



Progression of Veterinary Public Health Management - University of Sydney

Jenny-Ann Toribio

Hannah Forsyth

Richard Whittington



2002 Faculty recognition of ...

- Critical lack of veterinary expertise (Rose 2000)
 - Change in needs of livestock industries e.g. market assurance, product integrity, policy, economics, risk, environment and public health
 - Demand for postgraduate education in Australia
-



Consultation and support

National workshop – February 2002

Articulated the need for a Masters program that equipped veterinarians with technical and leadership skills to address current and future issues

Support secured

External and university support for development of a new postgraduate coursework program



2003 Start of Program

Vision

***To produce leaders
in veterinary public health***

**Veterinarians equipped to engage with
challenges related to**

- **Animal and human health**
- **Animal, herd and product**
- **Science and policy**



Graduating Professionals with Applied Skills in:

- Epidemiology
 - Risk analysis
 - Surveillance
 - Emergency response
 - Research
 - Communication
 - Teamwork
 - Leadership
 - Project management
 - Policy development
-



Wider recognition

“Applied epidemiology requires understanding of the policy-making process as well as the basic principles of epidemiology...

Epidemiology training programs must incorporate communications skill building and experiential learning opportunities in a team environment.”

Hueston WD (2003) *Prev Vet Med* 60:3-12

Future needs and recommendations for leadership in veterinary medicine

Lloyd et al (2005) JAVMA 226: 1060-1067

- To identify leadership needs in the veterinary profession, 37 thought leaders from across the profession were interviewed
- Community expectations of the veterinary profession are evolving to include greater participation in:
 - public health and policy
 - ecosystem health and maintenance
 - protection of agroindustry and food safety
 - biomedical science and technology advances
 - emergency response systems
- Need to move away from the image of the veterinarian as a loner and toward that of team player working to secure communities and industries

“I was just wondering where one could go to find a program that could provide it's students and the profession with not only some, but all, of the necessary attributes for future veterinarians as described by Lloyd?

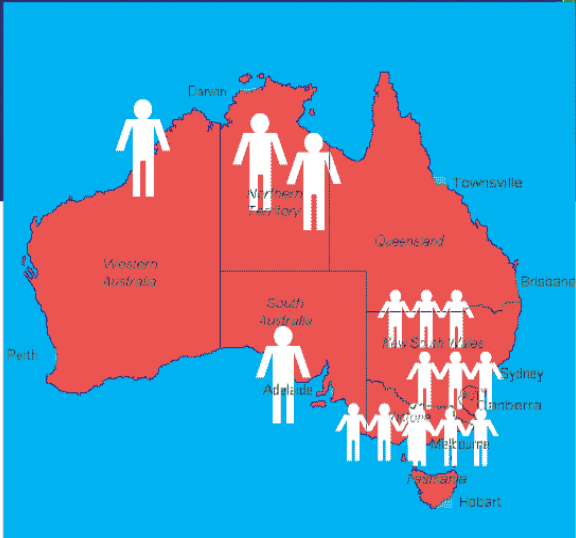
As I see it, one might even be willing to travel far into the Southern Hemisphere if the program was unavailable at home.

Keep up the great work and the future thinking necessary to drag the profession into the 21st Century.”

Allan Drusys, VPHMgt Forum 2005
Equine Practitioner 20 years, Now County
Veterinarian, Orange County California



Students 2005 (as at Oct 04)





How the program works

Articulated on-line distance program with short residential sessions

Graduate Certificate – Graduate Diploma - Masters

Residentials

- Leadership and Project Management units
- Total 3 workshops in Sydney over 2 years (3-5 days)

On-line distance units

- Continuation of Leadership and Project Management
- Technical core and elective units

Research Project required for Masters

- Relevant to current work where possible



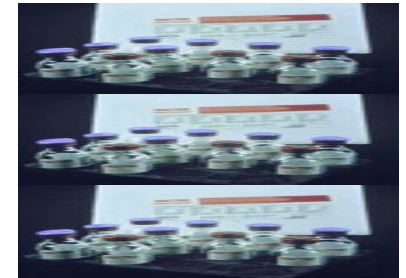
Core units

- Leadership 1 & 2
 - Project management 1 & 2
 - Veterinary epidemiology 1 & 2
 - Animal health economics
 - Hazards to human and animal health
 - Animal health policy development
 - Data analysis for animal health
- } Short residentials



Additional units

- Risk analysis
- Wildlife epidemiology
- Aquatic animal epidemiology
- Diagnostic tests
- Food safety
- Surveillance, preparedness and response

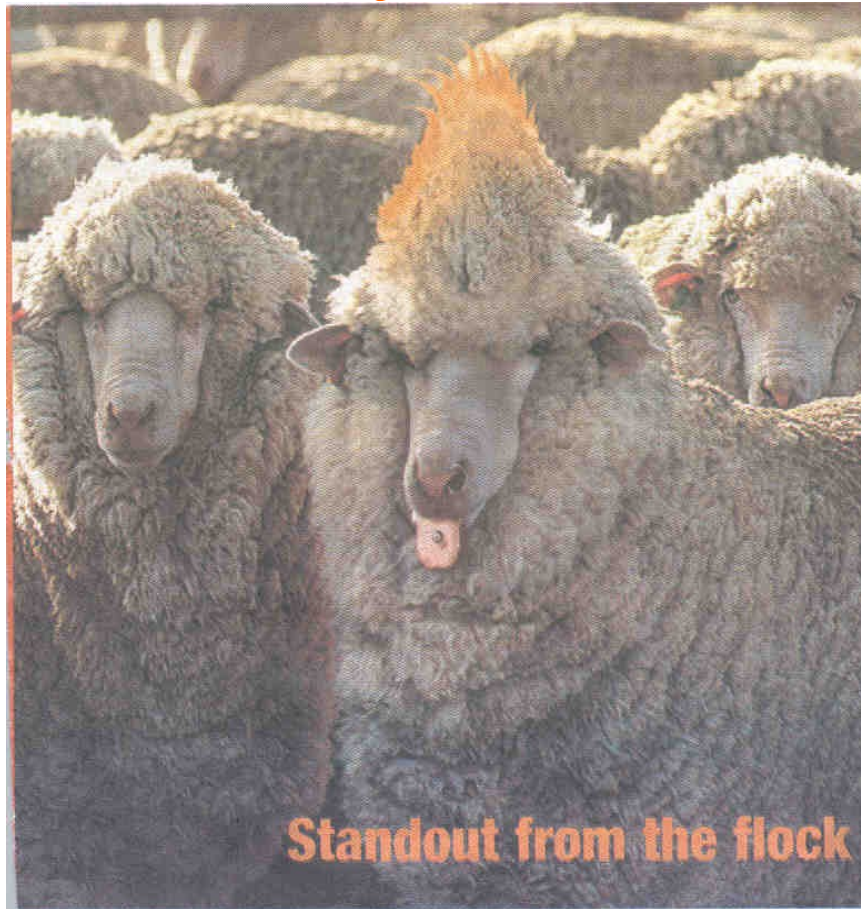


Plus Research Project for Masters students





Distinctly different



Standout from the flock



Features of program

1. Graduate attributes

- Technical and managerial skills
- Emphasis on problem-solving, creative solutions, communication, teamwork, action learning...
- Required development of new learning resources
- ❖ Redesign of AGSM materials to explore organisational behaviour, management and leadership in veterinary contexts
- ❖ Project management material modelled on USyd Masters of Project Management applied to veterinary contexts



Technical units

Study guide, Assessment tasks, Online learning activities

Dr Evan Sergeant

AusVet Animal Health Services



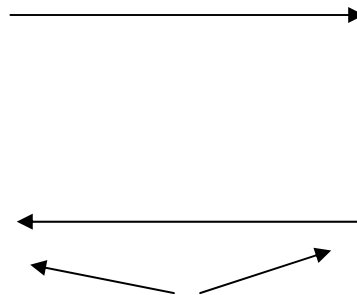
Facilitator

Professor Ian Gardner

University of California Davis



Academic Reviewer



+ educational consultant

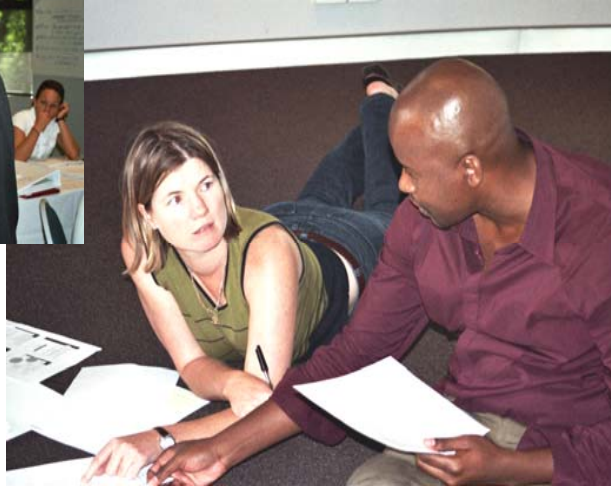
Data management & Data analysis units



Features of program

2. Short residential

- Introduce students to distance & online learning
- Establish student interaction
- Experiential learning





Features of program

3. Online delivery

- High quality resources for distance education
 - Consistent service by USyd IT & library services
 - Training for facilitators and students in online T&L
-

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http://learn-on-line.auth.usyd.edu.au/SCRIPT/VETTEACH/scripts/serve_home

Search

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Faculty of Veterinary Science Online Teaching Tutorial

Course Menu

Homepage

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Homepage

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Learn about WebCT

Teaching effectively online

Accessing online resources


University policies

Module Completion Checklists


Faculty of Veterinary Science Online Teaching Tutorial

Welcome to this online teaching tutorial. Click on the link below to the *Guide to the Online Teaching Tutorial*. You should save this document on your own computer, then print it and refer to it as you work through the tutorial.


Study guide




Guide to the Online Teaching Tutorial




A: Learning about WebCT




B: Teaching effectively online



C: Accessing online resources




D: University policies



Discussions

Checklists to email on module completion



Module Completion Checklists

Moderated discussion board

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Done



Features of program

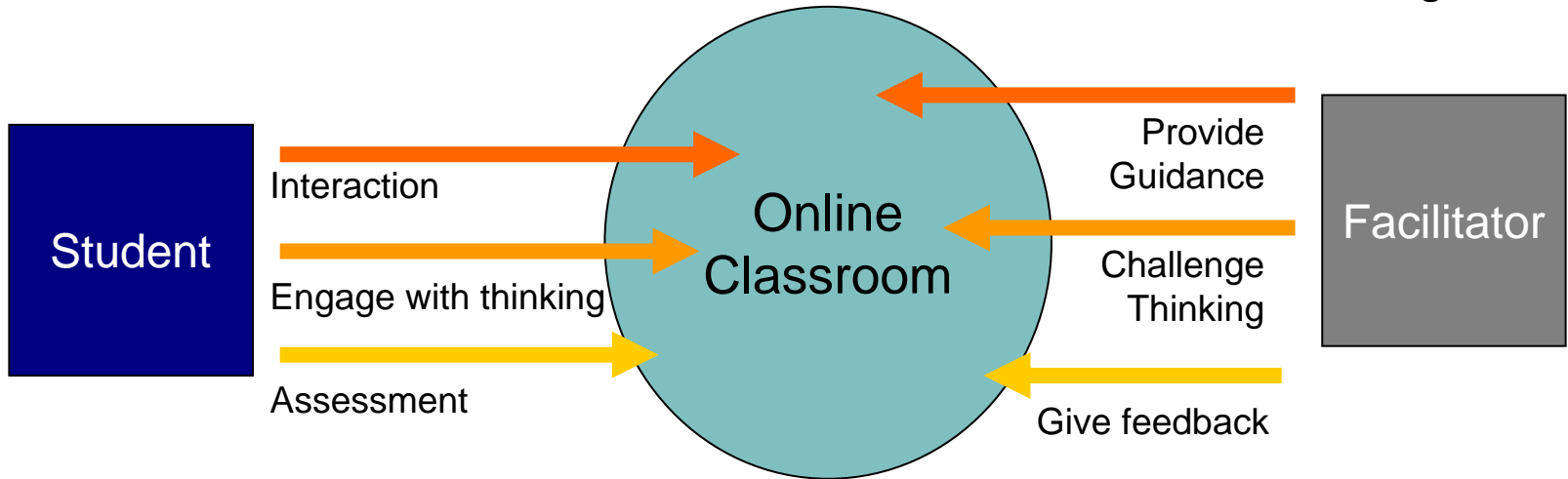
3. Online delivery

- High quality resources for distance education
 - Consistent service by USyd IT & library services
 - Training for facilitators and students in online T&L
 - Participation in online class is required and assessed – Total of 15% of marks in each unit
 - 5% Quality of contributions to online activities
 - 5% Quality of responses to other students
 - 5% Number of postings
-

The Online Classroom

Facilitator Brings:

- Knowledge of subject area
- Experience in relevant field
- Professional recognition



Students Bring:

- Reading
- Self-assessment
- Knowledge from experience
- Application in real life



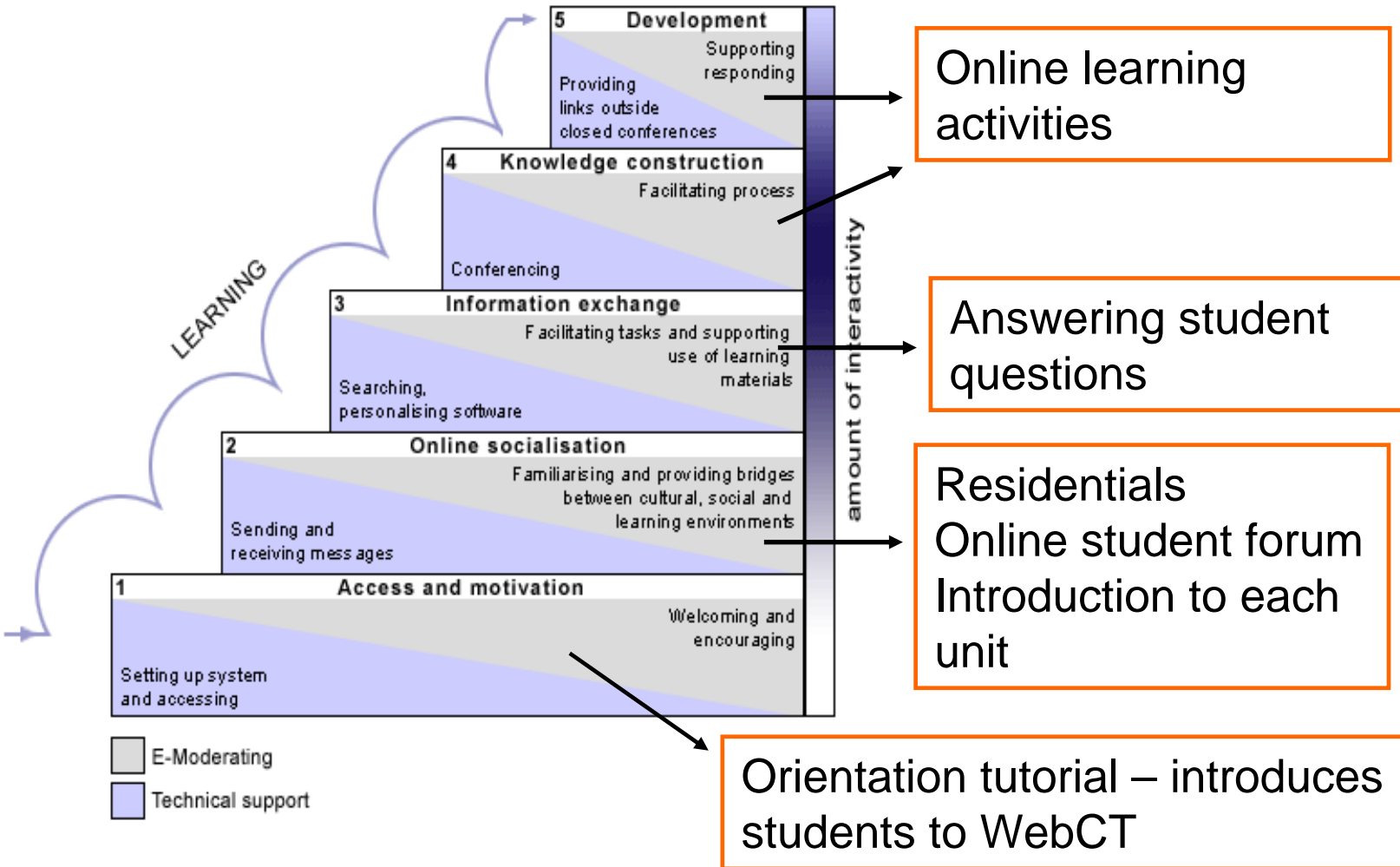


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-

5-stage model – E-learning



Salmon G. (2002) *E-tivities: The Key to Active Online Learning*

E-learning activities

Sampling strategy

Outline for sampling in a cross-sectional study of village pigs

Request comment on:

- Purposive sampling
- Stratified sampling
- Multistage sampling
- Sampling frame

Pick up on complexities and gaps identified by students and challenge them to come up with viable options for improvement of the sampling strategy

Emerging disease

Three Gorges Dam

Search for one issue and post outline in class

Categorise and prioritise these issues in relation to factors for emerging disease

Draws on knowledge from required readings and application of learning from Leadership too



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 - Enables group work on learning activities and assessment tasks
 - Enables leaders to be engaged as facilitators and guests
-

Epidemiology



**Nick
Malikides**



**Robert Dixon
Stephen Page**



Hazards



**Gerry van Schaik
Netherlands**



**Kevin Doyle
Policy**

Economics

**Jenny Hutchison
Mike Nunn**

Surveillance Risk analysis



**Ed Peeler
Sophie St-Hilaire
United Kingdom**

Aquatic epi



Wildlife epi

Hume Field



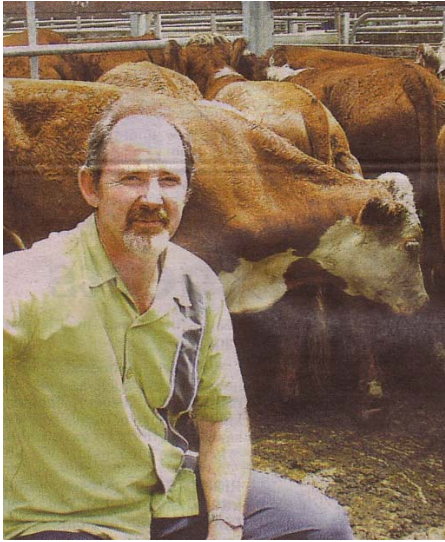


Features of program

4. Assessment tasks

- Include a group assignment in majority of units to develop teamwork skills with penalty for inadequate contribution
- One or more individual tasks – critical analyses, proposals, reports, quizzes
- All assessment task strive to be authentic

Authentic = Tasks relevant and appropriate to the professional, real world work context of our students
(Reeves, Herrington and Oliver, 2002)



Group task

Analysis of patterns to investigate disease

Provide limited data on disease scenario
Teams investigate outbreak concentrating on disease pattern detection and analysis
Draw conclusions about type of disease and appropriate response

Individual task

Facts sheet on a zoonotic disease for veterinary and medical practitioners

Compiled for a website sponsored by the Interdisciplinary Network in Public Health

Individual task

Evaluate evidence provided by 2 papers reporting studies on the same topic but using different study designs to answer a research or clinical question



Features of program

5. Support for student experience

- Timely response to student questions and feedback by administrative, library and teaching staff
 - Tips for success in postgraduate study
 - Ease of access to all learning resources
 - Residentials provide opportunity to build networks
 - Online student forum for conversations, information on job opportunities and research projects
 - Coordinator to support students undertaking research projects
-



Response to program

✓ Enquiries to admissions

90 enquiries and 27 students admitted in 2005

✓ Facilitator comments

"I really enjoyed being a part of this new method of teaching. The opportunity to interact with students and to "listen in" on their discussions greatly improves the teaching process and provides a means of addressing contemporary issues such as live sheep export." **Kevin Doyle**

✓ Unit evaluations

Average USE result 4.1/5 for overall satisfaction for 15 units delivered in 2004

✓ Career progression / *College membership*



Student comments

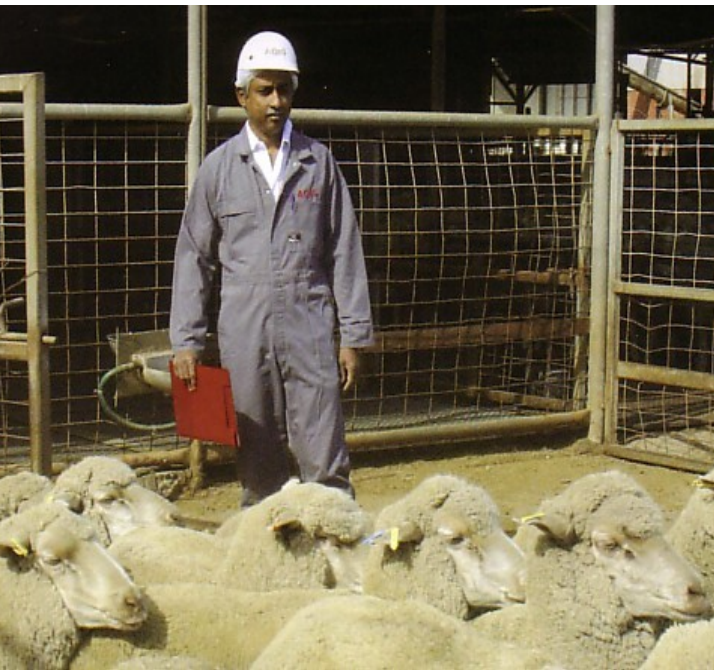
Undertaking the Leadership training has opened my eyes to the wonderful possibilities that we are all capable of, and instead of being frustrated by the past I am excited by the future.

Catherine Taragel, VPHMgt Student





Student comments



The course is an eye-opener. It has broadened my scope of understanding and appreciation of finer details as well as the 'big picture' issues related to domestic and international meat trade.

Anand Deo

VPHMgt Student



academic



Real VPHM vets



academic





Acknowledgements

Vincent Fairfax Family Foundation

Meat & Livestock Australia

Agriculture, Fisheries & Forestry
Australia

McGarvie Smith Institute

Australian Biosecurity CRC

