

The challenges and future development of animal welfare education in the UK

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Abstract

At present, UK schools are not required to teach children about animal welfare. This undoubtedly contributes to widespread deficiencies in knowledge, and misconceptions about animals' needs, likes, and dislikes. Aware of the issues at hand, animal welfare organisations create their own materials for teachers to use, and/or deliver educational programmes directly to children and young people. As the design, content, processes and outcomes associated with these interventions are rarely documented publicly or systematically evaluated, there is little evidence to guide the development of animal welfare education. A three-stage online Delphi study was used to identify who current interventions target, what delivery methods are being used, and how expert practitioners describe priorities and challenges in the field. Thirty-one experts participated in Round 1, with 84% of the sample ($n = 26$) also taking part in Round 2. Qualitative analysis revealed passionate accounts about the far-reaching potential of educating children about animals. However, we also identified ambiguities and tensions that could thwart the future development of effective animal welfare education. Alongside the production of a web-based framework and evidence-based toolkit to support practitioners, findings will be used to encourage animal welfare professionals to work towards producing shared terminology, definitions, and outcomes' frameworks; focusing on positive education and the idea of harm as opposed to cruelty. This should facilitate collaboration with schoolteachers and education policy-makers to assess the ways in which animal welfare might be successfully incorporated within formal education in the future. These data suggest many potential avenues for inclusion, although a holistic approach emphasising the links between humans, animals and the environment, within the context of young people's recent activism and contemporary health, societal and environmental issues, may be most successful.

Keywords: animal welfare, animal welfare education, children, cruelty prevention, Delphi, evaluation

Introduction

Education and prevention are significant parts of the work undertaken by animal welfare organisations. Many charities are operating with tight funding constraints, so intervention work is channelled into reaching as many children as possible through visits to schools or provision of resources that schools can access. Recently, the Royal Society for the Prevention of Cruelty to Animals (RSPCA) has instigated a campaign calling on governments in England and Wales to include animal welfare in formal school education. There are similar calls to incorporate humane education (that incorporates understanding of, and empathy towards, animals) into school curricula in other countries (Chun Fung & Zhou 2020). At present, animal welfare is not a curricular requirement in the UK, and it is not clear if it is considered sufficiently important by teachers or educational policy-makers to warrant inclusion. Teachers may also feel ill equipped to teach in this area, especially in what may be

perceived to be an already overloaded curriculum, with the added pressure to cover areas relevant to current societal, cultural and environmental crises (Borg *et al* 2012; Lasen *et al* 2017; Monroe *et al* 2019). They undoubtedly welcome expert visits to schools.

It is possible though that to those outside the animal welfare profession, animal welfare education (AWE) might be to some extent misunderstood. Often inherent in the providers' name (society for the prevention of *cruelty* to animals), animal welfare organisations are inextricably linked with animal rescue/re-homing, prosecutions, and the more extreme forms of cruelty/abuse. Educators within the formal education system may not view animal welfare as a priority, especially if they feel it is irrelevant for the majority of schoolchildren or, more importantly, a sensitive topic. AWE may be viewed only in terms of the benefits for animals (not for people) and may not always be interpreted as having a positive focus. The idea of 'Educating a kinder generation' (Royal Society for the

Prevention of Cruelty to Animals [RSPCA] 2018) may well be interpreted through a negative lens.

There may be some work to do initially in terms of heightening awareness of the bigger picture and the links between animal welfare and human well-being. Drawing on internationally recognised concepts such as ‘One Health’ (One Health Initiative Task Force 2008), ‘One Welfare’ (García Pinillos *et al* 2016), and the ‘Link’ between animal and human harm (Monsalve *et al* 2017; Longobardi & Badenes-Ribera 2019), or the ‘positive education’ focus of humane education (Chun Fung & Zhou 2020) is likely to prove useful. Associated approaches are based on the understanding that people, animals, plants, and their shared environment are intimately interconnected. Identifying where in the specific curriculum of different countries AWE might fit well is also imperative. In the UK, the recent emphasis on the significance of mental health and relationships may provide the perfect backdrop. The emotional and mental well-being of every child is a responsibility of all those working in schools, and there are many resources available to support teachers (see, for example, ‘The Compassionate and Connected Classroom’ Education Scotland 2020). It is easy to see how AWE could be linked with these, helping children to identify and respond to the needs of others.

As well as maintaining and adapting existing educational programmes, ensuring resources are up-to-date, animal welfare organisations undoubtedly feel the pressure to demonstrate what they have achieved to promote their work and secure funding, public support, and a continued presence in schools. While some evaluations of educational programmes delivered in schools exist (eg Coleman *et al* 2008; Nicoll *et al* 2008; Fonseca *et al* 2011; Mariti *et al* 2011; Samuels *et al* 2016; Samuels 2018; Hawkins *et al* 2017, 2019), they are in short supply. Hence, although there are promising results, particularly in terms of enhancing children’s knowledge of animal needs and beliefs about animal sentience, it is difficult to conclude that programmes are effective in the long term, lead to behavioural change, or have wider impact on children’s thinking or skills. We also know little about the content and pedagogy used within interventions. Consequently, it is impossible to pinpoint which elements make an intervention successful. Similar criticisms have been levied at humane education in the US (eg Ascione 1997; Arkow 2006) and animal-assisted interventions (AAI), where animals are specifically used to support people who are experiencing difficulties (eg Ratschen & Sheldon 2019). There is, at least, a code of practice for AAI in the UK (Society for Companion Animal Studies [SCAS] 2019) and Europe (International Association of Human-Animal Interaction Organisations [IAHAIO] 2014), and for canine-assisted interventions in the US (Binfet & Kjellstrand Hartwig 2020). However, this does not yet exist for animal welfare education. Building guidance and an evidence base are critical to sustainability. Consulting those most familiar with associated content, processes and impact should help to lay solid foundations to progress the field.

This paper partners Muldoon and Williams (2021; this issue), drawing upon data from the same study, an online Delphi of animal welfare education professionals. The aims were to unearth the expertise of professionals working in this field, identifying the extent to which they agree on priorities for practice and key components of successful interventions. It also sought to explore any tensions relating to their work. The challenges facing practitioners are the main focus of this paper.

Materials and methods

Online Delphi

The Delphi Technique is a multi-staged approach that focuses specifically on achieving expert consensus on an important issue (Keeney *et al* 2011). Each stage is designed to build on the results of the previous one (Sumsion 1998). Hence, our Delphi consisted of three ‘Rounds’:

- Round 1 online survey using Online Surveys, gauging initial views and identifying key themes (areas to assess consensus);
- Round 2 online survey, using the same platform, presenting collated statements and requiring ratings of agreement and importance, or selection of phrases that resonated most with the participant; and
- Round 3 report, sent via email, gathering reflections on findings from participants.

The process of developing the survey, ethical procedures, data handling, and organisation of statements to incorporate into Round 2, are detailed in Muldoon and Williams (2021; this issue). The survey included questions on demographics, and participants’ work roles and experience (both organisational and personal) in animal welfare education/cruelty prevention. A series of open-ended questions were asked in relation to five core themes to gauge initial thoughts on priorities:

- The need for animal welfare education/cruelty prevention interventions;
- Priorities and ideal target groups;
- Components of successful interventions;
- Anticipated outcomes; and
- Evaluation of animal welfare education/cruelty prevention interventions.

Participants were also asked how many animal welfare/cruelty prevention intervention programmes (aimed at children/young people) they were directly involved with at present (June–September 2019). If they were happy to share information about their own programmes/interventions, they were asked the following questions about each one at the end of the survey:

- What is the name of the intervention/programme?
- Does the intervention target any of the groups below? (Select from a list)
- Which age group(s) does the intervention target? (Select from a list)
- How is the intervention delivered? (Select from a list)

Round 2 (administered January/February 2020) comprised close-ended, multiple-choice questions. Most of these used five-point Likert scales to assess extent of agreement with a statement or the degree to which they felt the identified issue was important. Others asked participants to prioritise/order key considerations. At the end, a series of open-ended questions relating to issues of terminology highlighted in Round 1 or anything they felt had not been covered in Round 2, afforded participants the opportunity to provide their own definitions or raise any issues they considered important, to ensure no views were inadvertently missed. Following Round 2 data analysis, a report detailing the degree of consensus across all items of the survey was circulated to participants, with an invitation to respond with their final reflections. Both content and thematic analyses were used to examine Round 1 data. A variable-centred analysis was used, whereby responses to each question were considered in turn. We also thematically analysed the responses to open-ended questions concerning the use of specific terminology in Round 2.

Participants

After obtaining ethical approval, all members of two key umbrella organisations were invited to participate: the Scottish Animal Welfare Education Forum (SAWEF), and the UK Animal Welfare Education Alliance (AWEA). In total, 22 representatives from the 36 UK organisations took part (61%). Eighty-five percent of the SAWEF group ($n = 13$) participated. Only two members did not take part as they felt on the periphery of animal welfare education/cruelty prevention and had limited experience of interventions, so we achieved 100% of valid participants. Forty-eight percent ($n = 11$) of the 23 organisations involved in the wider AWEA participated. We advertised the study through our contact list, social media and our website. Seven further organisations contributed as a result, including four outside the UK.

Participants were from 25 different animal welfare organisations in total, 87% were based in the UK ($n = 27$), with 52% ($n = 14$) of those situated in Scotland (45% of the whole sample). Four participants were based in either the United States ($n = 2$) or Canada ($n = 2$). The majority (87%) were female ($n = 27$) as opposed to male ($n = 4$), with their ages ranging from 21–29 (7%) to 60+ (8%); the majority (45%) falling into the age category 30–39. The roles they occupied at the time of the study are outlined in Muldoon and Williams (2021; this issue). The majority of participants were Heads of Animal Welfare Education (29%), and Education Officers (26%), while some held multiple roles.

There was clearly a great deal of expertise in our sample; together, over 240 years of experience working in animal welfare education/cruelty prevention. Half ($n = 15$) of the professionals had worked in the field for more than ten years, seven for between six and ten years, and six for between three and five years. Only three people had worked in this area for fewer than two years. Almost all participants ($n = 29$) had worked with vulnerable children and/or young people, either in previous work roles or as a result of their current

programmes. Seven had previously been teachers either in primary schools or further education. Six had worked specifically with young offenders, five with looked after children, and nine with children with special educational needs.

In terms of the organisations they worked for, 65% of participants ($n = 20$) described them as having a long history of designing and delivering educational interventions. Thirty-two percent ($n = 10$) were currently delivering an educational intervention, and 10% ($n = 3$) were just starting to think about developing one. Nearly all participants had been personally involved in the design and delivery of interventions for children and/or young people and the development of materials. Almost two-thirds had been involved in policy development, just over three-quarters had evaluated an intervention, and a similar proportion of participants ($n = 24$) were currently involved with an intervention. Twenty-nine percent were working on one intervention ($n = 9$), 3% on two ($n = 1$), 23% on four or five ($n = 7$), and 23% on more than seven ($n = 7$). Twenty-five participants (80.6%) said they were happy to provide information on their current interventions. Six (19.4%) were not. Of the 31 professionals who took part in Round 1, 26 also completed Round 2 (84% response rate).

Findings

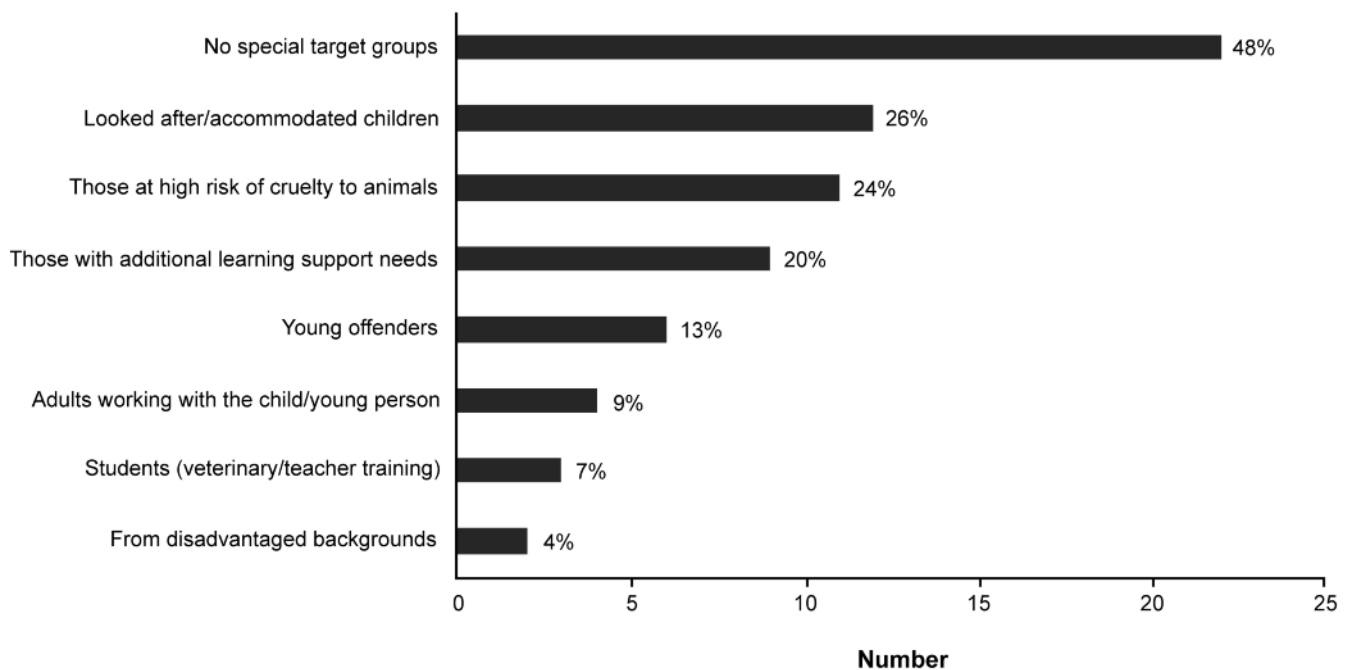
This section begins with a summary of the data relating to interventions organisations were currently involved with, covering key target groups and how they were being delivered. We then move on to look at the qualitative data under the following sub-headings: (i) The promise of animal welfare education; (ii) Short- and long-term intervention goals; (iii) Challenges associated with AWE; and (iv) Tensions relating to the terms ‘cruelty’ and ‘cruelty prevention.’ To forefront participants’ voices, there are direct quotations immediately under each sub-heading. These effectively highlight/summarise the main issues requiring attention in order to develop AWE. Further quotations linked to each theme are provided in the Appendix (see supplementary material to papers published in *Animal Welfare*: <https://www.ufaw.org.uk/the-ufaw-journal/supplementary-material>) and indicated below. Quotations are taken from the Round 1 dataset unless otherwise indicated, and pseudonyms used throughout. The tables presenting consensus data list the questions/areas in the same order as they appeared within the survey.

Current interventions

A description of what is classed as an intervention would be useful [Lorna].

Participants provided details of 46 interventions in total. However, as the quotation above indicates, relayed information suggested that many viewed all of the work undertaken to be ‘intervention.’ Indeed, ‘intervening with the intent to modify the outcome’ could be described as the *raison d’être* of animal welfare organisations. It was clear that some participants were describing a generic approach where the same provision is delivered to everyone, whereas others detailed specific educational programme sessions, included ‘workshops’ or open days/visits. Accordingly, it was difficult

Figure 1



Number and proportion of interventions that target specific groups of children and young people.

to establish which of the programmes listed were clearly defined interventions with a specific set of goals/outcomes, and which were being evaluated. However, 19 participants (61%) reported that they were currently involved in evaluating an intervention, representing 14 organisations.

As Figure 1 indicates, the majority of interventions described by participants had no special target groups (ie groups of children/young people considered vulnerable or in need of specialised input), although around one-quarter were targeting looked after children and those considered to be at 'high risk' of causing harm to animals.

In terms of age groups targeted, there is a clear focus on children of primary school age (Figure 2), although half of the interventions involved working with secondary school age groups.

The main mode of delivery was through schools (Figure 3). Half of the interventions that were delivered this way were not targeting a specific group. Other modes of delivery not represented in the graph included training for teachers, those working with vulnerable young people, vets/veterinary students, or those who would potentially work with animals in the future ($n = 8$).

The promise of animal welfare education

Fundamental to creating a caring and compassionate world [Richard].

When providing a justification for their view that it was 'vitally important/utterly essential' to teach children about animal welfare, practitioners explained that it was necessary to equip children with knowledge they may not have, and correct misinformation or myths that are widespread. Half

the practitioners emphasised the importance in terms of ensuring treatment of animals improves. References were made to children being the pet owners, consumers and decision-makers of the future, so it is essential to work with them as they are beginning to form their own opinions and before attitudes/belief systems become entrenched:

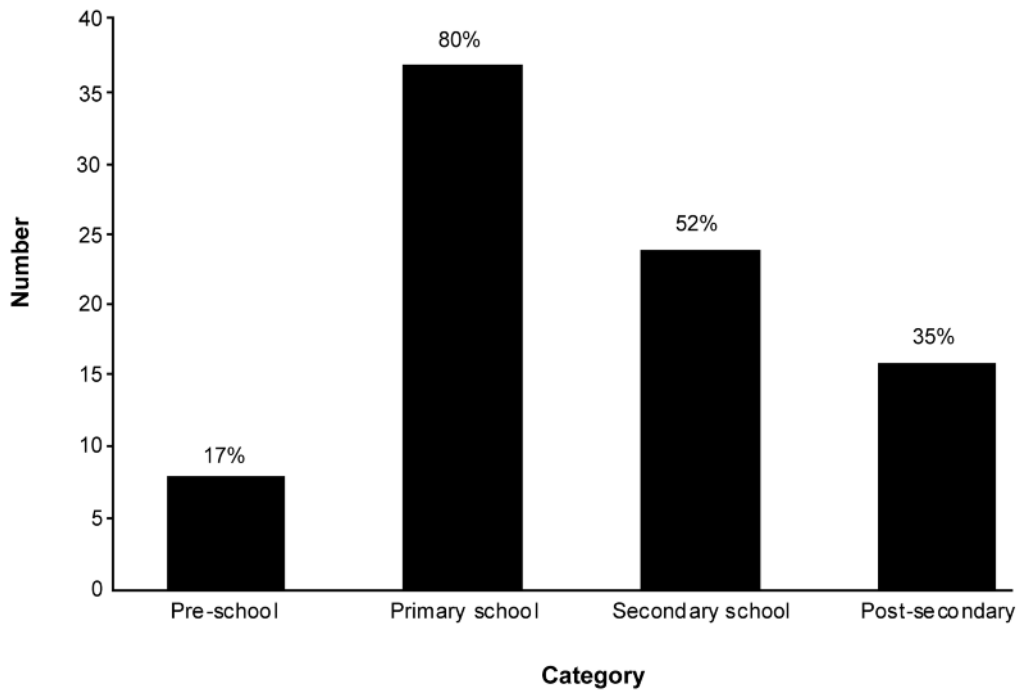
As they [children] develop and get older, they will be faced with making decisions about how they would like to see animals being treated, whether in the wild, at home, in captive collections, or on the farm. They will start to think about how their choices as consumers can impact on animals, and we need to give them the knowledge and the feeling that each individual is empowered to make positive decisions for animals [Suzanne].

However, just over one-third of the sample ($n = 11$) conveyed a strong sense of animal welfare education moving way beyond simply improving life for animals; capable of far greater accomplishments in terms of child development/well-being and the creation of a kinder, more compassionate society:

As an academic objective [AWE is] not particularly important. As a vehicle for promoting a child's development as a kind, compassionate, thoughtful, engaged and fulfilled member of society I can think of no more important topic [Jonathan].

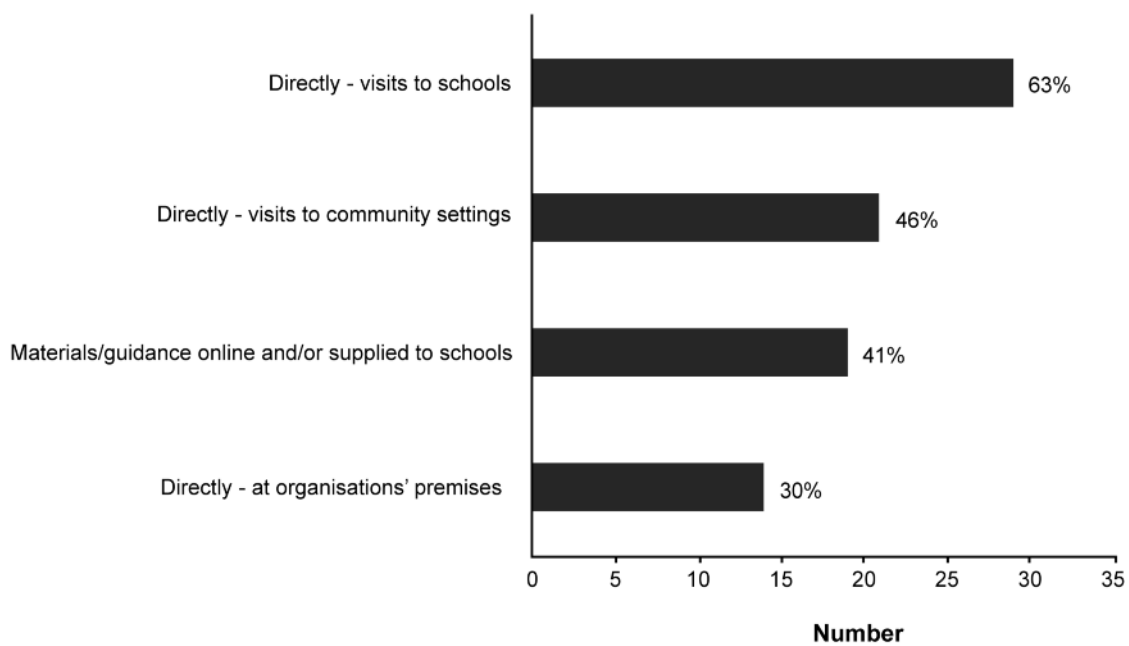
Extremely important, for their individual sake and the sake of creating a morally well-adjusted society. It also has the ability to work in a therapeutic manner — children can learn to understand themselves and their own emotions by learning about those of animals and interacting with animals [Lorna].

Figure 2



The number and proportion of interventions that target specific age groups. A single intervention may target multiple age groups.

Figure 3



Delivery methods in current interventions.

Animals were viewed as the means by which children learn about empathy and compassion towards others. In terms of working with more vulnerable children/young people, three participants explicitly made reference to ways in which animals can also be used to help children understand themselves. Two practitioners emphasised the significance of skills and this was reiterated by others in response to different questions. The wider ramifications for the way people interact with, and view, the world was also highlighted ($n = 5$), drawing attention to both the inter-relationship of people, animals, and the environment, and the importance of lifelong learning:

It's not just about teaching animal welfare, it's about drawing those comparisons between empathy and prosocial behaviour and the environment as a whole [Katy].

In my view, 'animal welfare education' is something that we should all undertake throughout our lives. Science is revealing more about animal cognition, behaviour and sentience all the time. With this new information should come new reflection on how this should impact on the way we treat animals, so animal welfare education should be a lifelong activity [Suzanne, Round 2].

Whilst the majority of professionals focused on the positives, Emma, who held a monitoring/evaluation role, highlighted the fact that animal welfare education in its current form would not achieve these goals unless there were significant changes, an issue we return to later:

It could be the most impactful and sustainable type of animal welfare intervention that there is, however, it is often delivered and designed without the necessary strategic planning and outcome mapping. It's also a highly under evaluated field with evaluation on the impact of an intervention on human behaviour change virtually non-existent. Therefore, we can assume that with programmes not utilising monitoring and evaluation processes, that required strengthening adjustments to output are not frequently applied [Emma].

Importantly, while AWE was broadly conceived in highly positive terms (Table 1 Appendix; see supplementary material to papers published in *Animal Welfare*: <https://www.ufaw.org.uk/the-ufaw-journal/supplementary-material>), 'cruelty prevention' appeared to engender thoughts about intentional or severe forms of suffering caused to animals. As Table 2 (Appendix; <https://www.ufaw.org.uk/the-ufaw-journal/supplementary-material>) shows, when asked if and why it was important to intervene to prevent cruelty, there was a focus on the escalation of cruelty behaviours and the need to understand the individual and the motives/root causes in order to determine a specific and 'tailored' course of action.

Very [important]. If cruel behaviours are already being exhibited by a child there needs to be an intervention — to change their understanding of their behaviour towards animals but also to try to understand what is behind their behaviour and help them to express their feelings. If cruelty to animals is not addressed, it will escalate and may lead to cruelty towards humans and criminal behaviour [Catherine].

Specifically designed human behaviour change interventions tailored to address identified welfare issues I feel are the most successful method that can be applied in improving animal welfare. However, for interventions to be successful we must fully understand what the barriers are to this for each individual concerned to allow us to then tailor specific interventions based on their circumstances [Holly].

This suggests that although when asked directly if 'cruelty prevention is only for those who have harmed animals or at risk of doing so', the majority (81%) disagree (Muldoon & Williams 2021; this issue), the term 'cruelty prevention' is frequently associated with harm that has been caused or is likely. It calls into mind the question of whether there is a difference between education and prevention and highlights the significance of the language we use (discussed further below).

Short- and long-term intervention goals

Awareness of the actions that they can take to improve the lives of animals [Richard].

There was strong recognition throughout the survey of the deficiencies in people's knowledge generally of animals' needs, but also their likes and dislikes. Several practitioners highlighted the tendency of humans to overcrowd or intrude upon an animal's space, as well as the proliferation of images or videos of animals on social media that are often viewed as 'cute' or 'funny' when the animal is in fact distressed or their need to express natural behaviour is being constrained. One participant, Amanda, felt there were:

...big disconnects between the ways that humans behave around animals and what animals like or dislike. Humans tend to be very intrusive, and probably by nature like to hug and squeeze animals (a primate thing), when the animals find this entrapping to be unpleasant and threatening.

Because, as Amanda suggests, "there are just so many who simply do not see when they are intruding or being unkind", it may prove difficult for AW educators to narrow their focus. Whilst there was strong agreement on all of the issues that AWE/cruelty prevention interventions should address (Table 3), and the desired outcomes of interventions (Table 4 [see below] and Table 5 Appendix: <https://www.ufaw.org.uk/the-ufaw-journal/supplementary-material>), there was no agreement on which of these should be priorities.

However, the qualitative data from Round 1 suggest that professionals would like to see children taking responsibility and applying their knowledge, reflecting on their own values and behaviours and those of others; learning skills that empower them to make positive decisions and actions with respect to the ways animals are treated:

I would like children to be able to list ways to improve a situation [Heather].

Children know what to do/say when witnessing cruelty [Tara].

Knowledge of how to take action if something is wrong [Pamela].

Children recognise where they can get help for an animal or pet in need [Chloe].

Table 3 Identified issues that AWE/cruelty prevention interventions should address.

Issues	Consensus*
Lack of knowledge/understanding of animal needs, unintentional cruelty and neglect, including cruelty through kindness (eg obesity) and the proliferation of misinformation and myths	100%
Taking responsibility for the animals in our care. This includes both self-awareness (understanding our own impact on animals) and awareness of animal-related issues in society. Stimulating a desire to improve the lives of animals and the conditions we create for them	100%
Skills with animals, ensuring appropriate and safe behaviour and handling, enhancing understanding of animal communication and behaviour, and the ability to identify when a need is not being met	100%
Understanding animal sentience and the psychological welfare of animals	96%
Prevention of, and appropriate responses to, intentional cruelty	96%
Recognising conflicts/contradictions in the ways humans treat/use different types of animal, challenging animal stereotypes and the ways animals are often (mis)used for our entertainment or pleasure	88%
Enhancing empathy and respect for animals	96%
Understanding the bigger picture = the inter-relationships between humans, animals and the natural world	92%

* Percentage of participants who agreed/strongly agreed with the statement (derived through analysis of open-ended questions in Round 1).

Table 4 The main changes participants would like to see in children/young people as a result of participating in an intervention.

Anticipated outcomes	Consensus*
Improved knowledge/understanding of animal welfare needs and issues	100%
Greater recognition of animal sentience	92%
Improved skills in relation to interpreting animal behavioural signals and responding appropriately, handling animals correctly (fewer intrusive/forceful/rough handling behaviours), recognising poor welfare and cruelty, and knowing how to behave safely around animals	96%
Improved empathy and compassion towards animals	96%
Improved empathy towards others generally (improvement in pro-social behaviour)	92%
Greater recognition of responsibility and an appreciation of their own impact on animals – increased self-awareness and self-reflection, and feeling more empowered to take action	100%
Being more respectful of, and improved attitudes towards, animals	96%
Sustained behavioural change and reduced incidence of children harming animals or being harmed by animals	100%

* Percentage of participants who agreed/strongly agreed with the statement (derived through analysis of open-ended questions in Round 1).

Moving on to consider the recipients of interventions, there was strong consensus on all the groups who should be targeted; all pupils of school age and those ‘at risk’ were considered most important. In other words, there is a strong sense in which everyone needs to be educated in this domain, hence the significant emphasis on ‘reach’, universal approaches and knowledge. As previously indicated, the majority of the interventions taking place at the time of the study involved children of primary school age (80%). There was a strong rationale for a focus on the young that centred on the importance of intervening early, setting the scene for a lifetime of treating animals (and others) properly. There was also recognition that it was easier to reach and engage this age group than any other:

I think that teaching children about animal welfare is the most effective way at impacting animal welfare. Children are open, curious, and still developing their values and morals. By

teaching young people the physical and emotional needs of animals, the importance of respect and understanding our responsibility to provide care, in my view will have the greatest impact improving animal welfare [Stephanie].

Many emphasised the importance of extending this work into secondary schools, to reach young people “on the verge of becoming decision-makers in their own lives and helping inform how those decisions can make positive impacts on the lives of animals in all forms of human-animal interaction” [Suzanne]. Teenagers/work in secondary schools was identified as a gap in provision by 85% of the participants, suggesting that the work already being undertaken in secondary schools is far from comprehensive. The same proportion felt there was not enough work being done with at-risk/vulnerable children and young people. This is where the language of ‘cruelty prevention’ often comes into play, but it is not clear how the content and delivery differ with

more specialist or targeted interventions. The strongest consensus though with respect to gaps in current provision (Table 6 Appendix: <https://www.ufaw.org.uk/the-ufaw-journal/supplementary-material>) was found in relation to the notion that AWE should be embedded within the school curriculum (96%). Seventy-three percent of participants felt this gap should be prioritised. There was no consensus on whether the others should be a priority.

Animal Welfare Education and Cruelty fit really easily into the current National Curriculum [of England and Wales] and it would be easy to make a few amends to the curriculum so teachers teach children about it without the need for so many interventions [Jenny].

Problems are often only recognised when they manifest as something serious — harm or abuse of an animal or another child, then people work backwards and discover certain behaviours or attitudes. Lack of recognition and action around potentially serious ‘red flags’ is a concern. We also know that despite the significant work of animal welfare charities, we simply aren’t reaching every child, even within the primary sector, when ideally, animal welfare education should run as a thread throughout a child’s years at school, starting with the basic welfare framework and running through different subjects through the years, such as science and geography, culminating in the more advanced legal, moral and ethical discussions around the place and treatment of animals in our society [Alison].

Knowledge of welfare needs appears to be the predominant focus of interventions in primary schools. However, the ultimate goals expressed by practitioners throughout the study are to influence different types of behaviour and have AWE as part of school curricula, suggesting that these are the areas that should be prioritised. In particular, the precursors to behaving in ways that promote positive animal welfare seem important (ie how to take responsibility, identify animals’ signals and potential problems, as well as act and speak out safely). It is not clear currently if the pathway from inputs to outputs is being mapped out, guiding delivery and the development of educational materials, or whether steps towards goals are being adequately assessed and re-evaluated to continue making improvements to programmes. The focus of animal welfare organisations on teaching children about animals’ needs was described by a minority as sometimes narrow or ‘superficial.’ While the Five Freedoms (Farm Animal Welfare Council [FAWC] 1990) was referred to as a useful framework to work within, there was also recognition that it is insufficient for transfer of learning, particularly by those who emphasised the lack of skills-based education and highlighted this as a major gap in provision:

Lack of hands-on education and skills for interacting with animals. Too much ‘teaching’ or ‘preaching’ and not enough playfulness or use of expressive intervention and education approaches. Lack of appropriate involvement of live animals at the right time in the process. It’s just not geared for transfer of skills, at least what I have seen [Amanda].

Amanda reiterated this view in Round 2, but also drew attention to the significance of targeting parents and teachers as well as the children:

I would say most interventions I’ve seen are rather superficial or else cognitive in nature. They try to change attitudes but not teach actual behaviours. The most effective I’ve seen teach actual skills, practice, and provide environmental supports that are ongoing [parents, teachers].

It should be noted that it was only those working in a more therapeutic way with individual children who described the involvement of live animals as essential. The majority of practitioners were opposed to using live animals due to welfare concerns but recognised the significance of using materials such as videos and toys to help children better understand, and emotionally connect to, the animal. The emphasis alluded to earlier with respect to developing empathy and compassion appears to afford greater opportunities to introduce animal welfare to children in schools, as another practitioner highlighted with respect to the way AWE has traditionally been viewed:

There is a lack of proper consideration for the importance of affective learning. Animal welfare is too often perceived as a science subject [Jonathan].

Challenges associated with AWE

The burden of uniform evaluation [Louise].

The most significant challenge facing animal welfare education professionals is how to demonstrate the effectiveness of the work they are undertaking. Inherent in this is the possibility that interventions are not successful in achieving intended outcomes. There was strong agreement that it is difficult to ascertain how successful interventions have been, and for whom, due to the lack of evidence. In order to demonstrate effectiveness, some professionals are clear on the need for structure, a detailed outcomes framework and continual re-appraisal as to whether goals are being met. One of the professionals, Anne, argued that this is critical if governments are to be persuaded of the significance of AWE. To meet the longer-term goal of incorporating into school curricula, she highlights the importance of structure from the perspective of the ‘fit’ with other subject areas:

To be able to ‘compete’ with other subjects and gain credibility for the subject in its own right, interventions need to be structured in line with other academic subjects. Flexibility, if required, can always be built into structure by well-trained, competent teachers, depending on the needs of the students. Effective monitoring and evaluation of the course is dependent on structure. Animal Welfare Education needs to be a recognised subject with curriculum appropriate to the relevant age group(s). It can be argued that to date, ‘*ad hoc* lessons’ in schools given by well-meaning NGOs, have been useful, although perhaps largely ineffective — although certainly better than nothing! However, it is a government’s duty to ensure that children develop into responsible citizens respecting all forms of life. It is our duty to persuade them! [Anne Round 2].

However, having a formal structure was perceived to be problematic by the majority of participants. There was strong rejection of a 'one-size-fits-all' approach and an emphasis on being flexible and adapting to the needs of those participating. In many cases, the evaluation of the intervention was viewed as troublesome because it required a standardised, and not an individualised, approach:

The desirable outcomes can vary quite significantly from child-to-child and therefore having a standard set of measures can dilute positive outcomes, as you may be focused on one or two outcomes only for that child but are measuring against ten. Additionally, I feel standard measures can end up driving the education so that on paper it looks great, but the heart of the work is lost. There needs to be flexibility in the evaluation goals and the measures used to allow for the education to be tailored and increase its efficacy. I appreciate that this really does not fit with the traditional principles of quantitative research, but educators should focus on achieving meaningful evaluations for individuals' needs, using a range of tools which are most appropriate for that child or young person. I would say this burden of uniform evaluation can be one imposed by funders too though thankfully some are now coming to value 'stories' over statistics [Louise, Round 2].

There was recognition of positive outcomes for children/young people where the work was undertaken on an individual basis, but also awareness that knowing how to measure impact is a significant challenge for most animal welfare organisations. Time constraints (for them and schools/teachers), concerns about the responses of schools, teachers, parents or children to a request to participate in an evaluation, difficulties children have completing a questionnaire, and the absence of, or 'rusty', skills in relation to evaluation and statistics were all identified as problems. There was also a great deal of emphasis on the difficulty of being able to measure behaviour and long-term change — clearly the ultimate goals.

Do we measure what's valuable or value what's measurable! [Richard].

This is probably the most difficult, but also the most important challenge we face. There is no point developing programmes and engaging materials that get great initial feedback from participants, and self-reported intention to make better choices, that then do not translate to a change in their behaviour when they get back into their 'real lives'. This is what we should actually be measuring but finding a surrogate or proxy of this behavioural change is no straightforward task, or we would all be doing it! [Suzanne].

The full range of challenges facing those responsible for animal welfare education is best summarised with reference to the consensus data for certain questions. The summary is provided in the supplementary materials (<https://www.ufaw.org.uk/the-ufaw-journal/supplementary-material>).

Tensions relating to the terms 'cruel' and 'cruelty'

Are children cruel? [Jonathan].

It became clear in Round 1 that there was a great deal of ambiguity around the use of the terms 'cruelty' and 'cruelty prevention' (Table 7 Appendix; <https://www.ufaw.org.uk/the-ufaw-journal/supplementary-material>). Accordingly, an additional question was asked in Round 2 to establish consensus on the language typically used in the field (Muldoon & Williams 2021; this issue). In response to the question asking professionals to define 'cruelty', some viewed any kind of harm as cruelty regardless of intent, underlying cause, or cultural norms. Others (especially those working more internationally) emphasised differences in the ways animals are viewed in various parts of the world or sub-groups of society. Some described discomfort using the label 'cruel' or 'cruelty', particularly if harm is caused through lack of knowledge, awareness or capacity. Concern was expressed about the implications; how it might reflect underlying assumptions about the people an intervention is targeting, translating into practice with detrimental effects. Several participants felt deliberate cruelty was actually rare; that harm caused unintentionally was far more common and the reasons behind it complex and nuanced, as Amanda explained:

I worked with many children with facial bites from dogs. Some had endured multiple surgeries, and most were now fearful of dogs. In a few cases, these children had become more forceful with dogs, likely because of their fears. These were not children who were deliberately harmful to animals, nor were their parents aware of the miscommunication with the animals or with animal body language. They were everyday kids who crowded, hugged, trapped, or otherwise intruded on an animal to the point where the animal felt the need to defend him/herself [Amanda].

Other practitioners felt the word cruelty would be viewed by the public in a narrow sense, to refer to the worst kinds of malicious treatment and, as Louise highlighted, might fail to draw attention to the wide and varied nature of different forms of harm caused to animals:

The word cruelty is in some ways a loaded word. Think Cruella de Vil, for example. In the same way that the language of 'Domestic Violence' was detrimental to the wider public understanding and identification of the range of domestic abuse, I feel the term cruelty could have a tendency to close people's minds to deliberate acts/malicious acts of physical or emotional distress, such as forceful behaviour that doesn't involve physical violence. Yet there are a wide range of ways that we may intentionally or accidentally cause our animals distress or harm, which is avoidable [Louise, Round 2].

Concern was expressed about children who have caused severe harm to animals, and recognition that this needs to be understood as a risk factor and the child not stigmatised but instead supported:

We need to raise awareness across the professions, and with the public, about the significance of cruelty behaviour towards animals. Such behaviour needs to be understood and addressed. A child exhibiting such behaviours is a child in need [Alexandra, Round 2].

In Round 2, 85% of the practitioners agreed that there were differing views on both (i) what is meant by cruelty prevention and (ii) the constituents of AWE. Although no consensus was reached on whether AWE and cruelty prevention are synonymous, 65% of participants disagreed. Only five participants believed they were the same thing. This suggests that most draw a strong distinction, as the following quotations vividly illustrate:

The term animal welfare education projects a positive education process. The term cruelty prevention suggests negative/judgemental connotations [Anne, Round 2].

I'm having a problem with animal welfare education and cruelty prevention being rolled together as if they are one thing. They are not and my answers would be different for the two different categories. Animal welfare education [should target] all children — staged education from pre-school onwards to build an understanding about the relevance of animal lives and how animals should be treated. Cruelty prevention [should be] more targeted at vulnerable groups [Paula].

It was interesting to note that while the majority of participants engaged with the questions that asked them to reflect on definitions and causes of cruelty and explain if and why 'cruelty prevention' is important, two of the participants who were working internationally rejected the use of these terms outright. Their arguments are compelling.

I accept that any form of deliberate abuse or neglect, whether deliberate or through ignorance is cruelty, but am not comfortable in certain situations using the term cruelty. This relates to my working experience in developing countries. The terms 'cruelty' and 'cruelty prevention' tend to be regarded as offensive and judgemental. When developing our education programme in Asia, careful consideration was given to terminology, which is why we decided to use Caring for Life Education, using an holistic approach based on the UNESCO Four Pillars of Education — one of these pillars being Learning to Live Together [relevant to the well-being of humans, animals and the environment] [Anne, Round 2].

Perhaps we need a whole different vocabulary that reflects the modern perspective on animal welfare that places an emphasis on promoting positive welfare, not preventing negative welfare [Jonathan, Round 2].

It may well be those who have worked with more vulnerable groups or people who have harmed animals as a result of their own distress or lack of awareness, knowledge or respect for animals that is evident in their own cultural environment, who recognise both the significance of 'labelling' and question whether children in these circumstances could ever be described as 'cruel.' However, almost half of the sample was uncomfortable with the term 'cruelty prevention' even if their discomfort was not articulated in the free response boxes. There was also wider recognition among those working internationally that adopting a broader

framework and focusing on 'positive education' would help to garner support from others:

I prefer the term humane education which embraces human and animal welfare and environment protection. It is a One Health One Welfare approach which I think will get more support and engagement. [Alexandra, Round 2].

This is particularly pertinent when considering how to engage with teachers and educationalists.

Discussion

Our study has drawn attention to the highly nuanced and complex nature of animal welfare education and cruelty prevention. It has also highlighted the passion of those working in this field and the considerable potential they ascribe to AWE in terms of enhancing children's and animals' lives. However, the current lack of evidence relating to the impact of interventions, and tensions around the terminology used, pose a significant challenge to progression of the field. If policy-makers and education professionals are to be persuaded of the value of including animal welfare education or human-animal interaction in their curricula, a sound rationale and evidence base are essential. There are various issues to address to ensure that AW educators' assets, and the very essence of what they do, are not lost as we move into an era of economic instability.

First, it is essential that AW educators are able to communicate clearly and in detail the purpose and goals of their interventions, and demonstrate how they work in order to achieve them. It may be that the activities being undertaken are out of sync with the ultimate goals. An obvious first step is to scrutinise existing practice in light of the findings from the study, especially with regard to identifying (i) what has not worked and (ii) how the activities children participate in are expected to result in the changes practitioners want to see. Thus far, the predominant emphasis of AWE has been the enhancement of knowledge, but our study has shown that practitioners are more interested in seeing behavioural change and children taking responsibility; understanding what to do and taking action. Accordingly, there needs to be a stronger focus in interventions on equipping children with these mindsets and behavioural skills.

It is important to establish a strong outcomes' framework, recognising that some types of knowledge and behaviour are more likely than others to be amenable to change (Jensen 2002; Boyes & Stanistreet 2012). How to handle an animal appropriately, accurately read their behavioural signals, intervene safely when an animal appears to be suffering, and recognise when to leave an animal alone, are all important for children to take action in different situations. Furthermore, if we want children to make decisions in the future that positively impact animals in the food industry, farming, and science, we need to be educating young people about how this looks at present, how they might understand and evaluate best practice, and how they might exert an influence and make informed choices. New measurement tools may be required to reflect this emphasis

on behaviours, skills, responsibility, and empowerment. The literature relating to environmental education in schools and the concept of ‘action competence’ (Jensen 2002; p 329) may prove useful here.

Curriculum-blended humane education programmes have started to be developed in the United States, and this had led to the suggestion that for these to be successful and the mainstay of AWE in the future, humane educators should redirect their focus away from intervening with school-children to engaging with pre-service teachers (Chun Fung & Zhou 2020). Working in partnership with schoolteachers seems an important next step. Whether or not animal welfare is formally incorporated into school curricula, teachers’ knowledge of curriculum development, classroom behaviour, effective teaching methods, and how to create materials for different age groups would be invaluable to animal welfare organisations. It would also open up discussion about where in the curriculum AW might be successfully introduced, and how the expertise of AW professionals could be drawn upon for best effect. In UK primary schools especially, while teachers are recognised experts in pedagogy and teaching, they are not necessarily ‘experts’ in any of the subjects they teach. They rely on good quality sources of information, resources, and training, adapting content or methods to the specific needs of members of their class. Animal welfare professionals have a strong sense of the bigger picture, the variety of roles that animals play in people’s lives, and the wider implications of not helping others to understand animals better. As evidence is accumulating (Longobardi & Badenes-Ribera 2019), many are also acutely aware of the link between animal abuse and human-directed aggression. It is imperative that this understanding is shared with schoolteachers, ensuring they are prepared for the possibility of children disclosing information about harm caused to animals in their homes (Faver 2010).

Much of UK formal education is moving towards recognition of the significance of skills and acknowledging diversity, so children are increasingly being taught how to recognise/name their own emotions or those of others, and to appreciate different perspectives, life experiences, religious and cultural backgrounds (Lavis & Robson 2015; Education Scotland 2020). An approach to animal welfare education that is broad and links to these emphases in schools, perhaps through the lens of ‘compassion’ initially, seems important. To engage educational policy-makers and teachers, a strong framework/model is required to demonstrate exactly how each aspect of an educational programme links to specific changes, and how these are reinforced and assessed (Hernandez 2000; WK Kellogg Foundation 2004; Kekahio *et al* 2014; Morgan-Trimmer *et al* 2018). With young children, a focus on care and compassion may be optimal: ‘caring for life’ and being ‘guardians of the earth’ (Rule & Zhanova 2014). Later on, AWE and human-animal interaction might be usefully incorporated within environmental science and ‘learning for sustainability’, exploring values and beliefs within moral education, or recognising protective and harmful effects in the context of health and well-being. Building on recent widespread involvement in youth environ-

mental activism (Walker 2017), it is also worthwhile exploring how to engage children and young people in the process of co-developing future animal welfare interventions and school-based content.

One Health and One Welfare are international frameworks devised to improve both animal welfare and human well-being, “recognising that animal welfare, biodiversity, and the environment are connected to human well-being” (One Welfare 2020). In this sense, COVID-19 provides us with an opportunity that should not be missed — a prime example of this interconnection and the far-reaching consequences that can result from the inhumane treatment of animals. If an approach is embedded within a broader humanistic, environmental or social justice framework, it will be easier to make the case that AWE is important (Arbour *et al* 2009; Chun Fung & Zhou 2020) and see the wealth of opportunities to introduce it within education. Some new terminology to reflect the fact that this form of education is not simply to educate children about basic welfare needs may well prove to be highly beneficial. These data strongly suggest that now is the time to move away from the language of ‘cruelty’; replacing all references with ‘harm.’ Adopting an educational focus that is positive, holistic, and action-oriented is likely to be the most successful way of ensuring optimal reciprocal relationships between humans, animals and the environment.

Limitations

The Delphi technique proved to be highly successful in identifying consensus among AWE professionals. However, the limited evidence base undoubtedly made it difficult to answer certain questions with confidence. This was also noted by Rioja-Lang *et al* (2020) in their Delphi study identifying top priority welfare issues of managed animals in the UK. However, areas where consensus was not achieved are not just due to lack of empirical evidence. They can indicate tensions within the field. The qualitative nature of our first Round enabled in-depth exploration of issues that invoked different responses and highlighted problems with terminology/definitions, so we were able to add further questions to shed light on this.

Although, ideally, we would have distinguished between AWE and cruelty prevention throughout, this would have relied on us making possibly false distinctions based on our perceptions rather than those of experts in the field. We would also have asked further questions with respect to interventions currently underway (ie whether specific programmes were being evaluated and how, and questions concerning content and pedagogy). The survey was already lengthy, and we prioritised accessing views across all elements, rather than details associated with specific programmes or organisational goals. The findings highlight the types of support that are likely to prove most beneficial. Hence, rather than mapping current provision, the Delphi technique has equipped us with the information required to produce a guide and toolkit geared specifically to the needs of those working in the field (this can be found in the supplementary materials; <https://www.ufaw.org.uk/the->

ufaw-journal/supplementary-material). Finally, although some of our participants were based outside the UK and three had worked in Asia and Africa, our findings reflect a mainly UK-based perspective. Accordingly, they may not generalise to animal welfare education in other countries.

Animal welfare implications and conclusion

It is essential that AWE professionals identify, air and resolve tensions in the field in order to enhance collaboration and maximise effectiveness. This process is critical if they are to achieve the important shared goal of persuading educationalists to include this topic in school curricula. We have identified key areas that should be the foci of initial discussion and resolution and recommend working in partnership with teachers. Researchers can provide guidance on the process of evaluation and analysis but may also support the future development of AWE through examination of teachers' views, and the development of measures that capture the type of behaviours and skills AWE professionals want to promote. At the heart of this work is the need for animal welfare educators to develop a common language and a strong outcomes framework to ensure the work being undertaken passionately to protect animals and children from harm is successful. It is vital that their significant expertise and knowledge is harnessed to inspire and equip the young to care for the world around them.

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