Embedding sustainability within veterinary medical education

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Session

• Professional requirements
• Embedding within the curriculum
• Examples
RCVS Day One Competences

2 Understand the ethical and legal responsibilities of the veterinary surgeon in relation to patients, clients, society and the environment.

- To abide by the principles in the Code of Professional Conduct, veterinary surgeons need to be able to make professional judgements based on sound principles. They must be able to think through the dilemmas they face when presented with conflicting priorities and be prepared to justify the decisions they make.

- As well as decisions relating to individual patients, animal groups, populations of animals and clients, veterinary surgeons must take account of the possible impact of their actions beyond the immediate workplace, e.g., on public health, the environment and society more generally.
NAVMEC Roadmap for Vet Med Ed in the 21st Century

Adapt to changing environments

“The rapidly changing dynamics of society and environment require that veterinarians need to have an open mind and be flexible enough to make the changes required for the profession to remain relevant for both personal satisfaction and for society’s appreciation of future contributions. Planning for flexibility in meeting societal needs must address globalization (animals, people, diseases), economic shocks, and natural and intentional disasters. Challenging situations need to be met with curiosity and flexibility when changing priorities and situations arise.”
How?
Sustainability at the Dick Vet

• UoE goal to have at least one sustainability-related course at core of student programme (Bloemen 2013)

• Criteria for a sustainability course
  1. cover one or more themes related to sustainability (content)
  2. approach the sustainability themes from a discipline-specific, interdisciplinary or holistic perspective (approach)
  3. are taught using mostly student-centred and praxis-oriented teaching and assessment methods (delivery and assessment)
  4. allow students to engage with local community projects or businesses (community engagement).

• Dick Vet can provide a demonstration of embedded sustainability over a full degree programme.

• New Global Academy of Agriculture and Food Security.
The 4-D model of AI as described by Carter (2006):

- **Destiny**: is focused on sustaining the envisioned future(s) or 'what will be' through supporting the ongoing learning and innovation.
- **Discovery**: is focused on appreciating the 'best of what is and what has been' through generation of affirmative stories.
- **Design**: is focused on making choices and co-construction and transforming 'what the ideal should be'.
- **Dreaming**: is focused on an affirmative exploration of 'what might be' through thinking outside of the usual boundaries and by envisioning positive futures.

**Choice of Affirmative Topic**
HEA & QAA skills & attributes mapping
Sustainability themes

- Environment (includes ecosystem health, food and farming)
- Economy (including employment rights)
- Society (includes medicine, health and wellbeing)
- Crosscutting themes
  - Sustainability
  - Ethics
  - Environmental ethics (relationship between humans, animals and the environment)
  - Scholarly ethics (specific to the discipline)
  - Futures scenarios
  - Uncertainty and risk
Sustainability pedagogies

- Student-led learning
- Real-world case studies
- Problem-based learning
- Group work
- Debates
- Site and field visits
- Role-plays and simulations
- Stimulus activities (e.g. work with the ECA)
- Reflective accounts
- Personal development planning
- Futures visioning

- Worldview and values research
- Outdoor learning
- Work-based learning
- Guest speakers
- Self-assessment
- Peer-assessment

- Action research (possibly EMS)
- Multi-dimensional assessment (incl. social impact + academic)
Student Research Component Foundation (UG2)

- Prepare for individual SRC project (UG years 3-5)
- Group project (~4 students)
- Extend research beyond the vet curriculum

Sustainability themes
- Economics/socio-economics
- One Health or One Well-being
- High technology/low technology
- Ethics
- Local/global issues
- Cultural influences
- Resource management

(Boyd et al., 2017)
Veterinary Public Health (UG yrs 1 and 4)

• VPH is…
  – “… The sum of all contributions to the physical, mental and social well-being of humans through an understanding and application of veterinary science”.
  – Human health inextricably linked to animal health and production.
  – Link between animal and human populations particularly close in developing regions.

• Covers core HEA/QAA themes in the context of the discipline of veterinary medicine, with clear global and local examples
Conservation Medicine (MVetSci)

• Relationships and interactions between animal, human and ecosystem health
• Impact on animal and human health as a result of anthropogenic effect on the environment

• Interdisciplinary - input from veterinary and human medicine, ecology, biology, epidemiology, public health and social and political science
• Online distance learning
• Guest speakers and student shared knowledge
• Field trips
Sustainability in clinical skills

- Survey waste from clinical skills labs
- Improve awareness of appropriate disposal of waste
- Business skills

Plymouth collaboration: Dr Jane Grose (https://www.plymouth.ac.uk/staff/jane-grose)

- Introduction to the methods Plymouth have used to embed sustainability issues into the nursing curriculum
- Health Environment & Resources Toolkit (HEaRT: http://heart-etools.com/)
Campus wellbeing

- Student leaders
- Student Research and summer projects
- Edinburgh Teaching Award

Campus sustainability:
- SRS awards and Green Gown
- Equality and Diversity
- Veg garden
- Apiary
- Wellbeing
Sustainable Veterinary Medical Education

- Core Veterinary Medical Knowledge
- Evidence-Based Veterinary Medicine
- Equality and Diversity
- Community Engagement
- Sustainable Labs
- One Health
- Leadership & Interdisciplinary Collaboration
- Carbon Neutral Economy
- Local and Global Perspective
- Flexibility and Resourcefulness
- Green Veterinary Practice
- Ethics
Questions?
References


