Challenges and Approaches To Teaching Animal Welfare in the DVM Curriculum: A Case Study

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Background

- Traditionally welfare not taught as a separate discipline in the veterinary curricula
  - Welfare equated with physical health
  - Little or no emphasis placed on other components of welfare such as behavior or mental state
  - Little formal exposure to current issues such as confinement housing
Veterinarians are looked to by the public as the animal experts

- The public recognizes welfare encompasses more than just physical health
- Increasingly raise their concerns through support of legislation to improve perceived animal welfare
Background

- Increasing gap between the veterinary profession in its knowledge of animal welfare and the public’s perception that veterinarians are the expert
Challenges in Teaching Animal Welfare

- Where does welfare belong in the veterinary curriculum?
- Should welfare be core for all students?
- Who teaches animal welfare?
- What teaching methodologies should be used?
Our Approach to Teaching Animal Welfare at Ohio State

Development of the course “Contemporary Issues in Animal Welfare”
Teaching Philosophy

- Students need an opportunity to explore current issues in animal welfare through non-didactic means
  - Readings
  - Presentations
  - Writing of summary opinions
  - Discussion
Teaching Philosophy

- This approach will help students to gain an appreciation of welfare issues and will provide them the tools to evaluate and articulate welfare issues as veterinary professionals.
- Our job is not to teach students what to think but rather how to use scientific and lay resources to evaluate both sides of an issue.
Considerations in Course Development

- Elective course
- Offered early in curriculum
- Limit class size
- Involvement of faculty with expertise in content matter
- Length of course – 2 hour blocks
Selection of Topics

- Issues with legitimate pros and cons and adequate scientific literature
  - Sow housing
  - Equine slaughter
  - Feral cat management
  - Foie gras production
  - Elephants in captivity
Course Structure

- Student preparation for class
  - Reading assignments
  - Writing of summary opinion
  - Submission of topic question(s)
  - Selected student presentation
Course Structure

- First week of class
  - Discussion of course approach and ground rules
  - Review of basic animal welfare concepts
    - Five freedoms
    - Fraser’s approach (biological function, natural state and emotions/feelings)
  - Example presentation
Course Structure

- Remaining class weeks
  - Overview of topic by moderator (20-30 minutes)
  - Two students present major supporting and refuting arguments for topic (30 minutes)
  - Instructors and moderator guide topic discussion (45 minutes)
Course Structure

- Student presentations
  - Statement of the problem and its significance
  - Identification of the important stakeholders
  - Clarification of the problem and identification of the conflict
  - Analysis of both sides of the conflict
  - Identification of possible solutions
Example Week

Equine Slaughter and the Unwanted Horse
Reading Assignments

- Three peer-reviewed journal articles
- One conference proceeding article
- One opinion article by lay group
- Two web sites from animal welfare groups
- One web site from industry group
The Moderator

- Equine surgeon from the College
- Member of AAEP
- Involved with AAEP discussions on issue position
- Discussed background of equine industry and challenges with horse disposal
Student Presentation

Statement of the Problem

- Is slaughter a justifiable method for disposal of unwanted horses?

Stakeholders

- Horse
- Owners
- Veterinarians
- Public
- Animal welfare groups
- Horse industry
Pros on Issue

- Economical and humane method of disposal
- Avoidance of shipment of horses to other countries
- Prevention of unintended consequences (abandonment)
Cons of Issue
- Humane transport
- Slaughter issues
- Ethics of slaughter of horses for human consumption
- Existence of alternatives
Student Presentation

- Potential solutions
  - Improvement of transport and regulations
  - Establishment of public/private funds for rescue
  - Methods to fund more economical euthanasia and burial
The Discussion

- Focus on economics and ethics
- Importance of questions ahead of time
- Role as traffic cop to direct discussion and prevent over or under engagement
Course Evaluations

- To date the course has been taught 5 times to 83 students
- Overwhelming support for course from students
- Many positive comments on incorporating course as core for all students
What Have We Learned?

A Survey of students who were enrolled in our course compared to a matched group of non-enrollees
Survey Design

- 49 students who took the course were surveyed
- A matched group of students who did not take the course were surveyed for comparisons
Survey Design

- General questions on attitudes
- 3 novel welfare scenarios
  - Greyhound racing
  - Veal calf production
  - Genetically engineered mice
- Actual knowledge evaluated
- Welfare factors evaluated
General Attitudes

Attitude Towards Animal Welfare

- Animal Welfare Required Core (p<0.001)
  - Course Participant: 33
  - Non-Course: 11
- Comfort Level Researching Novel Topic (p<0.05)
  - Course Participant: 10
  - Non-Course: 4
- Ability to Answer Questions (p=0.05)
  - Course Participant: 39
  - Non-Course: 28
Groups in decision making

**Ranking Participants as Very Important in Making Animal Welfare Decisions**

- **Vet (p < 0.05):**
  - Course Participant: 76%
  - Non-Course: 93%
- **Animal Sci. (p < 0.05):**
  - Course Participant: 39%
  - Non-Course: 67%
- **AVMA (p < 0.05):**
  - Course Participant: 56%
  - Non-Course: 82%
- **Animal Ind. (p < 0.05):**
  - Course Participant: 28%
  - Non-Course: 40%
- **Public (p = 0.08):**
  - Course Participant: 57%
  - Non-Course: 38%
Student Comfort Level

For three animal welfare scenarios, each of the course participants felt more comfortable in educating themselves about the industry practices than did non-course participants.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>ODDS</th>
<th>P-value</th>
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<tbody>
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<td>Veal Calf Production</td>
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<td>0.037</td>
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<tr>
<td>G.E. Mice</td>
<td>4.1</td>
<td>0.007</td>
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Identification of welfare factors

Course Participants identified more factors in considering welfare (biological functioning, natural state, feelings) for each of the three scenarios.

<table>
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<tr>
<th>Scenario</th>
<th>Odds Ratio*</th>
<th>P-value</th>
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</thead>
<tbody>
<tr>
<td>Greyhound Racing</td>
<td>2.3</td>
<td>0.043</td>
</tr>
<tr>
<td>Veal Calf Production</td>
<td>3.3</td>
<td>0.004</td>
</tr>
<tr>
<td>G.E. Mice</td>
<td>2.1</td>
<td>0.012</td>
</tr>
</tbody>
</table>
Conclusions

- Positive approach to introducing animal welfare into curriculum
- Not a replacement for a more formal course on animal welfare assessment and theory
- Our role doesn’t replace having an animal welfare specialist at the College
- Course is a way to introduce welfare for motivated faculty
Thank you

- Jennifer Walker
- Candace Croney
- AVMA and AAVMC
- Moderators
- Our Students
Questions?

“Can I borrow those kittens for an hour? I want to freak out the people who had me spayed.”