topic in AW. Because health is absent in syllabus textbooks, it iss reasonable to conclude that when mentioning farmed animal topics AW has not been in focus. The same cannot be the case with the material from farming organisations, as AW is frequently mentioned in a literal sense. Yet distinct information about animal health is absent in their material, except for the very common insinuation that an adequate level of AW is ensured since it equates to a good yield. In Dyrevelferd.no and Dyra på gården there are several examples of this kind of misleading information. Nevertheless, farming organisations seem to have the same professional understanding for the concept of AW, as AW organisations. In Dyrevelferd.info AW is defined as 'fulfillment of the behavioural and physiological needs of the animal in its daily environment'. The web site also refers to the five freedoms and stress responses due to inadequate environmental factors ('Hva er dyrevelferd', https://www.dyrevelferd.info/view_article.asp?id=33). Therefore it must be seen as a conscious choice to leave out coverage of AW problems in livestock production.

In the case studies of city farm visits, many of the same aspects are evident as in the material provided by farming organizations. The presentation of livestock production is fragmentary, mental health is not mentioned and problematic AW issues are left out. A positive factor is the tendency to make a point of the animals' personalities. This is an important contribution to the pupils' understanding of the animals' abilities and needs. However since no problems connected with the meeting of these needs are discussed, there is no consciousness-raising concerning AW problems.

The general impression from the educational resources in this analysis is that each entity has its weaknesses and strengths. Even though the professional quality of the information is sufficient, the presentations usually are either too critical or not critical enough. Also, the omission of several important aspects of livestock production and AW make most of the educational resources inadequate for basic education.

10

DISCUSSION

An investigation into the transfer of knowledge about AW and livestock production in Norway has revealed several interesting aspects connected with responsibility and organisation. Through looking at the issue of farmed animals a distinct picture became apparent of how the focus differs throughout society. Governmental and public authority FAW policy has been compared with the actual situation for imparting FAW knowledge in basic school. There is little overlap between the strategies for knowledge transfer which is presented in political documents and the concrete initiatives carried out by public authorities.

In St.prp nr 1 (1998–1999) and St.meld. nr 40 (1998–1999) it is pointed out that there is a need for consciousness-raising of the real responsibility that citizens have as consumers. However, in these documents AW is not mentioned as one of the areas that the consumers are responsible for. Consumer responsibility is an absent dimension in the authorities' view of the consumers' relation to AW problems. When authorities focus on the possibility of consumers influencing animal welfare (St.meld nr 12 (2002–2003)), the only dimension is the potential for stimulating their willingness-to-pay as purchasers. In connection with food safety, on the other hand, the authorities emphasize the ethical dimensions of the consumer role. But it is only the consumers own prospective demands concerning ethical production which decide whether AW is an important factor. On the basis of these findings, FAW can not be considered a social issue that the authorities expect the public to take active responsibility for.

For the authorities, aiming for improved consumer knowledge is seen as an area of commitment. Here, both consciousness-raising of consumers as to their responsibilities and the consumers' role in AW policy are viewed as important areas. Yet few initiatives have been carried out to impart knowledge about AW in the education system. While consumer issues in general are integrated topics in the curricula, there are no occurrences of such topics being seen in connection with AW. Neither are there any incidents of association between these areas in official educational resources. AW is generally seldom mentioned in educational resources, and there are no occurrences of animal ethics being discussed in connection with AW issues.

This situation seems to have left room for allowing external stakeholders to present their perspectives on AW to pupils. Farming organizations have a wide selection of material especially made for basic schooling. AW organizations, on the other hand, offer material that has the general public as target groups. The information provided, especially from farming organisations, has a strong tendency towards unbalanced and fragmentary

54 / The Provision of Educational Materials about Farm Animal Welfare

presentation. In neither of these stakeholders' material is the consumer role seen in connection with AW issues.

11

POSTSCRIPT

11.1 ANALYSIS OF SYLLABUS TEXTBOOKS FOR LOWER SECONDARY EDUCATION

In my analysis of official textbooks I have not included lower secondary school (8th–10th grade). Yet, as previously stated, I have examined the most common textbooks for these grades.

It turned out that there is only one textbook series that was relevant. The most dominant textbook series, with more than 50% market chare, is *Tellus* from the publishing house Aschehoug. (Pers. comm. repr. Gyldendal Agency, 23 January 2006). The coverage of different topics is shown in Table 11.1. The only kinds of farmed animals that are mentioned are cattle (both dairy and beef) and sheep. In 8th grade there is a comparison of conventional and organic dairy production. The description of conventional dairy farming is quite critical and not representative for Norwegian farms:

'In order to produce such great amounts of milk, their udder is so big that it to a great degree prevents them from moving outdoor... The cows are a kind of "milk machines with concentrated feed as fuel".'

This is a distinct contrast to the description of organic farming:

'The cows are allowed to spend time outdoors also during the winter... They are fed less concentrated feed than conventional cows. The consequences are less milk yield but also healthier and more fertile cows.'

It is also claimed that organic dairy cows have a less stressful life, which according to scientists results in better meat quality. The coverage of sheep farming only deals with problems with predatory mammals. An overview is given of the most common arguments from two central organisations in the social debate: Bonde- og småbrukarlaget (Norwegian Farmers' and Smallholders Union) and WWF.

In 10th grade the topic is breeding and gene technology. The beef cattle breed Belgian blue is used as an example. The fact that this breed is not common in Norway is not mentioned. The problem with a correlation between mastitis and milk yield is used as an

TABLE 11.1 Mentions of livestock and FAW in Tellus 8th-10th grade (including teacher's manuals).

			Не	alth	Phy Enviro	sical onment	Soc Enviro	ial nment	Ma	ınagem	ent	on
		Breeding	Physical	Mental	Restrictive	Free Range	Mother-Offspring Relationship	Group Behaviour	Inspection and Care	Transport	Slaughtering	Alternative Production
8th grade:												
	Cattle		X		X	X			X			X
	Sheep					X			X			
10th grade:												
_	Cattle	X	X									

Note: There were no findings in 9th grade. Topic categories are defined in Table 1.1, and are the same as the categories used in the analysis of the rest of the educational material. A general tendency of the coverage is a critical perspective.

example of the unforeseen results of breeding. This is a relevant Norwegian breeding issue. There is a comparison of modern breeding and gene technology:

'The disadvantage of traditional breeding is the long time perspective and that the offspring both gets the desired and undesired genes. The new knowledge in gene technology makes it possible to choose the desired genes without any risk for inclusion of undesired traits.'

In this discussion there is no focus on critical aspects with gene technology or the AW issues related to gene technology research.

11.2 A NEW RELEASE OF EDUCATIONAL MATERIAL FROM DYREVERNALLIANSEN

This autumn, the AW organization Dyrevernalliansen released a new web site with educational material especially developed for Knowledge Promotion. The web site http://dyrevern-ung.no contains a variety of different educational material based on the new article about AW in 4th grade. There are for example suggestions for relevant conversation topics and a quiz. It is also possible to order the video La oss snakke med dyrene, which is a Norwegian version of the video Lets talk to the animals. This video is produced by ASAB (http://asab.nottingham.ac.uk/), in association with Cambridge University and Bristol University. There has been a quite positive response from primary schools, with more than 100 orders during the first month since the launch. The author of this document is a co-worker in Dyrevernalliansen and involved in this project.

Part III

United Kingdom

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INTRODUCTION TO PART III

Farm animal welfare has become an important issue for consumers, producers, policy makers and academics (for example, see Bennett, 1995; Appleby and Sandoe, 2002; Buller and Morris, 2003). Farm animal welfare is at once a technical issue, which can be usefully subjected to scientific forms of knowing (such as the objective assessment of animal diseases, injuries and behaviours) and an ethical issue, which requires wider societal debate and input. Indeed, many authors have called for increased science-society dialogue with regards to farm animal welfare (see Blokhuis et al., 2003; Miele and Evans, 2006) and have emphasized the importance of providing citizens with reliable, non-biased information.

This sub-deliverable forms part of the output of sub-task 5.1.1.3 (School Materials). The ultimate goal of this sub-task is to use the knowledge generated in sub-projects 1 to 4 of the Welfare Quality® project to design teaching materials on farm animal welfare issues for schools and universities. Many of these materials will be delivered in the form of a dedicated web site. The current report helps to prepare the ground for this website by analysing the current provision of educational resources in the UK. Indeed, it enables us to identify any gaps in the current provision of educational information about farm animal welfare and it enables us to avoid simply replicating the types of information and resources that are already available. In short, it enables us to understand how the Welfare Quality® project might best contribute to present farm animal welfare education. The research also enables us to gain some understanding of the broader involvement of UK NGOs within farm animal welfare issues and thus usefully supplements work conducted within subproject 1, which focuses primarily on the roles and concerns of consumers, farmers and retailers.

We begin the report by outlining the different methodologies that we employed to collect information regarding the current provision of educational information about farm animal welfare in the UK. Secondly, we discuss the current formal (state) provision of farm animal welfare education in the UK. In particular, we identify the types of farm animal welfare issues that are covered within the UK national curricula and examination syllabuses. Thirdly, we turn our attention to the non-formal (primarily NGO-led) provision of educational resources about farm animal welfare in the UK. In particular, we draw on results form a large questionnaire survey to both provide the reader with some important background information about the different roles and value positions of UK NGOs and to outline the nature and content of the current educational resources that they are providing. Furthermore, we seek to identify the types of farm animal welfare topics which these organisations are currently covering in their resources and we identify the farm animal

60 / The Provision of Educational Materials about Farm Animal Welfare

welfare topics that they believe to be the most vital to provide information about to school children/university students and the general public. Finally, we draw some conclusions about the current provision of educational materials regarding farm animal welfare in the UK and we consider the implications for the provision of any future resources by the Welfare Quality[®] project.

13

METHODOLOGY

We employed three principle methodologies in order to collect information about the current provision of educational materials about farm animal welfare. First, in consultation with Welfare Quality® members from SP1, SP2 and SP3, we developed an extensive postal questionnaire survey; this survey is reproduced in full in Box 13.1. The questionnaire was sent (either electronically or by post) to 68 organizations in order to gain a broad overview of the current provision of educational materials about farm animal welfare in the UK (see Appendix for names and addresses of survey recipients). Organizations targeted included: those responsible for setting the curriculum; those responsible for setting exams; NGOs; producers and producer groups; retailers and retailing groups; and industry bodies (e.g. Meat and Livestock Commission in the UK). The questionnaire had two main parts; the first was aimed at 'formal' education providers and the second was aimed at potential providers of 'informal' educational materials about animal welfare. The section aimed at formal educational providers enquired about the provision of official (state) educational resources dealing with animal welfare (e.g. exam syllabuses or official course texts) and sought information on the types of resources provided, the subjects covered and the age groups targeted. The section aimed at potential providers of informal materials enquired about the provision of non-official (mainly NGO-led) educational resources dealing with farm animal welfare (such as books, leaflets, web sites, CDROMs, taught courses, exhibits etc.) and sought information on; background details of the organisations providing the materials (size, role, ideological approach to animal welfare etc.); the scale of distribution of educational materials; and the types of animal welfare topics that were being covered. Every effort was made to ensure that the survey was sent to a wide range of both formal and non-formal organizations that might potentially be providing educational resources on the topic of farm animal welfare. Efforts were also made to contact each organization via the telephone to ensure a good survey response rate.

Second, in order to gain more information regarding the formal (state) provision of resources about farm animal welfare in the UK, we conducted a detailed textual analysis of the relevant curriculum guidelines and examination syllabuses. This enabled us to examine the farm animal welfare content within a range of different subject curricula (e.g. Science, Geography) and examination syllabuses, including; biology, applied science, technology, and religious education.

Third, we drew on secondary sources such as organisational web sites, pamphlets, campaign literatures and other materials in order to develop three case studies of the provision of educational resources about farm animal welfare by UK NGOs.

Box 13.1 Questionnaire survey used to assess the provision of animal welfare educational resources in the UK.







ANIMAL WELFARE EDUCATIONAL RESOURCES SURVEY

Dear Sir/madam,

We are writing to invite you to participate in a short questionnaire survey about the current provision of educational materials relating to animal welfare in general and the welfare of farm animals in particular. We have approached your organisation because you are either an important educational provider or a key stakeholder to whom animal welfare is relevant.

The survey is being conducted across six European countries by members of the Welfare Quality project. Welfare Quality is a EU funded project relating to the integration of animal welfare in the food quality chain. The project aims to accommodate societal concerns and market demands, to develop reliable on-farm monitoring systems, product information systems, and practical species-specific strategies to improve farm animal welfare. The project started in May 2004 and will take five years to complete. If you would like more information about Welfare Quality, please visit our website at: http://www.welfarequality.net.

One of the key goals of the Welfare Quality project is to help foster science-society dialogue in relation to issues of farm animal welfare. As such, an important aim is to use the results generated by the project to produce a range of educational materials for school children and university students. We are therefore eager to gain an impression of the current state of educational provision relating to animal welfare so that we can determine how we might best contribute to this field.

We would be grateful if you, or another member of your organisation, could answer the questions contained in the following pages. In accordance with the data protection act, all the information that you provide will be treated in the strictest confidence and we will maintain your anonymity when presenting our results. If you would like to contribute to this research would you please complete the electronic survey contained within this attachment and return it to the email address from which it was initially sent. Respondents should either type their answers in the boxes provided (for free response questions) or indicate their choices by typing an 'x' next to the box that best reflects their views.

With Best wishes,

how lunes

Mara Miele (Science-society dialogue coordinator for the Welfare Quality project) Contact person: (please insert details of the national contact person for this survey)

7			
Your name and position within the	organisation:		
Address of organisation:			
Contact telephone number:			
Contact email address:			
1) At what spatial scale does your or	ganisation primarily or	perate?	
ocal Region		National	International
2) Does your organisation have any roducing official course textbooks eves No 3) What, if any, FARM animal welf within which subjects are these issue	If YES go to If NO go to are issues does your org	to question 3 o question 6 ganisation address wi	
ARM animal welfare topic addresse		issue is addressed	Age group for which topic is intended
4) What, if any, non-farm related an ocumentation, within which subject	s are these issues address		S. S. F. S. S.
4) What, if any, non-farm related an ocumentation, within which subject nimal welfare topic addressed	Subject in which i (e.g. Geography, I Studies)	issue is addressed	Age group for which topic is intended

welfare? Yes		ES go to question O go to question						
BACKGROUND IN (6) What is the prima			AL EDUCATIO	NAL PROVIDERS (e.g.	NGOs)			
Animal Welfare/Anii			nental Issues					
Human Rights		Retailing		-9				
Consumer Issues		Other (P	lease specify belo	w)				
Farming Issues					l			
(7) How important ar	re the follow	ng issues to your o	rganisation?	25				
Topic		Not important	Quite Importa	nt Fairly Important	Very Important			
Animal welfare in ge	eneral							
	2500	4	1					
The welfare of FAR!	M animals							
to support animal we Not applicable		Consum	ers	organisation primarily tar				
Retailers	`	Animal	scientists/vets	Government/au	thorities			
Other (please specify	")							
(9) Which, if any, of	the following	best describes vo	ır overall approac	h to animal welfare?				
Not applicable	The state of the s	al sentience	· · · · · · · · · · · · · · · · · · ·					
Animal health			Ifare in the context of					
			onmental issues (e.g. organic farming)					
Animal welfare	Anin	al rights		Ţ,	J.			
(10) Does your organ	isation prov			events on the topic of ani	imal welfare?			
Yes	No		ES go to question					
		IIN	O go to question	20				
organisation provided	many differ	ent types of the following 1995-2005.		fare educational resources	/events your			
Books CDROMs		Leaflets	118000	Websites Exhibits				
Other (please specify	and state	Taught co	urses	EXHIBITS				
number)	and State							
DISCHARGO CONTRACTOR OF THE CO	many of the	resources/events re	ecorded in questio	n 11 were aimed at the fol	lowing age			
groups. 2-5		10±						
(12) Please state how groups. 2-5 16-18		18+		Non-specific				

Books		Leaflets		V	Vebsites		
CDROMs		Taught courses		E	xhibits		
Other (please specify and s number)	tate						
(14) Please state how many FARM animal welfare) we				13 (addressing	g the specifi	c issue of	
2-5	5-	11		11-10	6		
16-18	18	+		Non-	specific		
			advantional re	ecources distri	buted?		
Local (16) Considering all of you	Regional reducational re-	sources, which o	National of the following	ng animal wel	fare topics of	•	
(15) At what scale are the r Local (16) Considering all of you and in how much detail do Topic	Regional reducational re-	sources, which o	National	ng animal wel	fare topics of	lo you cover	children
Local (16) Considering all of you and in how much detail do	Regional reducational re-	sources, which o	National of the following	ng animal wel	fare topics of	lo you cover	Substantia
Local (16) Considering all of you and in how much detail do Topic (a) Animal welfare ethics/anim	Regional r educational re you cover them	In resour public	National of the followin ces aimed at Brief	ng animal wel	In resour and stude	ces aimed at ents Brief	children Substanti
Local (16) Considering all of you and in how much detail do	Regional r educational re you cover them	In resour public	National of the followin ces aimed at Brief	ng animal wel	In resour and stude	ces aimed at ents Brief	Substantia
(16) Considering all of you and in how much detail do Topic (a) Animal welfare ethics/animal welfare regulation	Regional reducational re you cover them nal rights fare	In resour public	National of the followin ces aimed at Brief	ng animal wel	In resour and stude	ces aimed at ents Brief	Substantia
Local (16) Considering all of you and in how much detail do Topic (a) Animal welfare ethics/anim(b) The science of animal welfare regulation (d) The welfare of companion	Regional reducational re you cover them nal rights fare s animals (pets)	In resour public	National of the followin ces aimed at Brief	ng animal wel	In resour and stude	ces aimed at ents Brief	Substanti
Local (16) Considering all of you and in how much detail do Topic (a) Animal welfare ethics/animal welfare regulation (d) The welfare of companion (e) The use of animals for science (e) The use of animals for science (figure 1) and the welfare of companion (e) The use of animals for science (figure 2) animals figure 2) animals figure (figure 2) animals figure 2) animals figure 2) animals figure 2)	Regional reducational re you cover them nal rights fare s animals (pets) entific research	In resour public	National of the followin ces aimed at Brief	ng animal wel	In resour and stude	ces aimed at ents Brief	Substantia
Local (16) Considering all of you and in how much detail do Topic (a) Animal welfare ethics/animal welfare regulation (d) The welfare of companion (e) The use of animals for scie (f) The use of animals for entertail (c) the use of animals for entertail (d) the welfare of companion (e) the use of animals for entertail (d) the use of animals for entertail (e) the use of animals (e) the	Regional reducational resyou cover them nal rights fare s animals (pets) entific research	In resour public	National of the followin ces aimed at Brief	ng animal wel	In resour and stude	ces aimed at ents Brief	Substanti
Local (16) Considering all of you and in how much detail do Topic (a) Animal welfare ethics/anim(b) The science of animal welfare regulation (d) The welfare of companion (e) The use of animals for seis (f) The use of animals for entage) The hunting of wild animals	Regional reducational re you cover them nal rights fare s animals (pets) entific research ertainment ls	In resour public	National of the followin ces aimed at Brief	ng animal wel	In resour and stude	ces aimed at ents Brief	Substanti
Local (16) Considering all of you and in how much detail do Topic (a) Animal welfare ethics/animal welfare regulation (d) The welfare of companion (e) The use of animals for scie (f) The use of animals for entertail (c) the use of animals for entertail (d) the welfare of companion (e) the use of animals for entertail (d) the use of animals for entertail (e) the use of animals (e) the	Regional reducational re you cover them nal rights fare s animals (pets) entific research ertainment ls	In resour public	National of the followin ces aimed at Brief	ng animal wel	In resour and stude	ces aimed at ents Brief	Substanti

/

Box 13.1 continued.

(17) Considering all of your educational resources,	, which of the following	FARM animal	welfare topics do you
cover and in how much detail do you cover them?			

Торіс	In resources aimed at the general public			In resources aimed at children and students		
	Not Covered	Brief Coverage	Substantial Coverage	Not Covered	Brief Coverage	Substantial Coverage
(a) The welfare of farm animals						
(b) Different approaches to farm animal welfare	i i	1				
(c) Assessing and measuring farm animal welfare						
(d) Consumers and farm animal welfare	Y					
(e) Welfare-friendly food products (e.g. free-range eggs)						
(f) Farm animal welfare and food safety/quality						
(g) Retailers and farm animal welfare						
(h) Farmers and animal welfare						
(i) Facts about farm animals						
(j) Farm animal sentience						
(k) Different types of animal production systems						
(l) The pros and cons of intensive animal rearing	"					
(m) Selective breeding and genetic modification of farm animals						
(n) The slaughter of farm animals						
(o) The religious slaughter of farm animals (e.g. kosher or halal meat)						
(p) The transport of farm animals						
(q) The environmental impacts of farm animal production		2.				
(r) Practical strategies for improving farm animal welfare						

(18) Have you ever produced any educational resources relating to animal welfare in conjunction with (or funded/partly funded by) the following organisations. If so, please place an 'x' in the corresponding box or boxes.

(Other) NGOs	Local Government	National Government	
(Other) Educational Authorities	Schools	Universities	
Other (please specify)			

(19) Approximately how much money di 2004?	id you spend on providing educational resources about animal welfare in

FARM	A ANIMAL WELFARE PRIORITIES	
	rom the FARM animal welfare topics listed in question 17, which three do	
impor	ant to provide information about to school children and university student	s in your country?
1		
2]
3		1

(21) From the FARM animal welfare topics listed in question 17, which three do you consider to be the most important to provide information about to the general public in your country?

1	ant to provide information about to the general public in your country.
2	
3	

MORE DETAILED INFORMATION ON EDUCATIONAL PROVISION (optional)

(22) If at all possible, we would be very grateful if you could send us a list of all the educational resources that you have provided between 1995-2005. We would also really appreciate the opportunity to look at examples of some of the materials that you have provided. If you are able to provide us with examples of your resources, could you please send them via post to (insert contact name and address).

Thank you very much for taking the time to complete our survey

THE FORMAL (STATE) PROVISION OF EDUCATION MATERIALS ABOUT FARM ANIMAL WELFARE IN THE UK

In this section we examine the coverage of both animal welfare and farm animal welfare issues within formal (state) education in the UK. First, we outline the nature of the formal schooling system in the UK. Second, we examine the role of 'National Curricula' and examination bodies in helping to determine what can be taught in different subject areas in Wales, England, Scotland and Northern Ireland. Third, we take a more detailed look at the farm animal welfare content present in UK school curricula and exam syllabuses. In particular, we focus on the farm animal welfare content within subjects such as: Science (particularly Biology); Citizenship Studies; Personal, Social, and Health Education (PHSE); Geography; Environmental Science; Design Technology (particularly Food Technology); Religious Studies; and Religious Education. Finally, we examine the farm animal welfare content within 'Further Education' in the UK.

14.1 INTRODUCTION TO THE SCHOOL SYSTEM IN THE UK

Public education is a policy area that has been devolved to the four constituent parts of the UK (Wales, Scotland, England and Northern Ireland), with each administration responsible for the school system, curriculum and standards in education in their own territory. The types of institutions that are available, the age ranges for which children and older students remain at each educational level, and the types of qualifications that are available to them, therefore, varies across the UK. The system continues to be in a state of flux, and to some extent, of fragmentation, as new reforms in both the type of school and in curriculum are introduced in various parts of the country.

The range of school institutions and the range of qualification and examination awarding bodies create a situation where there may be considerable differences in the formal educational experience gained by pupils in different parts of the UK or in different educational institutions. This is mitigated to some extent by the existence of a National Curriculum for pupils aged from 4–16, although with a local variation in Scotland. The

examination and curricular authorities also co-operate on their provision and standard setting, but even so, some educational provision (particularly those that may be regarded as not being core areas) may differ considerably across the UK.

Compulsory primary and secondary education lasts for 11 years for most pupils in the UK. Statutory schooling means that children must receive suitable full-time education, normally provided by a school. The system is divided into primary and secondary schools corresponding to the age ranges shown in Table 14.1 and a student may continue at a Further and/or Higher Education institutions. In some areas there may be a system of Middle Schools that are inserted between the primary and secondary levels. Pupils may either continue their education at the secondary school until the age of 18 or transfer to either a sixth form college or Further Education institution to continue their education past the age of 16. The school career of pupils is divided in Wales, England and Northern Ireland into Key Stages (KS) as shown in Table 14.2. These are laid down by the National Curriculum⁸ and pupils are assessed at the end of each Key Stage and the Public Examination General Certificate of Secondary Education (GCSE) is taken by pupils at the end of KS4.

TABLE 14.1 The structure of education provision in the UK.

Type of Educational	Age Range (Statutory)						
Institution	Wales	Wales England		Northern Ireland			
Primary	5–11 (unless Middle schools are relevant)	5–11 (unless Middle schools are relevant)	5–12	4–11			
Secondary	11–16 (to GCSE level)	11–16 (to GCSE level)	12–16 (to Standard Grade)	11–16			
Secondary	11–18 (to A level)	11–18 (to A level)	16–18 (Higher courses)	11–19 (Grammar Schools)			
Further Education	16–open ended	16–open ended	16–open ended: Higher and Advanced Higher	16-open ended			
Higher Education	18-open ended	18-open ended	17–open ended	18-open ended			

TABLE 14.2 National Curriculum key stages and public examinations.

111522 1 2 1 (actional cont	riediam kej stages and pasme e	Tallilliations.
Key Stages (KS) and Public	Student Age Wales and England	Student Age Northern Ireland
Examinations		
KS1	5–7 years	4–8 years
KS2	7–11 years	8–11 years
KS3	11–14 years	11–14 years
KS4	14–16 years	14–16 years
GCSE	End of KS4	End of KS4
GCE (A) level	16 +	16 +
Baccalaureate (Welsh)/	16 +	
Diploma (England)		

⁶ There is a small variation possible in Northern Ireland where pupils may start at the age of four and, hence, may receive 12 years of statutory schooling

⁷ If the child does not attend school, the local authority has to ensure that some other provision is made to educate the child e.g. suitable home tuition.

⁸ Education Reform Act, 1988.

The National Curriculum lists seven subjects as core compulsory subjects at KS4: English, ICT, Mathematics, Science, Citizenship, Physical Education, and Religious Education (together with Welsh in Wales). Additional 'entitlement' subjects include: Modern Foreign Language, Art and Design, Design and Technology, Geography, and History (known as the Humanities).

The National Curriculum does not apply in Scotland. Responsibility for the curriculum in Scotland rests with local authorities and head teachers, with common national guidelines provided. The Scottish Executive Education Department (SEED) regulates the curriculum in primary schools under the 5–14 curriculum, whilst at the secondary level education is divided into three stages. The first two years provide general education; third and fourth years are based on specialist and vocational education for all. From 14–16 pupils take Standard Grade programmes, which are part of a national programme of assessment and standardization overseen by the Scottish Qualifications Authority (SQA).

Beyond the age of 16 students in Scotland may continue their education through Higher and Advanced Higher courses, which are also administered by the SQA. Elsewhere students may decide to continue their education at schools or colleges and may sit for examinations at the General Certificate in Education (GCE) A level, the Welsh Baccalaureate, the International Baccalaureate, and the Business & Technician Education Council (BTEC)⁹ awards. However, curricula are in a constant state of flux, with new specifications being introduced from time to time, e.g. a revised curriculum for the whole range from 3–19-year-olds in Wales has be implemented from September 2008, and in parts of England a new diploma qualification is being introduced.

TABLE 14.3 Curriculum authorities and Examination Boards in the UK.

	Wales	England	Scotland	Northern Ireland			
Curriculum	Qualifications,	Qualifications and	Scottish	Council for the			
Authority	Curriculum and	Curriculum	Qualifications	Curriculum,			
-	Assessment	Authority (QCA)	Authority (SQA)	Examinations and			
	Authority for	(also responsible	•	Assessment (CCEA)			
	Wales (ACCAC)	for vocational		, ,			
	,	qualifications in					
		Northern Ireland)					
Examination	Welsh Joint Educat	ion Committee (WJE	C)				
Boards							
	Assessment and Qualification Alliance (AQA)						
	Oxford Cambridge and Royal Society of Arts (OCR)						
	Scottish Qualifications Authority (SQA)						
		riculum, Examination	ns and Assessment (C	CCEA)			

⁹ Administered by Edexcel, a for-profit examination company, and are one among a number of vocational schemes.

14.2 QUALIFICATION BODIES AND QUALIFICATIONS

Many different bodies are responsible for creating, standardizing and assessing courses and public examinations (see Table 14.3). The four Curriculum authorities are responsible for maintaining and developing the National Curriculum along with associated public examinations that are administered to students from KS4 onwards in their respective part of the UK. As part of this work they also act as overseers to the examination boards. The National Curriculum¹⁰ identifies areas that examination syllabuses should cover but allows a degree of latitude about what may be contained in any particular syllabus. In the UK there are six major qualification awarding bodies (or examination boards), which are responsible for setting exam syllabuses and awarding qualifications. Although examination boards must set syllabuses in line with recommendations from the curriculum authorities there are often differences in content, emphasis and even method of assessment between different different examination boards.

14.3 FARM ANIMAL WELFARE CONTENT IN UK SCHOOL CURRICULA AND EXAM SYLLABUSES

In order to begin our assessment of the extent to which farm animal welfare issues are covered within UK school curricula and exam syllabuses, we sent questionnaire surveys

TABLE 14.4 Results from the questionnaire survey depicting the formal educational organizations that were contacted and the survey response rates.

	D 1' 1		1 337 10	T 1	T 4	. 1 *** 1 C	T 1
Organizat	Replied	Anı		Education	Farm Animal Welfare Education		
			Providers			Providers	
		Yes	No	Unknown	Yes	No	Unknown
Formal education providers							
QCA (Qualification and	N			X			X
Curriculum Authority							
The Assessment and	N			X			X
Qualifications Alliance							
Northern Ireland Council for	N			X			X
the Curriculum, Examinations							
and Assessment (CCEA)							
Edexel	Y	X			X		
OCR	N			X			X
Welsh Joint Education	N			X			X
Committee (WJEC)							
Scottish Qualifications	N			X			X
Authority							

¹⁰ See http://www.nc.uk.net/webdav/harmonise?Page/@id=6004&Subject/@id=6321.

(see Box 13.1) to seven of the major UK curriculum authorities and examination boards. The survey sought information on what farm animal welfare topics were being covered in the national curriculum and in public examination syllabuses. Furthermore, we were keen to ascertain the academic subjects in which farm animal welfare (and more general animal welfare issues) were being taught and we wanted to know how the official teaching of animal welfare issues varied with age. Unfortunately, we only received one completed survey (see Table 14.4). This low response rate might reflect the fact that no single person has an immediate knowledge of the total coverage of a given topic (such as farm animal welfare) across a range of different subject areas and that any response would have required a great deal of effort from the respondent. However, despite these difficulties, it was still possible to gain a very good impression of the nature of the formal (state) provision about farm animal welfare in the UK by conducting a detailed textual analysis of the actual curriculum guidelines and examination syllabuses. The discussion and analysis that follows, draws on these sources to outline the coverage of farm animal welfare issues within formal UK schooling. We begin by discussing the farm animal welfare content within a range of different subject curricula (e.g. Science, Geography), before moving on to examine the farm animal welfare content within a range of different examination syllabuses, including: biology, applied science, technology, and religious education.

First, in relation to the farm animal welfare content within the *National Curriculum*. Farm animal welfare (FAW) issues seem to be dealt with most directly within the 'programmes of study', 'syllabuses' and 'lesson plans' related to: Science; Citizenship Studies; Personal, Social, and Health Education (PHSE); Religious Education; and Geography.

The *Science Curriculum* expects pupils to be able to observe, explore and ask questions about the natural world. As pupils progress through the Key Stages they increasingly apply their knowledge and begin to consider the 'positive and negative effects of scientific and technological developments' and 'take account of others' views and understand why opinions may differ'. By KS4 pupils are also expected to: 'consider the power and limitations of science in addressing industrial, ethical and environmental issues'. The most direct reference to care for animals comes in KS1 where: 'Pupils should be taught how to treat animals with care and sensitivity'. In KS4, animals in food production are referred to via the requirement that pupils learn about: 'how food production and distribution systems can be managed to improve the efficiency of energy transfers'.

The Citizenship Curriculum educates pupils how to act as responsible members of their community and they are expected to take part in discussions including issues such as: 'where our food and raw materials for industry come from' (KS1). In the following Key Stages pupils are expected to: 'develop their sense of social justice and moral responsibility', for which 'looking after animals properly' is suggested as a relevant example (in KS2), and develop skills that will help them to be critically aware and able to evaluate issues for themselves.

Similarly the *PSHE and Religious Education Curriculum* deals broadly with moral and ethical views and in KS3 Religious Education, pupils should also have the opportunity to

take part in 'discussing, questioning and evaluating important issues in religion and philosophy, including ultimate questions and ethical issues/themes. Topics to be covered include: 'global issues: what religions and beliefs say about health, wealth, war, animal rights and the environment'.

TABLE 14.5 Examples of the coverage of animal welfare topics in UK exam syllabuses.

Subject Area and Level	Reference	Curriculum Board
GCSE Science	Students should	WJEC ^a
(Biology)	'discuss the advantages and drawbacks of intensive farming	
(=8)/	methods, such as using fertilisers, pesticides, disease control and	
	battery methods to increase yields.	
	Investigate the issues surrounding the question of the source of TB	
	infection in cattle, including the role of the scientific community in	
	planning valid experiments in order to inform policy decisions'	
	understand the use of artificial selection in plant and animal	CCEA ^b
	breeding, and how this leads to increased yield, food value, hardiness	
	and disease resistance.'	
GCSE Applied	" Compare the advantages and disadvantages of organic and	WJEC
Science 11	intensive farming.	
	Examples of applied contexts are the 'Use of genetic engineering – in	
	horticulture and agriculture to modify species' and farming in	
	general.'	
GCSE	Theme 4: World population and food supplies, selective breeding,	AQA^{c}
Environmental	Genetically Modified Organisms, animal welfare and organic	
Sciences	farming.	
	Include moral/ethical concerns relating to animal welfare and	
	increased use of agrochemicals and veterinary medicines which may	
	affect human health.	
GCSE Geography	Students are required to consider: 'What are the characteristics of one	WJEC
	major farming type and its recent changes.	
	One area within the Knowledge and understanding of:	
	(i) the characteristics of one major farming type;	
	(ii) the nature and causes of changes that have taken place in this	
	farming type in recent years;'	
GCSE Design and		WJEC
Technology	'Consider moral, social, environmental and cultural influences on	
(Food	product design' and that they should	
Technology)	'Appreciate that influences on new product design could include:	
	• environmental and moral issues – organic produce, animal welfare,	
	recycling; use of pesticides, use of antibiotics, growth promoters;	
	BSE; availability of food materials out of season, transportation	
CCCE D 1' '	issues'	WIEG
	How should we care for the world? – stewardship of the natural	WJEC
Education (B)	world: animal rights, husbandry of resources	
	Attitude to animals, vegetarianism in different world religions	4.0.4
	Section D: Planet Earth: origins of life; human attitudes to animals;	AQA
C 1 4	care of the planet.	WIEG
Geography A	Includes a theme on Sustainable Food Supply	WJEC
Level		404
GCE Biology	Candidates should be able to	AQA
	• apply their understanding of biological principles to present	
	scientific arguments that explain how these and other farming	
	practices affect productivity	
	• evaluate economic and environmental issues involved with farming	
	practices that increase productivity	
	 consider ethical issues arising from enhancement of productivity. ww.wiec.co.uk/uploads/publications/3420.pdf>: b http://www.rewardin 	

Notes: a http://www.rewardinglearning.org.uk; c http://www.aqa.org.uk.

The Geography Curriculum does not specify study about the relationship between humans and animals apart from in the widest sense of how human activity affects the environment (e.g. through farming) in KS2 and KS3. Geography is not a core subject for KS4, but as a 'humanities' subject (namely History and Geography) is one of four so-called 'entitlement' study areas, two of which are expected to be offered to pupils at this Key Stage.

Second, in relation to formal examination syllabuses, the main subject areas that include reference to FAW are: the Science syllabuses (particularly Biology); Geography; Environmental Science; Design Technology (particularly Food Technology); Religious Studies; and Religious Education. Table 14.5 illustrates the ways in which references are made to FAW in these subject areas by taking examples from the syllabuses of a number of the qualification awarding bodies. The table contains a brief overview of the explicit references made to; farm animals; the role and practice of farming in modern society; the food supply system; and ethical and spiritual responses to the use of animals for food and fibre. The table is not exhaustive, nor does it indicate all the possible instances of when FAW may be discussed in the school system, since (as with the curriculum at KS1-3) FAW may be used as an example to illustrate issues that relate to other broader subject areas. In addition, FAW may be combined in some courses with the welfare and ethical concerns about animals used in medical research and dealt with in terms of the general requirement of curricula for students to consider ethical, cultural and social issues resulting from scientific interpretations, advances in knowledge and human impacts on the natural environment.

The qualifications considered above may be described as non-vocational, but school students may also follow vocational courses (often in combination with non-vocational subjects) to gain credits within the National Vocational Qualifications (NVQ) framework. Vocational qualifications at school level provide a broad introduction to a particular vocational area, for example, manufacturing, health and social care. Another class of qualifications, labelled 'Occupational qualifications' are related to a specific job and are based on the knowledge and skills needed in that job, for example, commercial horticulture, food preparation and cooking, or retail operations. NVQs, however, may be awarded to students who reach national occupational standards and are not time limited or age restricted. They may be taken by employees, including modern apprentices, or by school and college students who have a work or training placement. There are eleven NVQ occupational areas, one of which is termed 'tending animals, plants and land'.

To summarize, there are generally few explicit references to Farm Animal Welfare (FAW) in the syllabuses taken by school pupils. As indicated above, courses at all Key Stages of the National Curriculum, NVQs and at GCE (A) level are required to consider social and ethical issues but it remains at the discretion of schools and teachers whether and how many actual lesson plans contain work on FAW. The RSPCA conducted a survey¹² in 2007 of formal animal welfare education in primary and secondary schools throughout the UK

¹¹ see QCA: http://www.qca.org.uk/14-19/qualifications/index_brief-guides-work-based.htm>.

¹² The Welfare State: Measuring Animal Welfare in the UK in 2006; RSPCA, available at http://www.animalwelfarefootprint.com/cms-media/2007-10-15/AWI report 2007.pdf>

and found that 77% claimed to provide at least one lesson on the issue. Although this refers to general animal welfare concerns the RSPCA's report claimed that: 'there are many more opportunities to use animal welfare as a focus or context for the delivery of the curriculum and we would like to see all schools using them'.

14.4 FARM ANIMAL WELFARE CONTENT WITHIN 'FURTHER EDUCATION' IN THE UK

Further Education institutions may award qualifications that include those available to schools, but the majority of the courses are at levels that are above GCSE. The National Qualifications Framework (NQF), which sets out the levels against which qualifications are recognized, is common for Northern Ireland, Wales and England. Scotland has its own scheme, namely the Scottish Credit and Qualifications Framework (SCQF) that embraces all the main qualifications in Scotland from schools to postgraduate and from work-based to academic.

There are at five levels of the NQF, which are, in ascending order, the Certificate, Intermediate, Honours Degree, Masters and Doctorate levels. Certificate level courses are at the same level as GCSE and provide a basic level of competence in a subject area. The Intermediate level includes Foundation degrees, ordinary (Bachelors) degrees, Diplomas of Higher Education and other higher diplomas many of which are vocationally oriented. This review will only consider the Certificate and Intermediate levels.

Non-vocational FE courses are designed to provide a possible alternative pathway for students to enter higher education and so are similar to the approach of non-vocational school-based qualifications considered so far, as such for the purposes of this report there is no need to consider them any further.

Vocational qualifications are offered by a large number of awarding bodies ranging from broad-based to specialist qualifications designed for a particular sector including a number with specific relevance to Farm Animal Welfare. The most obvious of these are the BTEC qualifications in various aspects of farm management including awards in Agriculture, Animal Management, Fish Management, Horse Management, as well as Agricultural Production awards with specialisms in Grazing Livestock, Pig, Poultry and Organic production. The 'Principles of Animal Science' is a core unit in the BTEC National Diplomas and Certificates in these subject areas and is described¹³ as introducing:

"...the principles of animal science, enabling the learner to apply these to the husbandry and management skills involved in the rearing and routine care of

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¹³ See Edexcel: http://www.edexcel.org.uk.

animals. It introduces the systems of the animal body and can be used to build upon specific applications for the routine care of a range of animals ... This unit offers the opportunity to heighten learners' awareness of the following issues: ethical/moral, environmental and health and safety.'

Teaching units are also linked to National Occupational Standards¹⁴ that include a standard for animal care and welfare.

The Farm Animal Welfare Council (FAWC) considered the qualifications and training available for workers in the livestock industries and examined the contribution of vocational training provision and standards to maintaining and improving farm animal welfare. Its report¹⁵ of 2007 critically addressed the low take-up of NVQs in the livestock industries and the content of vocational courses in this area.

'The over-general nature of vocational qualifications in the livestock industries and their comparative lack of relevance to current needs is one reason why the uptake of vocational qualifications continues to fall from a level which was already low. In response to this unsatisfactory situation, the Qualifications and Curriculum Authority is proposing to develop a framework that is more responsive to the needs of industry in general and which encompasses both formal and informal learning. This proposal has the wholehearted support of the livestock industry' (FAWC, 2007, p. 15).

¹⁴ 'National Occupational Standards (NOS) define the competences which apply to job roles or occupations in the form of statements of performance, knowledge and the evidence required to confirm competence'; See http://www.ukstandards.org.

¹⁵ (FAWC, 2007): FAWC Report on Stockmanship and Farm Animal Welfare; Farm Animal Welfare Council, London; available on http://www.fawc.org.uk/pdf/stockmanship-report0607.pdf.

THE NON-FORMAL PROVISION OF EDUCATIONAL MATERIALS ABOUT FARM ANIMAL WELFARE IN THE UK (BY NGOS AND OTHER ORGANIZATIONS)

In this section, we provide a detailed overview of the non-formal provision of educational materials about farm animal welfare in the UK. In particular, we draw on questionnaire survey responses from many of the leading NGOs, meat bodies and farm certification bodies in the UK to present an overview of the extent of non-formal educational provision in this area. First, we draw on our questionnaire data to present a brief summary of the nature and extent of the provision of non-formal educational resources about farm animal welfare. Second, we examine the overall approaches to animal welfare/animal rights that are being adopted by different NGOs, and we develop a threefold typology for classifying different organisations (animal welfare; animal rights; broader/environmental). Third, we examine the target audiences of different NGOs, as a way of further understanding their different approaches to bringing about improvements in farm animal welfare. Fourth, we look in more detail at the types of educational resources that different NGOs are providing and we outline the different age groups that they are targeting. Fifth, we discuss the types of animal welfare and farm animal welfare topics that these NGOs are covering within their educational resources and we try to identify any gaps in their provision. Sixth, we critically examine the types of topics that these organizations considered to be the most important to provide information about to school children/university students and to members of the public. In particular, we attempt to understand the motivations behind their selections and we try to understand the implications of their choices for any future provision of educational information by the Welfare Quality® project. Finally, we draw on additional textual sources (including web sites, campaign literature and educational materials) to briefly outline three contrasting case-studies of different NGOs (VIVA!, CIWF and the Soil Association) that are providing educational resources about farm animal welfare/rights topics.

15.1 AN OVERVIEW OF THE EXTENT OF THE NON-FORMAL PROVISION OF EDUCATIONAL RESOURCES ABOUT FARM ANIMAL WELFARE IN THE UK

In order to ascertain the extent and nature of the non-formal provision of educational resources about farm animal welfare in the UK we sent a postal questionnaire survey (see Box 13.1) to 61 different organizations (including 30 NGOs; 15 meat/dairy/egg organizations; and 16 food/farming certification bodies). Furthermore, we contacted key members of each organization via the telephone to ask whether or not they produced any educational resources for school children about farm animal welfare issues and to encourage them to complete the postal questionnaire.

Of the 61 organizations contacted, 30 responded to our initial enquires (and informed us whether they were providing any animal welfare educational resources). Furthermore, 19 out of these 30 organizations completed our questionnaire in full (see Table 15.1). Of the 30 organizations that replied, 20 were producing educational resources about farm animal welfare aimed at schoolchildren. This statistic alone indicates the size and importance of the non-formal provision of information about farm animal welfare in the UK. Indeed, it would seem that many organizations with an interest in farm animal welfare issues have been attempting to fill the perceived gap in the formal (state) provision of education about farm animal welfare.

Considering different types of organizations in turn, we can see that NGOs are playing a leading role in the provision of educational resources about farm animal welfare (15/30 NGOs were providing educational resources about farm animal welfare; 5/30 NGOs were not providing resources; and 10/30 NGOs did not respond to the survey).

Unfortunately, given the limitations of our data, it is more difficult to ascertain the roles that meat, dairy and egg organizations and certification bodies are playing in the provision of non-formal education about farm animal welfare issues. In relation to meat, dairy and egg organizations, 3 out of the 15 organizations that we contacted were producing educational materials. These included; the Meat and Livestock Commission (which produces a CD about the welfare of farm animals and animal welfare regulations aimed at 11–16-year-olds); the National Beef Association; and the British Pig Executive. The British Poultry Council also informed us that they were not currently producing any educational resources for school children about farm animal welfare issues. However, 11 out of the 15 meat, dairy and egg organizations that we contacted did not respond to our request for information. It is also worth noting that in promoting their sector many of these organizations (both explicitly and implicitly) support and promote current UK farm animal welfare standards.

In relation to certification bodies, only two of the 16 certification bodies that we contacted produced educational materials about farm animal welfare aimed at school children (the Soil Association and the Soil Association Scotland). In contrast, four organizations

TABLE 15.1 Results from the questionnaire survey illustrating the extent of the non-formal provision of educational materials about animal welfare in the UK.

Organizations contacted	Reply		Provider			Provider	•	re Education
			Yes	No	Unknown	Yes	No	Unknown
NGOs Universities	Y	Y	X			X		
Federation for Animal								
Welfare	N.T.	N.T.			37			37
National Animal	N	N			X			X
Welfare Trust	. 17	v	v			v		
British Vet Association	ı Y	Y	X			X		
Friends of the Earth	N	N			X			X
National Union of	Y	N		X	74		X	Λ
Farmers	-	11		21			21	
Food Ethics Council	Y	Y	X			X		
British Vet. Ass.	Y	Y	X			X		
Animal Welfare Found	l							
RSPCA	Y	Y	X			X		
SSPCA	Y	Y	X			X		
Compassion in World	Y	Y	X			X		
Farming	* 7	* 7	*7			***		
Advocates for Animals	s Y	Y	X			X		
Animal aid	N	N			v			v
Animal aid Farm Animal Welfare	N N	N N			X X			X X
Network	11	11			Λ			Λ
Uncaged Campaigns -	Y	N	X			X		
Political Animals	1	11	Λ			Λ		
FAWC Secretariat	Y	N	X			X		
Humane Slaughter	Ϋ́	Y	X			X		
Association	1	1	71			21		
Animal Health Trust	Y	N	X			X		
WSPA	Y	Y	X			X		
WWF	N	N			X			X
Viva!	Y	Y	X			X		
Vegan Society	Y	Y		X			X	
Sustain	Y	Y		X			X	
Nature Watch	N	N			X			X
Vegetarian Society	N	N			X			X
LEAF	N	N			X			X
PETA	N	N			X			X
RUMA	Y	N		X			X	
British Retail	Y	N		X			X	
Consortium	NT	NT.			W			V
National Consumer	N	N			X			X
Council Brit. Ass. for the	Y	Y	X			X		
Advancement of	1	1	Λ			Λ		
Science								
Meat bodies								
Meat and Livestock	Y	Y	X			X		
Commission	-	1	71			21		
British Meat	N	N			X			X
Education Service								
Livestock Auctioneers	N	N			X			X
Association								
Dairy UK	N	N			X			X
Dairy Council	Ŋ	N			X			X
Milk Development	N	N			X			X
Council	ът	N.T			37			3.7
National Pig	N	N			X			X
Association								

Table 15.1 continued

Organizations contacted	Reply	Form Return	Provider	Velfare Ed		Provider		re Education
			Yes	No	Unknown	Yes	No	Unknown
Meat bodies								
NOAH	N	N	**		X	***		X
National Beef	Y	N	X			X		
Association	N.T.	NT			37			37
British Meat	N	N			X			X
Processors Association	1 Y	N	X			X		
British Pig Executive	N N	N N	Λ		X	Λ		X
National Sheep Association (NSA)	11	11			Λ			Λ
British Wool	N	N			X			X
Marketing Board	11	11			Λ			Λ
Royal Association of	N	N			X			X
British Dairy Farmers	11	11			21			21
British Poultry	Y	Y		X			X	
Council (BPC)	-	-						
Certification bodies								
Organic Farmers and	N	N			X			X
Growers								
Assured British Pigs	Y	N		X			X	
Quality Meat Scotland	l Y	N		X			X	
Genesis Quality	N	N			X			X
Assurance								
EFIS-FABBL	N	N			X			X
Farm Assured Welsh	N	N			X			X
Livestock								
National Dairy Farm	N	N			X			X
Assured Scheme	3.7	3.7		***			37	
Assured British Meat	Y	Y N		X	X		X	v
Assured Combinable	N	IN			Λ			X
Crops Assured Chicken	Y	N		X			X	
Production	1	11		Λ			Λ	
Scottish Food Quality	N	N			X			X
Certification	11	11			Λ			Λ
Northern Ireland Food	N	N			X			X
Chain Certification	. 11	11			21			71
Quality Welsh Food	N	N			X			X
Certification Ltd	- 1	- '						
Checkmate	N	N			X			X
International								
Certification Ltd								
Soil Association	Y	Y	X			X		
Soil Association	Y	Y	X			X		
Scotland								

(Assured British Pigs, Quality Meat Scotland, Assured British Meat and Assured Chicken Production) responded to inform us they were not producing any educational resources of this kind. Unfortunately, a further 10 certification bodies did not reply to our survey. However, it seems likely that certification bodies tend to focus their efforts on providing professional advice on farm animal welfare to their members rather than general advice to school children and members of the public. The Soil Association and the Soil Association Scotland are exceptional cases, as these organizations have dual roles as both certification bodies and charities.

To summarize, our results indicate that NGOs are playing a key role in the provision of non-formal educational resources about farm animal welfare in the UK. They also indicate that meat, dairy, egg and certification bodies are not producing many educational resources regarding these issues (although further research is needed in this area). In the remainder of this section we move on to discuss in more detail both the types of organisations that are providing educational resources about farm animal welfare and the precise nature of the information that they are providing. Given the nature of the responses to our survey, our analysis focuses primarily on the role of NGOs.

15.2 THE CONTRASTING CHARACTERISTICS OF NGOS PROVIDING EDUCATIONAL MATERIALS ABOUT FARM ANIMAL WELFARE IN THE UK

Before we begin our analysis of the types of non-formal educational resources about farm animal welfare that are provided by UK NGOs, we would like to spend some time looking at the different characteristics and approaches of the animal welfare NGOs that responded to our survey. We would contend that this provides the reader with crucial background information, as we believe that the characteristics of different NGOs influences the types of educational resources that they are able to provide (in terms of the size and nature of the target audience, the content of the educational resources and the value positions, which are both explicitly and implicitly espoused within the materials that they produce).

One of the key characteristics that can help us to gain a better understanding of the nature of these NGOs, relates to their overall (ideological but also practical) approaches to farm animal welfare/rights. The notion of what it might mean for an animal to live a good life is a highly contested issue. On the one hand, there are many organizations, which adopt a deontological or rights-based approach to this issue. Indeed, certain organizations believe that it is simply wrong to use or exploit animals in any way for human benefit. These views are frequently referred to as 'animal rights' and organizations adopting this position would stand against animal farming in any form and promote alternative food consumption strategies (such as vegetarianism and veganism). On the other hand, there are a range of organisations that adopt a more utilitarian (or outcome-based) position in relation to this issue. In other words they do not condemn all animal farming as necessarily wrong, but rather seek to evaluate the acceptability of different farming systems in terms of animal suffering (and even in some cases in terms of animal pleasure as well). This approach is commonly referred to as 'animal welfare'. It is also worth noting that even within these broad ethical approaches there are a variety of different value-positions. For example, within the animal welfare approach it is possible to identify three separate value-positions; those that view animal welfare in terms of health and productivity; those that view animal welfare in terms of the absence of negative emotions and the presence of positive emotions; and finally those that view animal welfare in terms of the ability of farmed animals to fulfil natural/normal behaviours (see Fraser, 2003). Furthermore, there are a range of other

factors which complicate any simplistic reading of a given organization's (or for that matter individual's) approach to animal welfare/rights. In particular, issues of animal welfare and animal rights frequently overlap and interact with other ethical issues such as those relating to ecology and environmental sustainability and this can influence the type of overall approach that is adopted. This can be most clearly seen in the case of the Soil Association; an organization that primarily focuses on environmental concerns, but which has increasingly become interested in issues of farm animal welfare.

In order to begin to understand the value-orientations that underlie different UK NGOs' approaches to farm animal welfare, we asked survey respondents to define their organization's overall approach to animal welfare, in terms of a range of different options (including; animal health; animal welfare; animal sentience; animal welfare and broader environmental concerns; and animal rights), see Table 15.2. Furthermore, we drew on secondary sources (primarily web sites of the organizations), to produce brief descriptions of the NGOs concerned, see Table 15.3.

Looking at the results depicted in Table 15.2, one can see that different NGOs used different terms to define their overall approach to human-animal relations. The first point to note is that whilst half of the NGOs questioned identified a single term to describe their approach to animal welfare, the remainder chose at least two different terms to define their approach. Thus for example, UFAW had an affinity to ideas about animal health, animal welfare and animal sentience and the soil association had an affinity to all of the terms listed. This reflects the complexity of the (ethical) positions espoused by these organisations and the difficulty of neatly categorising different NGOs in accordance with the different approaches that they adopt towards animal-human relations. It would seem that real-world ethics are more complex, messier and even more prone to inconsistency (see for example the dual affinity towards both animal rights and animal ethics adopted by Advocates for Animals) than the types of abstract ethics practiced by (analytical) philosophers.

Bearing these difficulties in mind, we believe that it is still possible to tentatively identify three broad groups of UK NGOs based on their overall approach to human-animal relations. First, there are those NGOs whose primary focus is on animal welfare. Many organizations that responded to our survey stated that their overall approach to humananimal relations had some affinity with the notion of animal welfare (including; the SPCA, the RSCPA, BVAAWF, BVA HSA, UFAW, CIWF, Advocates for Animals and the Soil Association). This overall approach was also reflected in the texts posted on their organizational web sites, for example the BVAAWF web site, states that the BVAAWF is committed to improving the welfare of all animals through veterinary science, education and debate. The HSA website also states that the HSA works towards achieving the highest worldwide standards of welfare for food animals during transport, marketing and slaughter. As one can see in Table 15.2, we have included all these organizations within our 'animal welfare' category, except for the Soil Association, which we have allocated to the broader/environmental category for obvious reasons. Given its dual animal welfare-animal rights position, it was difficult to categorize the organization 'Advocates for Animals' within this scheme; however, we decided to place it within the animal welfare category.

TABLE 15.2 How UK NGOs define their overall approach to animal welfare.

	SPCA	RSPCA	SPCA RSPCA BVAAWF	BVA	HSA	UFAW	CIWF	Advocates	Vegan	VIVA!	Soil	Soil
								for Animals	Society		Association	Association Association Scotland
Animal Health	0	0	0	0	0	1	0	0	0	0	1	1
Animal Welfare	1	1	1	1	1	1	1	1	0	0	1	0
Animal	0	0	0	0	0	1	1	0	1	0	1	0
Sentience	(C	C	((¢	d	(¢	C	,	,
Animal Weltare	0	0	0	0	0	0	0	0	0	0	_	_
& Environment												
Animal Rights	0	0	0	0	0	0	0	1	1	1	-	0

TABLE 15.4 The primary target audiences of UK animal welfare/rights NGOs.

	Soil	Association Scotland	1	1	1		1	1		0	
	Soil	Association Association Scotland	1	1				1		0	
	VIVA!		1	1	0		0	0		0	
	Vegan	Society	1	1	0		0			0	
	Advocates	for Animals	1							0	
	CIWF		1	1	1		1	1		0	
	UFAW		0	0	1		0	1		0	
0	HSA		1	0	1		1	1		1	
	BVA		0	1	1		0	0		0	
	RSPCA BVAAWF		0	1	1		0	0		0	
	RSPCA		1	1	1		1	1		0	
L	SPCA		0	0	0		0	0		1	
			Retailers	Consumers	Animal	Scientists/Vets	Farmers	Government/	Authorities	Other	

Animal welfare Animal rights Broader/environmental

TABLE 15.3 Brief descriptions of the NGOs who contributed to the questionnaire survey.

Scottish Society for the Prevention of Cruelty to Animals (SPCA): The mission of SPCA International is to raise awareness of the abuse of animals to a global level, to teach and foster good pet parenting policies, and to promote spay and neuter programmes around the world with the goal of eradicating the need to euthanize healthy and adoptable companion animals of all ages.

Royal Society for the Prevention of Cruelty to Animals (RSPCA): The RSPCA's vision is to work for a world in which all humans respect and live in harmony with all other members of the animal kingdom. The RSPCA as a charity will, by all lawful means, prevent cruelty, promote kindness to and alleviate suffering of animals.

British Veterinary Association Animal Welfare Foundation: The BVA AWF is committed to improving the welfare of all animals through veterinary science, education and debate. Veterinary surgeons are involved in all aspects of animal care and therefore in the best position to identify animal welfare problems and assist in finding solutions to them. The involvement of the veterinary profession as trustees of the BVA AWF makes this charity unique.

British Veterinary Association: The BVA is the national representative body for the veterinary profession with over 11 000 members. In promoting and supporting the interests of our members, and the animals under their care, the BVA is committed to developing and maintaining channels of communication not least with government, parliamentarians and the media.

Humane Slaughter Association: The Humane Slaughter Association (HSA) is the only registered charity that works, in the UK and internationally, through educational, scientific and technical advances, exclusively towards the highest worldwide standards of welfare for food animals during transport, marketing and slaughter.

Universities Federation for Animal Welfare: UFAW is an internationally recognized, independent, scientific and educational animal welfare charity concerned with improving knowledge and understanding of animals' needs in order to promote high standards of welfare for farm, companion, laboratory, captive wild animals and those with which we interact with in the wild.

Compassion in World Farming: CIWF was founded over 40 years ago in 1967 by a British farmer who became horrified by the development of modern, intensive factory farming. Today we campaign peacefully to end all cruel factory farming practices. We believe that the biggest cause of cruelty on the planet deserves a focussed, specialized approach – so we only work on farm animal welfare.

Advocates for Animals: Our vision is that all animals live their natural lives free from exploitation and abuse. Advocates for Animals works to secure respect for all animals, by overcoming exploitation and abuse, and inspiring a more compassionate society.

Vegan Society: Founded in 1944, The Vegan Society provides advice on ways of living free of animal products for the benefit of people, animals and the planet.

VIVA!: Eating meat, fish and dairy causes environmental destruction, damages human health, contributes to global hunger and inflicts immense suffering on billions of animals across the world. Viva! believes that the solution to all these problems is in our own hands: the best way to stop the destruction and the cruelty is to stop eating animals now – go vegetarian, or better still, vegan. Through popular campaigns, solid research, undercover exposés and effective media skills we have brought the reality of modern farming into people's living rooms.

Soil Association: The Soil Association is the UK's leading campaigning and certification organization for organic food and farming. The Soil Association was founded in 1946 by a group of farmers, scientists and nutritionists who observed a direct connection between farming practice and plant, animal, human and environmental health. Today, the Soil Association is the UK's leading organic organization, with over 180 staff based in our Bristol headquarters, in regional centres and working as certification inspectors across the country.

Source: Based primarily on information taken from their respective web sites.

Second, there are those NGOs whose primary focus is on animal rights. For example, The Vegan Society and Viva! defined their approach to human—animal relations as animal-rights oriented. This stance was also reflected in their respective web sites, for example the Viva! web site states that: eating meat, fish and dairy causes environmental destruction, damages human health, contributes to global hunger and inflicts immense suffering on billions of animals across the world.

Finally, there are those organizations whose primary focus is on environmental issues and a broader understanding of what constitutes good human—animal relations. Based on their survey responses, we have included the Soil Association and the Soil Association Scotland

in this category. This should come as no surprise given the origin of these two organizations, for example the Soil Association website informs us that the Soil Association was founded in 1946 by a group of farmers, scientists and nutritionists who observed a direct connection between farming practice and plant, animal, human and environmental health. Throughout the remainder of the analysis we will be using these three categories to help us to map and understand the non-formal provision of educational resources about farm animal welfare.

Another very useful way of gaining insights into the nature of different animal welfare/animal rights NGOs is to look at the character of their target audiences, see Table 15.4. These results highlight some of the differences in both the size and function of UK NGOs with an interest in farm animal welfare/rights. First, we can see that the British Veterinary Associations (BVA and BVAAWF) have a fairly narrow target audience and that they tend to focus their attentions on animal scientists/veterinarians and consumers. Second, one can see that UFAW only targets animal scientists/veterinarians, which is consistent with its membership and aims. Third, one can see that NGOs promoting veganism (such as Vegan Society and Viva!) tend to target both consumers and retailers, although the Vegan Society also targets government/authorities to a certain extent. Fourthly, the RSPCA, CIWF, Advocates for animals and the Soil Association target all sectors. This partly reflects the size and institutional capacity of these organizations and highlights their ability to influence a broad range of different stakeholders. Finally, the Humane Slaughter Association targets all sectors, except for consumers, in its attempts to bring about improvements in UK animal slaughter practices. The fact that the HSA does not pursue this issue with consumers is perhaps indicative of the nature of its subject matter; as issues of animal slaughter are considered to be unpalatable and are often avoided by UK consumers, especially when consuming meat and animal products.

15.3 THE NATURE OF THE CURRENT PROVISION OF EDUCATIONAL RESOURCES ABOUT ANIMAL WELFARE (IN GENERAL) AND FARM ANIMAL WELFARE BY UK NGOS

In this section, we would like to delve deeper into the types of resources that UK NGOs are providing about (farm) animal welfare, the age groups that they are targeting and the types of topics that they are covering. Looking at Table 15.5, it is possible to make a number of interesting observations about the nature of the resources that UK NGOs are providing about animal welfare. First, one can see that the RSPCA and CIWF produce educational material about animal welfare issues across all age groups (including 16–18 year olds, which no other organizations cover); this partly reflects the shear size and institutional capacity of these organizations. Second, the BVAAWF, BVA, HAS and UFAW only seem to be producing educational materials for the over 18s, this fits in with their target audiences. Third, the Soil Association seems to target primary school children

BVA HSA UFAW CIWF VIVA!

Soil Association Soil Association Scotland

NGOs (by age group and type).

Organization

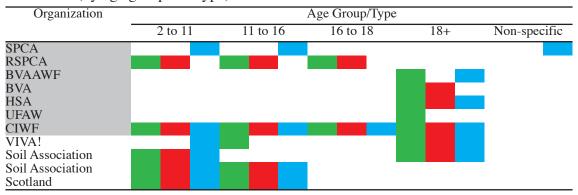
Age Group

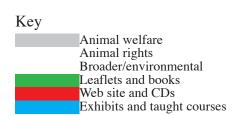
2 to 11 11 to 16 16 to 18 18+ Non-specific

SPCA
RSPCA
BVAAWF

TABLE 15.5 The current provision of educational resources about animal welfare by UK NGOs (by age group and type).

TABLE 15.6 The current provision of educational resources about farm animal welfare by UK NGOs (by age group and type).





(which fits in with their schools 'Food for Life' campaign) and adults but do not provide materials for secondary school children. Finally, all three formats (leaflets and books, websites and cd-roms, exhibits and taught courses) are used by most organizations.

Turning our attention to Table 15.6, one can see that the profile of the types of educational materials that these NGOs are providing about farm animal welfare is very similar to the profile of the types of educational materials that they were providing about animal welfare issues in general. In many ways this is hardly surprising, as farm animal welfare is a crucial topic within broader notions of animal welfare, furthermore organizations such as BVAAWF, HAS, UFAW, CIWF and VIVA! focus predominantly on issues of farm animal welfare. However, one difference which is worthy of note regards the fact that whilst the RSPCA is providing exhibits and/or taught courses about animal welfare to a range of

different age groups, it does not seem to be covering issues specifically related to farm animal welfare within these courses. Furthermore, whilst the RSPCA provide a range of resources about animal welfare issues (including leaflets, books, websites, CDs, exhibits and taught courses) to the over 18s, they provide no such resources in relation to farm animal welfare issues.

Moving on to consider Table 15.7, it is possible to make a number of more detailed observations about the types of animal welfare topics that UK NGOs are covering in their educational resources. First, one can see that 'animal welfare/rights issues' and 'the science of animal welfare' are covered more frequently than other topics. In the case of the former this is hardly surprising as most animal welfare topics are highly interconnected with ethical issues. In the case of the latter this might reflect the growing importance and authority of scientific means of understanding animal welfare issues. Second, topics such as 'animal welfare regulations', 'the welfare of companion animals', 'the use of animals for scientific research' and the issue of 'stray animals' were all given reasonable coverage in the educational materials provided by UK NGOs. Third, issues such as 'animals used for entertainment', 'the hunting of wild animals' and 'vegetarianism and veganism' received less attention from NGO sources on the whole; however, the educational materials provided by Viva! covered vegetarian and vegan issues in great detail. It is perhaps surprising that the hunting of wild animal received so little attention given the prominence of debates about fox hunting in the UK. Fourth, the animal welfare topics covered seemed to reflect the main aims of each organization. For example, the Soil Association, in which farm animal welfare is framed within an organic farming context, cover 'animal welfare ethics/rights' issues and 'regulation' but do not cover wider (non-farm) animal welfare issues. On the other hand, the RSPCA cover all the topics listed except for vegetarianism and veganism. The majority of 'animal welfare' NGOs covered issues of the science of animal welfare, while VIVA! and the Soil Association only gave brief coverage to these issues. This might reflect the strong interconnection between the types of utilitarian notions that inform animal welfare ethics and the types of utilitarian notions, which inform scientific enquiry (e.g. measurability, objectification, equivalence, exchange).

Finally, looking at Table 15.8, it is possible to make a range of observations about the types of farm animal welfare topics that UK NGOs are covering in their educational resources. First, it is important to note that UK NGOs covered all the animal welfare topics that we listed; indeed all topics (except for 'the religious slaughter of farm animals' and 'retailers and farm animal welfare') were given substantial coverage by at least one NGO. This again highlights both the extent and breadth of the provision of educational materials about farm animal welfare by UK NGOs. Second, despite the good level of overall coverage it is possible to highlight some topics which were covered more widely than others, For example, topics such as 'different approaches to farm animal', 'consumers and farm animal welfare', 'facts about farm animals', 'farm animal sentience', 'different types of animal production systems', the 'pros and cons of intensive animal rearing' and 'strategies for improving farm animal welfare' were all covered by a range of different NGOs. In contrast, topics such as 'assessing and measuring farm animal welfare', 'farm animal welfare and food safety/quality', 'retailers and farm animal welfare', 'selective breeding and genetic modification', 'the slaughter of farm animals', 'the religious slaughter

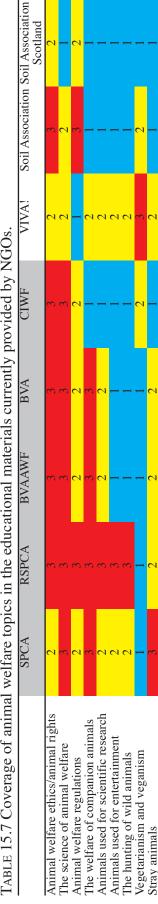
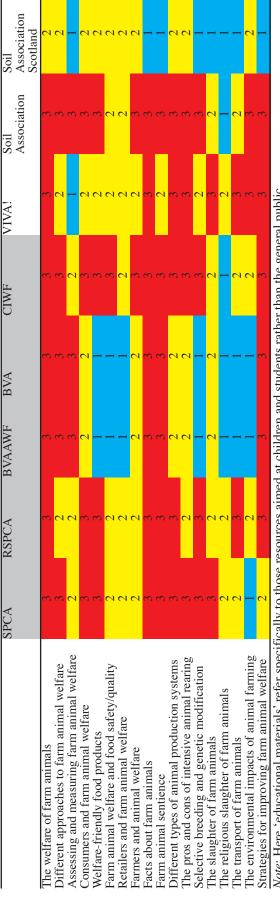


TABLE 15.7 Coverage of animal welfare topics in the educational materials currently provided by NGOs.

TABLE 15.8 Coverage of farm animal welfare topics in the educational materials currently provided by NGOs.



Vote: Here 'educational materials' refer specifically to those resources aimed at children and students rather than the general public.



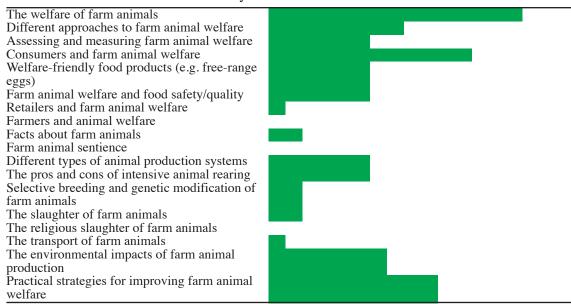
of farm animals', 'the transport of farm animals' and 'the environmental impacts of animal farming', were less widely covered. This in part reflects the more specialized nature of these topics. However, many of these topics have great resonance with European consumers' and citizens' farm animal welfare concerns, as such they constitute important and relatively neglected areas of animal welfare education, which the Welfare Quality project could usefully supplement. Thirdly, each NGO covers a unique profile of topics in their educational materials. For example, in accordance with their role as scientific and professional associations, the British Veterinary Association and the BVAAWF concentrate on the science of animal welfare and the practicalities of modern animal farming, but they do not cover the market for 'welfare friendly products' nor topics such as 'religious slaughter', 'the environmental impacts of animal farming' and the 'transport of live animals'. Furthermore, organizations such as the RSPCA, SPCA, CIWF and Soil Association, all provided substantial coverage on topics related to 'consumers and farm animal welfare', this reflects their involvement with retail and consumer issues, either directly through certification schemes (as in the case of the Soil Association's 'organic' certification scheme and the RSPCA's 'Freedom Food' certification) or indirectly by undertaking surveys of retailers and welfare-friendly products (as in the case of the SPCA and CIWF).

15.4 AN ANALYSIS OF THE FARM ANIMAL WELFARE TOPICS THAT NGOS CONSIDERED TO BE THE MOST IMPORTANT TO INFORM SCHOOL CHILDREN, UNIVERSITY STUDENTS AND THE GENERAL PUBLIC ABOUT IN THE UK

Looking at Table 15.9, it is possible to make some interesting observations about the types of farm animal welfare topics that UK NGOs believed were the most important to provide information about to school children and university students. First, taken as a whole across all the different UK NGOs that we surveyed, the most important topics to provide educational materials about were considered to be, 'the welfare or farm animals', 'consumers and farm animal welfare' and 'practical strategies for improving farm animal welfare'. It is very interesting that the topic of 'consumers and farm animal welfare' was considered to be so important. This partly reflects the fact that many of the organisations we surveyed had an interest in consumer issues; it also partly reflects the dominance of the animal-welfare labelling paradigm within the UK and the notion that it is appropriate for consumers to take responsibility for animal welfare issues and to vote on this issue by 'using their wallets'.

Second, topics that NGOs considered to be relatively important, included 'different approaches to farm animal welfare', 'assessing and measuring farm animal welfare', 'welfare-friendly food products', 'farm animal welfare and food safety/quality', 'different types of animal production systems', 'the pros and cons of intensive animal rearing' and

TABLE 15.9 Farm animal welfare topics that NGOs considered to be the most important to inform school children and university students about in the UK.



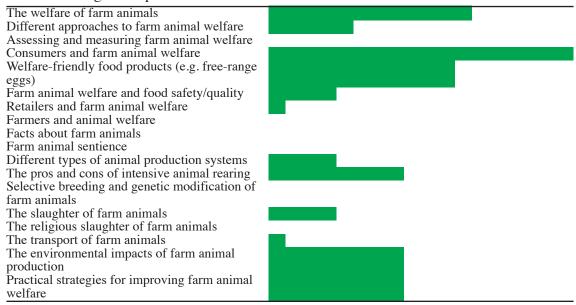
Note: Respondents were asked which three farm animal welfare issues they considered to be the most important to provide information about from the list provided. 1st choices were given a score of 3; 2nd choices were given a score of 2; and 3rd choices were given a score of 1. Scores were then compiled to yield the results shown. N=15 for information provided to schoolchildren and university students. N=14 for information provided to the general public.

'the environmental impacts of farm animal production'. It is interesting to note that many of these topics (except perhaps for the assessing and measuring of welfare) also seem to fit in well with a consumer-centric notion of the importance of farm animal welfare (i.e. they relate to food, system type and environment, rather than (what could be argued to be more) animal-centric notions of welfare, such as 'facts about farm animals', 'farm animal sentience', and the 'selective breeding and genetic modification of farm animals'.

Third, the topics which most NGOs did not consider to be amongst their top three in terms of importance, included 'retailers and farm animal welfare', 'farmers and farm animal welfare', 'facts about farm animals', 'farm animal sentience', 'selective breeding and genetic modification of farm animals', 'slaughter of farm animals', 'the religious slaughter of farm animals' and 'the transport of farm animals'. Clearly, we should not read too much into these results, as the fact that these topics did not feature in many of the top-three listed topics of each NGO does not necessarily mean that they were considered to be unimportant (for example, although issues concerning transport and slaughter do not feature they have in the past occupied an almost disproportionate position of importance within NGO literatures and campaigns). However, it is worth reiterating the fact that many of these non-favoured topics are not consumer-centric, or at least they are not 'consumer-centric' to the same extent as issues such as food quality/safety).

Turning our attention to Table 15.10, it is possible to make some similar observations about the types of farm animal welfare topics that UK NGOs considered to be most important to inform the general public about. The first point to note is that broadly speaking

TABLE 15.10 Farm animal welfare topics that NGOs considered to be the most important to inform the general public about in the UK.



the NGOs that we surveyed did not make that much of a differentiation between the animal welfare topics that they thought were important to inform school children and university students about and those they thought were important to inform the general public about. However, in spite of these similarities, there were some important differences. For example, consumer-centric topics such as 'consumers and farm animal welfare' and 'welfare-friendly food products' appeared even more frequently in the top-3 lists of animal welfare NGOs when it came to providing information to the general public. Similarly, more animal-centric topics such as 'facts about farm animals' and 'selective breeding and genetic modification of farm animals' featured even less frequently than before. Furthermore, it would seem that NGOs favour the provision of information about more simplistic issues to the general public than they did to school children and university students. For example, potentially more complex issues such as 'different approaches to farm animal welfare' and, in particular, 'assessing and measuring farm animal welfare' were not considered to be as important to provide information about to the general public as they were to school children and university students. Similarly, and again in contrast to the favoured topics for school children and university students, UK NGOs believed that it was more important to inform the public about the more specific issue of the 'pros and cons of intensive animal rearing' than they did about the potentially more insightful topic of 'different types of animal production systems'. Finally, it is worth noting that the issue of the slaughter of farm animals was considered to be slightly more pressing to provide information about to the general public than to school children and university students. This might be indicative of society's unease about confronting issues of animal slaughter and, in particular, it might reflect the notion that children should be protected from these types of 'harsh realities'.

15.5 THREE CONTRASTING CASE-STUDIES OF UK NGOS PROVIDING EDUCATIONAL MATERIALS ABOUT FARM ANIMAL WELFARE

In this section we supplement our general analysis of the provision of educational information by UK NGOs by focusing attention on three specific NGO case studies, namely VIVA!, CIWF and the Soil Association. These case-studies were selected to illustrate some of the differences between the three main approaches to animal welfare/rights that we have previously identified, namely animal rights (VIVA!), mainstream animal welfare (CIWF) and animal welfare within the context of broader environmental issues (the Soil Association). For each of these NGO case-studies we briefly examine the background of the organization concerned, we discuss their overall strategy and approach and we examine the types of educational resources that they are providing and the types of animal welfare/rights issues that they cover.

15.5.1 VIVA!¹⁶

Viva! (Vegetarians International Voice for Animals) was founded in 1994 and is linked to a registered charity called the Vegetarian and Vegan Foundation, ¹⁷ established in 2002. It campaigns against farming animals for food on issues of animal rights and animal welfare, the detrimental environmental effects of livestock and fishing industries, and the use of crops for animal feed rather than human consumption with consequent impacts on food prices and nutrition in developing countries. It also campaigns for the health benefits to humans of vegetarianism.

Viva! works as a campaigning organization by monitoring research on environmental and developmental issues, and publicising specific issues including farm husbandry practices, slaughtering practices and live animal transport. It has a broad ranging media campaign that includes a number of TV documentaries, many of which involve undercover reporting on farms and in abattoirs, and many of which have been given widespread TV exposure both in the UK and worldwide. Media campaigns include exposés of pig farming (Pig in Hell), general slaughterhouse conditions and religious slaughtering practices, and a campaign against the farming of 'exotic' animals (such as ostrich, kangaroo and crocodile) in the UK. In this case Viva! successfully targeted specific companies and pressurized retail operations to change their supply chain policies.

Viva!'s founder, Juliet Gellatley, was involved, as a worker for the Vegetarian Society, in a campaign opposing factory farming that was taken to schools during the 1980s and 1990s. This campaign formed a network of youth campaigners and, in collaboration with education authorities, worked to increase the number of schools offering vegetarian meals for pupils. The campaign claimed that the proportion of schools offering vegetarian meals increased from 13% to 65%.

¹⁶ http://www.viva.org.uk">.

¹⁷ <http://www.vegetarian.org.uk>.

Working with school children continues to be an important aspect of Viva!'s approach exemplified by campaigns such as: Convert-a-Parent (converting parents to vegetarianism); the Crate campaign that involved marches and rallies for young people protesting about the issue of live animal export; SCOFF! (Schools Campaign to Oppose Factory farming); and ACT! (Animal Campaigns for Teenagers). To support this focus Viva! has a list of speakers who are able to visit schools to debate vegetarianism and to encourage further campaigns among and by school age people. On these visits a video (Food for Life) is used as a primary resource for encouraging debate. Vegetarian cookery demonstrations may also be offered along with a range of leaflets.

Viva! resources and campaign information may be accessed through its web site http://www.viva.org.uk where it has a section directed at young people that includes a general introduction to animal welfare issues, health and fitness advice about vegetarianism and guides to becoming vegetarian. A range of leaflets, posters, books, reports and videos may also be ordered from the web site.

15.5.2 CIWF18

Compassion in World Farming (CIWF) describe their mission as being 'to advance the wellbeing of farm animals worldwide', with a vision of 'a world where farm animals are treated with compassion and respect and where cruel factory farming practices end'. It was established in 1967 by an UK dairy farmer, Peter Roberts, who had become concerned about animal welfare issues connected to the new systems of intensive farming in the 1960s. CIWF filled a gap formed by the lack of interest from animal welfare societies in the welfare of farm animals.

CIWF has grown into an international organization and also co-ordinates the European Coalition for Farm Animals, which is a campaigning and lobbying group of 32 organizations in 25 European countries and Israel. CIWF's international presence reflects the changing nature of international trade in food and livestock and the increasing consumption of meat and other livestock products worldwide. In response to this change CIWF is running a campaign to encourage people to reduce their meat consumption and to preferentially buy organic and/or free-range meat produced in sustainable farming systems. Their main focus in this campaign is the detrimental impacts of increased meat consumption on human health, on animal welfare and on the natural environment, and concerns about food supply and water use due to the expanding livestock industry.

CIWF's other areas of concern include the encouragement of debate and research on animal sentience, ethical issues regarding animal farming, and on the development of 'humane' education. Humane education, according to CIWF, involves encouraging 'compassion and respect for people, animals and the environment and recognises interdependence of all living things. It is the basis for respect and understanding for other human beings and all life'. By means of this approach to education CIWF's aims are to influence future consumers, food retailers and farmers to switch to more 'animal friendly and sustainable farming methods'.

¹⁸ http://www.ciwf.org.uk/index.shtml.

CIWF produces a range of educational resources; including videos, teaching activities and packs, information booklets, and web-based software. Most of the material is available from their web site at http://www.ciwf.org.uk/education/index.html. The material includes resources for school-based lessons, teacher training, and campaigns. CIWF also has a range of speakers who may attend schools, youth clubs, colleges, universities and adult groups in the UK. CIWF also provides training for aspiring speakers.

The educational materials cover age ranges from 5 years to adult, segmented by age group. Video titles include 'Farm Animals and us' (ages 10-16, and 14-adult); 'Genetic Engineering and Farm Animals' (14-adult); 'Stimulus Response' (14-adult); 'Lets ask the Animals' (8-11); 'WTO-Wrecking animal protection' (14-adult); and 'Eat less meat -It's Costing the Earth'. Teachers' Packs include support material for the corresponding videos together with a stand alone dedicated primary teachers' activity pack. Leaflets and booklets include: 'Intensive Farming and the Welfare of Farm Animals' (age 14-adult) among a set of general information leaflets, summary reports (ages 11-adult) and CIWF scientific reports (for 16+). CIWF also produces resources in French and Spanish for young people over 16 years old.

CIWF has also started to produce vocational educational material aimed at agriculture, veterinary and animal science courses. The first resource in this series is entitled 'Animal Welfare Aspects of Good Agricultural Practice: Pig Production'.

15.5.3 THE SOIL ASSOCIATION¹⁹

The Soil Association (SA) is the largest organization in the UK that campaigns on, and supports the development of, organic food and farming. It was founded in 1946 by a group of farmers, scientists and nutritionists who drew connections between human health, animal and plant health, and farming practices. The alterative perspective on farming offered by the Soil Association came to be known as organic agriculture, and the SA has since developed standards by which to certify farms as being organic. To carry this work further Soil Association Certification Limited was established, which is now the largest organic certifying body in the UK. The Soil Association itself is a registered charity and continues to campaign on issues of sustainable agriculture, human health, the welfare of farm animals, the protection of wildlife and of the environment. A major element of the Soil Association's strategy is to promote and develop local food cultures and food markets that reduce the dependence of consumers and producers on large scale production and distribution companies, and reduce what are perceived as the environmental and animal welfare impacts of an industrialised agri-food system.

The SA offers support for any food producer who is considering converting to organic production, and maintains a membership of farmers for whom the SA provides more indepth support, market information and educational material and training. It is currently piloting an Organic Apprenticeship scheme that aims to provide a way into practical organic farming and will establish a qualification that will be linked to the UK National

¹⁹ http://www.soilassociation.org/web/sa/saweb.nsf/home/index.html.

Vocational Qualification (NVQ) framework. The SA also provides specific training and technical guides for farmers of organic livestock that links to research on animal health and welfare in organic farming.

The Soil Association has developed an extensive set of educational resources for use in schools and colleges. These are targeted at the Key Stages (KS) of the National Curriculum (with modified material suitable for the Scottish education system) and have suggested links into specific curriculum subject areas. At primary level (KS1-2) the material includes a curriculum pack entitled 'Food for Life', which has material derived from CIWF and the World Wide Fund for Nature, and DVDs of animated and real-life footage of a farm visit. Virtual farm trails, that follow case-studies of organic farming on real farms across the UK, are available online and cover National Curriculum requirements at KS1-4 and for science, geography, and citizenship subject syllabuses. Actual farm visits are possible to arrange through the SA and there is teacher guidance on how these visits could be useful for their classes, particularly at KS3 and KS4. At KS4 fact sheets, leaflets and other downloadable resources are targeted directly at GCSE courses including Science, Geography, Mathematics, Design and Technology, Citizenship, English, French and Drama Studies. This material includes lesson plans and the SA education web pages contain links to other organizations' resources including animal welfare organizations such as CIWF. Most of the educational material offered by the SA includes discussion and opportunity for learning about farm animal welfare.

16

CONCLUSIONS TO PART III

16.1 THE NATURE OF STATE EDUCATION IN THE UK

Despite some geographical variations, the provision of education across the UK is more standardized than in many other European countries due the existence of a National Curriculum for pupils aged from 4 to 16. In the UK The National Curriculum is administered by four Curriculum authorities, these are responsible for issuing guidelines about the types of topics which should be covered within different subjects and the standards which should be achieved at certain 'Key Stages' of a pupil's development.

Across the UK (excluding Scotland) schooling is divided into four Key Stages (KS1 5–7 years; KS2 7–11 years; KS3 11–14 years; KS4 14–16 years). Pupils are assessed at the end of each Key Stage and at the end of KS4 they sit their GCSE (General Certificate of Secondary Education) examinations. The National Curriculum lists seven subjects as core compulsory subjects at KS4; English; ICT; Mathematics; Science; Citizenship; Physical Education; and Religious Education (together with Welsh in Wales).

In the UK, there are six major examination boards, which are responsible for setting exam syllabuses and awarding qualifications. Although examination boards must set syllabuses in line with recommendations from the curriculum authorities there are often differences in content, emphasis and even method of assessment between different examination boards.

16.2 THE STATE PROVISION OF EDUCATION ABOUT FARM ANIMAL WELFARE IN THE UK

Within the National Curriculum farm animal welfare issues arise most explicitly in the 'programmes of study', 'syllabuses' and 'lesson plans' related to: Science; Citizenship Studies; Personal, Social, and Health Education (PHSE); and Religious Education. In the

These age spans refer to Wales and England, see table 2 for differences in Northern Ireland.

Science Curriculum the most direct reference to human—animal relationships occurs in KS1 where: 'Pupils should be taught how to treat animals with care and sensitivity'. In KS4, animals in food production are referred to via the requirement that pupils learn about: 'how food production and distribution systems can be managed to improve the efficiency of energy transfers'. In the Citizenship Curriculum references to farm animal welfare include a need to study 'where our food and raw materials for industry come from' (KS1) and a need to learn how to 'look after animals properly' (KS2). In the PSHE and Religious Education Curricula there is also a requirement to explore issues relating to 'animal rights and the environment'. It is interesting to note that issues of 'care', 'sensitivity' and 'looking after animals properly' appear to be central to teaching younger children about human—animal relationships, even within the science curriculum.

In relation to examination syllabuses, the main subject areas that include reference to farm animal welfare are: the Science syllabuses (particularly Biology); Geography; Environmental Science; Design Technology (particularly Food Technology); Religious Studies; and Religious Education, see Table 14.1.

Within the examination syllabuses of science subjects it is possible to identify three broad clusters of farm animal welfare topics. First, there is a cluster that relates to the nature of different (animal) farming types and that more specifically focuses on the pros and cons of intensive farming methods. Second, there is a cluster that compares intensive farming methods with organic farming methods and that considers the animal welfare implications of both systems. Third, there is a cluster that looks at issues related to genetic engineering and artificial selection. Many of these topics seem to be either fairly technical in nature (e.g. GMO) or covered in a fairly technical fashion and issues of 'productivity' seem to be given equal billing alongside issues of animal welfare; however, more in-depth research would be needed to confirm this contention.

In addition to these topics covered within the science subjects, it is possible to identify a further two clusters of animal welfare topics addressed within other subject syllabuses. First, there is a cluster that links farm animal welfare with food issues and particularly food-related health issues. This cluster includes topics such as the increased use of agrochemicals and veterinary medicines (e.g. antibiotics and growth promoters) and animal diseases with implications for human health (such as BSE). Unsurprisingly, these topics appear within 'food technology' syllabuses; however, they also appear within 'environmental science' syllabuses, which indicates that this connection between farm animal welfare and human health is considered to have broader pedagogic merit outside of narrow food-focused subjects. Second, there is a cluster that addresses ethical issues relating to human-animal relationships, this includes topics such as 'attitudes to animals', 'animal rights' and 'vegetarianism in different world religions'. Whilst the ethical and moral dimensions of human-animal relationships are primarily broached within religious education syllabuses, they are also frequently touched upon across a wide range of other subject syllabuses, including GCSE Biology, GCSE Environmental science and GCSE Food technology.

Despite the apparent wealth of farm animal welfare topics outlined above, it is still fair to say that the overall coverage of farm animal welfare topics is fairly limited within UK curricula and examination syllabuses. Furthermore, whilst there are several opportunities for educators to cover farm animal welfare concerns as examples of broader scientific, social or ethical topics, it remains at the discretion of schools and teachers whether and how many actual lesson plans contain work on farm animal welfare.

In addition to the farm animal welfare content apparent in the UK national curriculum and examination syllauses (for pupils up to the age of 18) there are also several opportunities to learn about farm animal welfare after leaving school via 'Further Education'. In particular, there are BTEC qualifications in various aspects of farm management, including awards in Agriculture, Animal Management, Fish Management, Horse Management, as well as Agricultural Production awards with specialisms in Grazing Livestock, Pig, Poultry and Organic production. These courses include a core unit regarding the 'Principles of Animal Science', which teaches husbandry skills and introduces students to 'systems of the animal body'. However, the FAWC has in the past been critical of these courses due to their low uptake and perceived lack of relevance to current needs.

16.3 THE NON-FORMAL PROVISION OF EDUCATION ABOUT FARM ANIMAL WELFARE IN THE UK

In the UK, in addition to the formal schooling outlined above, several NGOs (such as the RSPCA and CIWF) are playing a leading role in the provision of information about farm animal welfare (15/20 NGOs who responded to our survey provided educational materials about farm animal welfare).

Unfortunately, due to a low survey response rate, it is very difficult to comment on the role played by other organizations such as 'industry bodies' (e.g. meat, dairy and egg bodies) or 'certification bodies' in providing educational resources about farm animal welfare for school children. However, with a few notable exceptions (such as the Meat and Livestock Commission; the National Beef Association; the British Pig Executive; the Soil Association; and the Soil Association Scotland) it seems unlikely that these groups as a whole are very active in this regard.

There are large variations in the characteristics of different UK NGOs involved in providing animal welfare resources. In particular, it is possible to tentatively identify three broad groups of UK NGOs based on their overall approach to human—animal relationships. First, there are a group of NGOs who adopt a primarily 'animal welfare' based approach, these include; SPCA, RSCPA, BVAAWF, BVA, HSA, UFAW, CIWF and Advocates for Animals. Second, there are certain NGOs who adopt a primarily 'animal rights' based approach these include the Vegan society and VIVA!. Third, there are certain NGOs who

approach human—animal relations within the broader context of environmental issues these include the Soil Association and the Soil Association Scotland. The overall approach adopted by each organisation exerts a significant influence on the nature, style and content of the information that they provide.

There are also interesting differences with regard to the types of groups that UK NGOs target in their attempts to disseminate information about (farm) animal welfare. For example, the BVA, BVAAWF and the UFAW tend to focus their attentions on animal scientists/veterinarians and consumers. In contrast, NGOs promoting veganism (such as the Vegan Society and Viva!) tend to target consumers and retailers. Finally, organizations such as the RSPCA, CIWF, Advocates for animals and the Soil Association target all sectors (including retailers, consumers, animal scientists, farmers and government authorities).

Whilst certain organizations only provide educational materials for the over 18s (BVAAWF, BVA, HSA and UFAW), the majority (SPCA, RSPCA, CIWF, VIVA, Soil Association, Soil Association Scotland) also produce materials (including leaflets, books, web sites, exhibits and taught courses) aimed specifically at younger children.

The animal welfare topics covered most frequently and in most depth by UK NGOs included; 'animal welfare ethics/animal rights' and 'the science of animal welfare' (this reflects the importance accorded to scientific understanding by many of the organizations that we surveyed). Topics such as 'animal welfare regulations' and 'the welfare of companion animals' were given reasonable coverage by a range of different NGOs. In contrast, issues such as 'animals used for entertainment', 'the hunting of wild animals' and 'vegetarianism and veganism' received less attention.

UK NGOs provided very good coverage of a range of different farm animal welfare topics. In particular, based on their self-observations, many NGOs were providing 'substantial' coverage of topics concerning: animal production systems (including the nature of different types of production systems and the pros and cons of intensive systems); farm animals (including basic facts about farm animals and farm animal sentience); farm animal welfare (including different approaches to farm animal welfare and practical strategies for improving animal welfare); and consumers and farm animal welfare.

However, there were some gaps in relation to the topics covered, in particular topics concerning 'the religious slaughter of farm animals' and 'retailers and farm animal welfare' were not given substantial coverage by any NGO. Furthermore, topics concerning 'farm animal welfare and food safety/quality', 'the transport of farm animals' and 'the environmental impacts of animal farming' were only given in-depth coverage by one or two NGOs. This in part reflects the more specialized nature of some these topics; however, they still represent important gaps in the non-formal provision of farm animal welfare education in the UK.

The farm animal welfare topics that UK NGOs considered to be the most important to provide information about included 'consumers and farm animal welfare' and 'practical

strategies for improving farm animal welfare'. As we can see from the discussion above, both these topics are already being given substantial coverage by numerous organizations. Topics that NGOs considered to be relatively important included 'different approaches to farm animal welfare' and 'the environmental impacts of farm animal production'. Whilst the former topic is already given substantial coverage by many NGOs the latter topic is only currently being given substantial coverage by the Soil Association (an environmental NGO) and VIVA! (an animal rights NGO).

One of the most interesting topics covered by UK NGOs concerns the issue of farm animal welfare and consumers. The importance accorded to this topic partly reflects the fact that many of the organizations we surveyed had an interest in consumer issues; it also partly reflects the dominance of the animal-welfare labelling paradigm within the UK and the notion that it is appropriate for food consumers to take responsibility for farm animal welfare issues and to vote on this issue by 'using their wallets'. However, whilst this topic as a whole is given substantial coverage by UK NGOs, it is clear that certain important elements of it are neglected. For example, issues concerning 'retailers and farm animal welfare' and issues concerning 'farm animal welfare and food safety/quality' are given less attention. Similarly, issues of vegetarianism and veganism are only dealt with in any depth by animal rights organizations such as VIVA!.

APPENDIX

A1 CONTENT ANALYSIS OF EDUCATIONAL MATERIAL FROM EXTERNAL STAKEHOLDERS AND SYLLABUS TEXTBOOKS (NORWAY)

The Tables on the next five pages show coverage of topics concerning farmed animals noted in educational material. The number of incidents is recorded. In the left-hand column all the materials are shown. They are sorted according to the different kinds of farmed animals they mention, and under the respective stakeholder group. The analysed text is put into different categories, shown in the uppermost rows. The categories are defined in Table 7.1.

O = Text which covers the topic in general terms, without any mention of problematic issues.

X = Text which covers both general and problematic issues

Categories that are not relevant for the farmed animal in question. For example, 'transport' is not a relevant category in fur farming, since transport is not part of common production routines.

TABLE A1.1 Topics concerning farmed animals noted in educational material.

	Breedin	HEA	неастн	PHYS	PHYSICAL ENVIRONMENT	SC ENVIR	SOCIAL ENVIRONMENT	M/	MANAGEMENT	ENT	Alternative
	ıg	Phys- ical	Mental	Re- strictiv	Free- range	Mother/ offspring	Group behaviour	Inspection and care	Trans- port	Slaugh- tering	
Animal welfare organisations:											
Dyrebeskyttelsen pamphlet	×	×	×	×	×	×	×	×	×	×	C
NOAH pamphlet	×	X	×	×	×	×	×			X	Ì
Dyrevernalliansen fact sheet	×	×	×	×	×	×	×		×	X	0
Farming organisations:											
Pål sine høner				0			0	0			
Øko-egg					0		×				0
Dyra på gården	0						0				
Dyrevelferd.info	0	0		X	X		X	0	0	0	X
Publishing houses:											
Fritt fram/ Yggdrasil	0					0					
Regnbuen/ Globus	0			0	X		×				
Animal welfare organisations:											
Dyrebeskyttelsen pamphlet	×	X	X		×		×	×	X	X	
Dyrevernalliansen fact sheet		X					,,,,,,	X	X	0	
Farming organisations:							~~~~				
En glad laks		0			0			0			

		Breedin	Ħ	неастн	PHYS	PHYSICAL ENVIRONMENT	SC ENVIR	SOCIAL	MA	MANAGEMENT	ENT	Alternative
		ng	Phys- ical	Mental	Re- strictiv	Free- range	Mother/ offspring	Group	Inspection and care	Trans-	Slaugh- tering	
welfa	Animal welfare organisations:											
• D	Dyrebeskyttelsen pamphlet	X	X	X		×	X	X		X	X	
ž	NOAH pamphlet	×				×		X				
D D	Dyrevernalliansen fact sheet	×	×	X		×	X	×	×	×	×	
• B	Broiler.no	×	X	X		×	X	X	X	X	X	0
g orga	Farming organisations:					****						-
• P	Pål sine høner	0	0			X		X	0	0	0	
ing h	Publishing houses:					****						
• •	Fritt fram/ Yggdrasil	1 70				0		0	0			
• R	Regnbuen/ Globus	0				****		0				
	2.0											
well	Animal welfare organisations:											
•	Dyrevernalliansen fact sheet	X	X	X		x	X	X			X	
g org	Farming organisations:					****						
•	En glad laks	0	0			0		X	0	0	0	

108 / The Provision of Educational Materials about Farm Animal Welfare
Table A1.1 continued.

Fig. Phys. Montal terminal welfare organisations: Fig. Phys. Montal terminal welfare organisations: Fig. Phys. Montal terminal welfare organisations: Phys. Phys				Breedi	HE	неастн	PHYS	PHYSICAL ENVIRONMENT	SC ENVIR	SOCIAL ENVIRONMENT	W	MANAGEMENT	NT	Alternative
Animal welfare organisations: X				ng	Phys- ical	Mental	Re- strictiv	Free- range	Mother/ offspring	Group	Inspection and care	Trans-	Slaugh- tering	
Dynabilistics organisations:					6			500000000000000000000000000000000000000		21				
• Dyrebeskytteken pumphlet X<		Animal	welfare organisations:								The second second			
• NOAH pamphlet X	1	*	Dyrebeskyttelsen pamphlet			X	X		X	X	X		×	
Paraming organisations:	MIN	*	NOAH pamphlet			X	X		×					
Pelsdyrinfo	KA	•	Dyrevernalliansen fact sheet	X		×	×		×	X	X		×	
Parming organisations:	ND	(*)	Pelsdyr.info			X	X		X					
1	FOX	Farming	corganisations:											
Animal welfare organisations: X	ζ.	•	Dyrevelferd.info	0	0		X		0		0		0	
Animal welfare organisations: X		•	Dyra på gården	0										
Animal welfare organisations: X														
• Dyrebeskyttelsen pamphlet X		Animal	welfare organisations:											
• NOAH! pamphlet X		٠	Dyrebeskyttelsen pamphlet	X	X	X		X	×	X		X	X	0
Farming organisations: X		•	NOAH I pamphlet	X	X	X		X	×	X			X	
Farming organisations: A control of a min gård vil jeg ha A control of a min gård vil jeg ha A control of a min gård vil jeg ha A control of a min gård vil jeg ha A control of a min gård vil jeg ha A control of a min gård vil jeg ha A control of a min gård vil jeg ha A control of a min jeg ha		٠	Dyrevernalliansen fact sheet	X	X	X		X	X	X	×	X	X	
• På min gård vil jeg ha 0 0 0 0 • Griseboka mi 0 0 0 0 0 • Dyra på gården 0 0 0 0 0 Publishing houses: A N 0 0 0 • Fritt fram/ Yggdrasil 0 N 0 0 0	P	Farming	organisations:					no socialis.						
• Griseboka mi O O O O O • Dyra på gården O O O O O O • Dyrevelferd.info O O X O O Publishing houses: A X O O • Fritt fram/ Yggdrasil O X O O	IGS	•	På min gård vil jeg ha					0	0		0			
gården O O O O O ferd.info O O X O O m/ Yggdrasil O X O O O		2	Griseboka mi	0				0	0	0				
ferd.info O O X O O m/Yggdrasil O X O O O		*	Dyra på gården	0				0	0		0			
m/ Yggdrasil		•	Dyrevelferd.info	0	0			0	X	0	0	X		
Fritt fram/ Yggdrasil		Publishi	ng houses:											
		•	Fritt fram/ Yggdrasil	0				01010010						

			Breedin	HE/	неастн	PHY	PHYSICAL ENVIRONMENT	SC ENVIR	SOCIAL ENVIRONMENT	MA	MANAGAMENT	TNE	Alternative
			ng	Phys- ical	Mental	Re- strictiv	Free- range	Mother/ offspring	Group behaviour	Inspection and care	Trans- port	Slaugh- tering	
	Animal w	Animal welfare organisations:											
	100	Dyrebeskyttelsen pamphlet	×	×	×	×	×	×	×		×	×	
	7.69	NOAH pamphlet	X	X	×	×		×					
	867	Dyrevernalliansen fact sheet				X	X	X	X				
	Farming	Farming organisations:											
CA	• 1	På min gård vil jeg ha					0			0			
ATT.	٠	Kuboka mi						0		0			
LE	٠	Dyra på gården	0							0			
	٠	Fra kalv til kvige til ku					0	0	0	0	0		
	•	Dyrevelferd.info	0	×		×	0	0	0	0	0	0	
	Publishin	Publishing houses:											
	0.60	Fritt fram/ Yggdrasil					0			0			
	800	Regnbuen/ Globus				×	0						
	Farming	Farming organisations:											
GO	(*)	På min gård vil jeg ha		0			0	0		0			
AT	Y•8	Dyrevelferd.info	0	0		0	0	0	0	0	X	×	
	•	Geiteboka mi						0		0			

Table A1.1 continued.

Alternative				0									
	Slaughtering			X						0			
MANAGAMENT	Transport			X						0			
	Inspection and care				X		0		0	0			
SOCIAL	Group	19		0	X			0		0			
SO ENVIR	Mother/ offspring			0			0	0	0		N		
PHYSICAL ENVIRONMENT	Free-			×	X		0	0	0	0		0	X
PHYS	Re- strictiv												
неастн	Mental			×	X								-252597.50
HEA	Phys- ical			×	X			×	X	0			
Breedin	ng			×	X					0			0
			Animal welfare organisations:	Dyrebeskyttelsen pamphlet	Dyrevernalliansen fact sheet	Farming organisations:	På min gård vil jeg ha	Saueboka mi	Dyra på gården	Dyrevelferd.info	Publishing houses:	Fritt fram/ Yggdrasil	Terrella
							S	HEE	P				

A2 SURVEY RECIPIENTS (UK)

Type of organization	Name	Address
NGO	Universities Federation for Animal	The Old School, Brewhouse Hill,
	Welfare	Whethampstead, AL4 8AN
NGO	National Animal Welfare Trust	Tyler's Way, Watford-By-Pass,
Mag		Watford, WD25 8WT
NGO	British Vet Association	7 Mansfield Street, London
NGO	Friends of the Earth	26-28 Underwood Street, London, N1
NCO	National Union of Forman	7JQ
NGO	National Union of Farmers	Agriculture House, 164 Shaftesbury Avenue, London, WC2H 8HL
NGO	Food Ethics Council	39-41 Surrey Street, Brighton, BN1
NGO	rood Etilles Couliell	3PB
NGO	British Veterinary Association Animal	
1,00	Welfare Foundation	r manshiri si, Benden, 1, 10 si (Q
NGO	Freedom Food	Wilberforce Way, Southwater,
		Horsham, West Sussex, RH13 9RS
NGO	Royal Society for Prevention of	Wilberforce Way, Southwater,
	Cruelty to Animal	Horsham, West Sussex, RH13 9RS
NGO	Scottish Society for the Prevention of	603 Queensferry Road, Braehead
	cruelty to Animals	Mains, Edinburgh, EH4 6EA
NGO	Compassion in World Farming	Charles House, 5a Charles Street,
		Petersfield. GU32 3EH
NGO	Advocates for Animals	10 Queensferry Street, Edinburgh, EH2
NCO	A:1-:-1	4PG
NGO	Animalaid	The Old Chapel, Bradford Street,
NGO	Farm Animal Welfare Network	Tonbridge, Kent, TN9 1AW PO Box 40, Holmfirth, HD9 3YY
NGO	Uncaged Campaigns - Political	9 Bailey Lane, Sheffield, S1 4EG
1100	Animals	9 Bancy Lane, Sherricia, 31 420
NGO	FAWC Secretariat	5th Floor, 1A Page Street, London,
1100	11111 O Desiretariat	SW1 4PQ
NGO	Humane Slaughter Association	The Old School, Brewhouse Hill,
		Whethampstead, AL4 8AN
NGO	Animal Health Trust	Lanwades Park, Kentford, Newmarket,
		Suffolk, CB8 7UU
NGO	WSPA	89 Albert Embankment, London, SE1
		7TP
NGO	WWF	WWF-UK Panda House, Weyside
NGO	X7. 1	Park, Godalming, Surrey, GU7 1XR
NGO	Viva!	8 York Court, Wilder Street, Bristol,
NGO	The Vegan Society	BS2 8CH Depoild Watson House, 7 Pottle Board
NGO	The Vegan Society	Donald Watson House, 7 Battle Road, St Leonards-on-Sea, East Sussex,
		TN37 7AA
NGO	Sustain	94 White Lion Street, London, N1 9PF
NGO	Nature Watch	14 Hewlett Road, Cheltenham, GL52
		6AA
NGO	Vegetarian Society	Vegetarian Society of the United
	Z ,	Kingdom, Parkdale, Dunham Road,
		Altrincham, Cheshire, England, WA14
		4QG
NGO	LEAF	National Agricultural Centre,
		Stoneleigh Park, Warwickshire, CV8
NGO	DETA	2LZ
NGO	PETA	PETA Europe Ltd., PO Box 36668,
NGO	British Datail Consortium (DDC)	London, SE1 1WA
NGO	British Retail Consortium (BRC)	2nd Floor, 21 Dartmouth Street, London, SW1H 9BP
NGO	National Consumer Council (NCC)	20 Grosvenor Gardens, London,
1100	radonal Consumor Council (14CC)	SW1W 0DH
		D II II UDII

Type of organization	Name	Address
NGO	Farms for Schools	PO Box 27, Hebden Bridge, HX7 5YZ
NGO	FACE	Arthur Rank Centre, Stoneleigh Park, Warwickshire, CV8 2LZ
NGO	Association for Science Education	College Lane, Hatfield, Herts, AL10 9AA
NGO	British Education Supplies Association	n 20 Beaufort Court, Admirals Way, London, E14 9XL
Industry Bodies	Meat and Livestock Commission	PO Box 44, Winterhill House, Snowdon Drive, Milton Keynes, MK6 1AX
Industry Bodies	British Meat Education Service	PO Box 44, Winterhill House, Snowdon Drive, Milton Keynes, MK6 1AX
Industry Bodies	Livestock Auctionners Association	Cobblethwaite, Wreay, Carlisle, CA4 0RZ
Industry Bodies	Dairy UK	93 Baker Street, London, W1U 6QQ
Industry Bodies	Dairy Council	Henrietta House, 17/18 Henrietta Street, London, WC2E 8QH
Industry Bodies	National Pig Association	Agriculture House, Stoneleigh Park, Warwickshire, CV8 2LZ
Industry Bodies	National Beef Association	Mart Centre, Tyne Green, Hexham, Northumberland NE46 3SG
Industry Bodies Industry Bodies	British Meat Processors Association British Pig Executive	12 Cock Lane, London, EC1A 9BU PO Box 44, Winterhill House, Snowdon Drive, Milton Keynes, MK6
Industry Bodies	National Sheep Association (NSA)	1AX The Sheep Centre, Malvern,
Industry Bodies	Royal Association of British Dairy Farmers (RABDF)	Worcestershire, WR13 6PH Dairy House, Unit 31, Stoneleigh Deer Park, Stareton, Kenilworth,
Industry Bodies	British Poultry Council (BPC)	Warwickshire, CV8 2LY Europoint House, 5 Lavington Street,
Certification Bodies	Organic Farmers and Growers Lts	London, SE1 0NZ Elim Centre, Lancaster Road, Shrewsbury, SY1 3LE
Certification Bodies	Assured British Pigs	48-50 Ashley Road, Hampton, Middlesex, TW12 2HU
Certification Bodies	Quality Meat Scotland	Rural Centre, West Mains, Ingliston, EH28 8NZ
Certification Bodies	Genesis Quality Assurance	Ryknield House, Alrewas, Staffordshire, DE13 7AB
Certification Bodies	EFIS-FABBL	PO Box 165, Winterhill House, Milton Keynes, MK6 1PB
Certification Bodies	Farm Assured Welsk Livestock	Welsh Lamb and Beef Promotion Ltd., PO Box 8, Gorseland, North Road,
Certification Bodies	National Dairy Farm Assured Scheme	Aberystwyth, SY23 2WB Midpark House, Bankend Road, Dumfries, DG1 4SZ
Certification Bodies	Assured British Meat	PO Box 5273, Milton Keynes, MK6 1HL
Certification Bodies	Assured Combinable Crops	48-50 Ashley Road, Hampton, Middlesex, TW12 2HU
Certification Bodies Certification Bodies	Assured Chicken Production Scottish Food Quality Certification	Long Hanborough, Oxford, OX29 8LH Royal Highland Centre, 10th Avenue, Ingliston, EH28 8NF
Certification Bodies	Northern Ireland Food Chain Certification	Lissue House, 31 Ballinderry Road, Lisburn, BT28 2SL
Certification Bodies	Quality Welsh Food Certification Ltd	Gorseland, North Road, Aberystwyth, SY23 2WB
Certification Bodies	Checkmate International Certification Ltd	Unit 23, Long Hanborough Business Park, Oxford, OX29 8LH
Certification Bodies	Soil Association	Bristol House, 40-56 Victoria Street, Bristol, BS1 6BY
Certification Bodies	Soil Association Scotland	18 Liberton Brae, Tower Mains, Edinburgh. EH16 6AE

Type of organization	Name	Address
Producers/Processors	Yeo Valley	Mendip Centre, Blagdon, Somerset,
		BS40 7YE
Producers/Processors	OMSCo	Worle, Somerset, BS22 6WA
Educational Policy-	QCA (Qualification and Curriculum	83 Piccadilly, London, W1J 8QA
makers and Providers	Authority)	
Educational Policy-	Assessment & Qualifications Alliance	Stag Hill House, Guildford, Surrey,
makers and Providers	(AQA)	GU2 5XJ
Educational Policy-	Northern Ireland Council for the	Clarendon Docks, 29 Clarendon Road,
makers and Providers	Curriculum, Examinations and	Belfast, BT1 3BG
	Assessment (CCEA)	
Educational Policy-	EDEXEL	Stewart House, 32 Russell Square,
makers and Providers		London, WC1B 5DN
Educational Policy-	OCR	1 Regent Street, Cambridge, CB2 1GG
makers and Providers		
Educational Policy-	Welsh Joint Education Committee	245 Western Avenue, Cardiff, CF5
makers and Providers	(WJEC)	2YX
Educational Policy-	Scottish Qualifications Authority	24 Douglas Street, Glasgow, G2 7NQ
makers and Providers		

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