

Curriculum Development: Drivers of Change and International Comparisons

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Veterinary Medical Education



- Current environment in which veterinary medical education is being taught is one of profound change
- Moving towards a global society
- This will have an impact on veterinary education!
- For example education of US veterinarians now occurs worldwide
 - ✓ Countries with AVMA accredited Vet Schools or Schools whose graduates feed into the US market
 - ✓ Currently 9 accredited foreign schools but this number is growing!







What **factors** have **driven**Veterinary Curriculum
Development, both within
the US and internationally,
in the **past**?

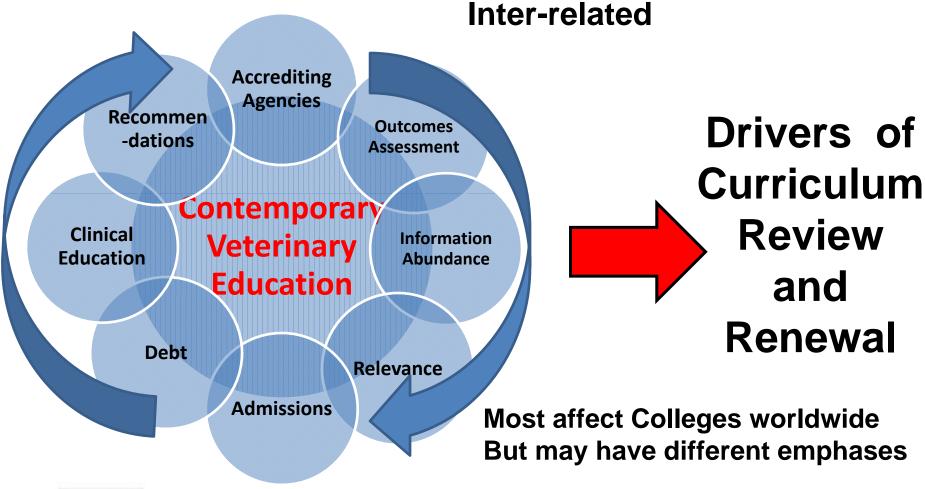
What factors are likely to drive Veterinary Curriculum Development in the **future**?

















1. Accrediting Agencies

- Significant input into curriculum development
 - ✓ mostly indirect input, but occasionally direct!
- North America (US and Canada)
 - ✓ AVMA Council on Education (AVMA COE)
- Australia and New Zealand
 - ✓ Australasian Veterinary Board Council (AVBC) Veterinary Schools Accreditation Advisory Committee

United Kingdom

✓ Royal College of Veterinary Surgeons (RCVS) + European
 Association of Establishments for Veterinary Education (EAEVE)

STANDARDS



Accreditation

AVMA-COE

AVBC

Harmonization





RCVS

EAEVE

Global Curricula



2. Outcomes Assessment

❖ Recent focus of the accrediting agencies on an ↑ accountability by the Vet Colleges in demonstrating the competence of graduates

Vet Rec. 2004

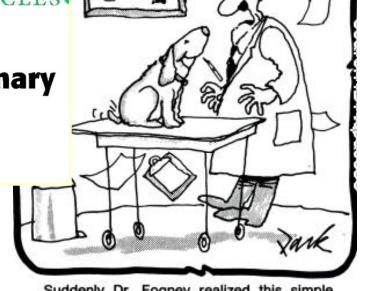
Papers & Articles

Survey of mistakes made by recent veterinary graduates

R. J. MELLANBY, M. E. HERRTAGE



Impact on curriculum development



Suddenly Dr. Fogney realized this simple spaniel knew more about veterinary medicine than he did.



2. Outcomes Assessment

- **Competencies -** Knowledge, Skills and Attributes
 - ✓ Knowledge (Cognitive Skills)
 - Ever-expanding!
 - Who defines these? NAVLE Job Analysis?
 - ✓ Clinical Skills Clinical/Technical
 - ➤ US currently trying to define these (VEC, NAVMEC)
 - UK Day 1 and Year 1 competencies and ongoing required CPD
 - Australia "borrowed" the UK's Day 1/Year 1 competencies
 - ✓ Attributes (Non-Cognitive Skills)
 - All struggling to define these let alone assess them!!!
 - Increasingly seeing themes for "professional development" which are introduced longitudinally into curricula



3. Information Abundance

- **♦** How do we fit it all in?
 - ✓ We don't!
 - ✓ Curriculum Reviews are now deciding what is core
 information and what may be additional
 - ➤ Who is defining core information? NAVLEs? Accreditors?
 - ✓ Additional information taught in some programs
 - **▶ Tracking and Streaming** limited licensure???
 - ✓ Is the core/additional program the same at all schools?
 - ✓ In US has to fit into 4 years

But are we really? \uparrow no. of students doing internships



3. Information Abundance

How do the students make sense of it?

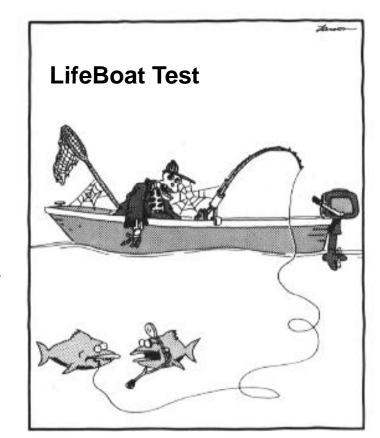
- √ They don't! "Academic bulemia"
- ✓ Future direction training student differently using different pedagogical approaches
- ✓ Train students to navigate through the information abundance: how to make good decisions on where to go, what to access, and what to dismiss ("factual relevance")
- ✓ ↑ focus on "just-in-time" versus "just-in-case"
- √↑ focus on critical thinking, problem solving, and reflection (self-directed learning)



4. Relevance

- Are we addressing societal needs?
 - ✓ Veterinary medicine and the lifeboat test: a perspective on the social relevance of the veterinary profession in the 21st century: FA Leighton J Vet Med Educ 2004; 31: 329-333.
 - ✓ Serving society first: a time for change in veterinary medicine. P Eyre, O Nielsen, JEC Bellamy

 JAVMA 2004, 225: 40-42.



"Well, first the bad news you're definitely hooked."





4. Relevance – Underserved Areas

United States

- ✓ development of specific areas of focus in curricula
- ✓ ↑ funding for under-served areas (e.g., VMLRP)

United Kingdom

✓ more emphasis on Public Health/Food Safety within veterinary curricula in UK Vet Colleges

Australasia

✓ opened two new veterinary colleges which emphasize either FA medicine or Public Health/One Health



5. Admissions

- ❖Many veterinary schools have ↑ student numbers (UK & Australia) or are planning to do so (USA)
 - ✓ Number of students we admit to veterinary schools will impact on what we can teach and how we teach it
- But we have stagnant admissions numbers
 - ✓ AAVMC Sponsored Survey (March, 2008) reported admission applications to Veterinary Colleges have "flatlined" and ↑ need for veterinarians not being reflected in increasing application pools









6. Money!

Increasing cost of veterinary education

✓ Student Debt

- ➤ Median student debt 2009 graduates
 - \$84,828 \$162,851
- Student debt increasing out of proportion with potential incomes

✓ Universities Broke!

Progressive \$\square\$ funding for Higher Education including Veterinary Education



6. Money

Impacts veterinary curricular development:

- ✓ Length of time of courses & prevet requirements
 - > 4 (undergrad) + 4 (DVM) years in US (=8 years)
 - > 5-6 years total in UK and Australasia
- ✓ Courses offered & faculty hired to teach
- ✓ Clinical training very expensive







7. Clinical Education

Clinical Training is very expensive!

❖ New curricular models:

- ✓ Distributive Model
 - where <u>all</u> clinical teaching is undertaken outside the College and don't have Veterinary Teaching Hospital
 - Western (US), Calgary (Canada), Nottingham (UK)
- ✓ Hybrid models (Partially Distributive)

some inside/some outside



8. Recommendations from Studies/Reports

- Number of foundational studies and reports that have impacted the direction of curricula - though sometimes not as much as some would like!
 - ✓ Pew Report 1989
 - ✓ KPMG or "mega" study 1999
 - ✓ Veterinary Education & Training: A framework for 2010 and Beyond – ESSG 2003
 - ✓ European Veterinary Education Structuring Future Development - 2004
 - ✓ Foresight Report 2007







8. Recommendations from Groups

- Other Professional Organizations
 - ✓ "Tomorrow's Doctors" U.K.
 - ✓ Brown University Alpert Medical School
 - ✓ Dentistry
- Professional Benchmarking
- Student Evaluations!

"how much curricular change would occur hout student evaluation to drive it?"



8. Recommendations from Groups

- Groups recently formed to help direct change
 - ✓ Veterinary Educator Collaborative (VEC)
 - ✓ North American Veterinary Medical Education Consortium (NAVMEC)
 - ✓ Education Strategy Steering Group (ESSG) UK
 - ✓ WikiVet
 - ✓ Veterinary Schools Accreditation Advisory Committee (VSAAC)

"Creative & forward thinking individuals with a collective passion for the profession"



Curriculum Development

Still a Journey



Haven't arrived at our destination!!!



