Title of Project and Project Number:

Curriculum Development and Assessment of Methods to Enhance Communication and Life Skills in Veterinary Students (ECALS) (PP7-340)

Grants Scheme

Progress Report - 31st January 2009
(6 monthly. Not for publication and no funding attached.)
(Limit four pages including coversheet)

Lead Institution: Murdoch University

Partner Institution/s: University of Queensland
University of Sydney

Project Leader/s and contact details:

Murdoch University:
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Curriculum development and assessment to enhance communication skills for veterinary students is a project designed to develop student competencies in professional communication. Well-developed communication skills and understanding of the Human-Animal bond is essential to becoming a professional Veterinarian. However to-date, social/emotional intelligence and collaborative team skills have not featured strongly in Veterinary curriculum or assessment. The assessment methods and curriculum to address this are being developed at Murdoch University, Sydney University and University of Queensland with collaborative discussions and sharing of experiences and expertise.

1. Project outcomes and deliverables

**Murdoch University**
1. Improved student communication skills using simulation clients and case scenarios of varying degrees of difficulty, scaffolded into the curriculum with particular learning objectives
2. Student-directed learning through the use of detailed rubrics for as global ratings scales for formative, peer and self-assessment of skills.
3. Facilitate development of student skills through the creation of instructional material and learning tasks, such as critical incident analysis, expressions of empathy, condolence.
4. Develop an electronic portfolio facility for students to store reports, record evidence of professional skills and develop a reflective learning journal. The portfolios can be used for review and showcase purposes.

**Sydney University**
1. Development of an educational tool that enhances communication and leadership skills through integration of emotional intelligence theory into the professional practice curriculum
2. Development of online resources to provide veterinary students with an improved understanding of the structure and purpose of veterinary consultations in the preclinical years of the curriculum
3. Promotion of continuing professional development of communication skills by facilitating reflection upon clinical experiences during final year rotations.

**University of Queensland**
1. Investigating whether the strength of client-animal bonding influences client expectations of communication within a veterinary consultation.
2. Developing on-line modules and experiential learning tasks to enhance veterinary students’ knowledge, skills and aptitude in evaluating the human-animal bond, and how to use such knowledge clinically.
3. Evaluating the effects of teaching an elective human-animal bond and communication skills program/workshop to final year veterinary students.

2. Review of Progress against Outcomes and Deliverables

2.1 Major achievements against schedule/ project brief

**Murdoch University**
1. Papers presented at Conferences ICCVM (Canada, Nov 14th ‘Introducing Client Simulation Consultations into Clinical Rotations’ ) and Teaching and Learning Forum (Perth, Jan 29th ‘Using an E-Portfolio to Prepare Veterinary Graduates for Global Employability’)
2. Client simulations for 5th yr students in two Rotations were completed. Analysis of student response showed a significant overall increase in confidence levels (p=0.01) derived from medical visits but not from wellness visits, despite individual variation. Opportunity to practice ‘breaking bad news’ was the most favoured task selected. Female students expressed a significantly higher level of confidence (p<0.01) in expressing empathy compared to males.
3. Consultations introduced into 3rd yr class in October with client simulation proved highly successful, with average satisfaction score of 9/10 for second workshop.
4. Overall student satisfaction survey of 5th year curriculum showed some improvement compared to 2008 survey but still some Rotations need revision. Some students listed client simulations as strengths of the program.

5. A list of non-technical veterinary competencies has been constructed and agreed by our collaborators. This will form the basis for assessment.

6. A list of rubrics for six of the major non-technical competencies has been adapted for use in assessment.

7. Only one veterinary student completed an electronic portfolio for showcase purposes; this provided unexpected learning benefits to the student. Other faculties participated in the e-portfolio trial.

8. More staff are involved in the communication and life skills program, and the Dean is now funding substantially the Train the Trainer and undergraduate life skills course and using outside consultants.

9. Organisation of our Vet Education Symposium on Communication and Life Skills (July 2009) has started and the key-note speaker booked.

University of Sydney

1. Integration of emotional intelligence theory into the professional practice curriculum has been more significant than originally planned due to the development of a new orientation and first year program. Some of these achievements have been linked specifically to this project whilst others have been stimulated by additional curriculum changes. The attitudes to animals questionnaire linked to this project provided the opportunity for current first year students to become increasingly self aware and develop a greater awareness of attitudes towards animals within cohorts of veterinary students at three Australian universities. A lecture and discussion session for first year students enabled further exploration of these findings and integration with other aspects of emotional intelligence theory presented during first year. The online questionnaire will provide the opportunity for longitudinal research which may benefit veterinary curricula.

2. The online resources model for development of consultation and communication skills early in the curriculum (first year students) received excellent feedback despite significant technical difficulties. The project has resulted in a re-vamping of an existing online tool to facilitate broader application and adaptation to specific tasks such as consultation structuring and communication skill development. The online scenarios have been further refined and will prove to be a valuable resource for future years.

3. Reflective exercises have facilitated the development of a process for improved implementation of the action learning cycle in the education of final year interns. Tutorials developed and refined through this program will enable future students to gain more from extramural rotations in final year through sharing of experiences and professional skills development.

University of Queensland

1. Survey instruments developed and validated

2. Client expectation survey completed, including analyses, and being prepared for publication

3. On-line human-animal bond module undergoing further evaluation, including its effectiveness as part of the undergraduate teaching program

4. Introduction of simulated consultations in the first class clinical teaching facilities of the Royal Brisbane Hospital Training Facility for all final year vet students

5. Major intervention with final year vet students was implemented on time, and results currently being analysed.

6. 12 simulated case scenarios developed for use with senior veterinary students (introduced 2008)

7. Considerable collaboration and dissemination activities within Australia and internationally;
   a. Three staff members from UQ attended ICCVM and presented posters at this conference.
   b. One member of the UQ project team (Michael Meehan) spent a week with Dr Jane Shaw at the Argus Institute, Colorado State University.
   c. Glen Coleman visiting the Higher Education Council for England’s Centre for Excellence in Teaching and Learning at the Royal Veterinary College (the centre’s theme is Lifelong Independent Veterinary Education) in March to discuss opportunities for further collaboration. A senior lecturer form the centre, Dr Kim Wittlestone, will be presenting at the Australasian Veterinary Education Symposium in July, 2009.
2.2 Lessons learnt

Murdoch University
1. The wellness visit simulations are more appropriate in 3rd year, and will be moved from 5th yr to follow the Introduction to Consultation workshop in 2009.
2. Consistently, 75% of students indicated improvement in confidence after client simulations, 20% expressed no change and 4 to 5% expressed a decrease in confidence. Reasons for the decreases were explored and teaching techniques modified accordingly; need to constantly focus on providing supportive feedback.
3. Assessment of client simulations and non-technical skills can be more rigorously evaluated using the rubrics developed.
4. Continue and develop Medical Visit simulations in 5th yr; introduce ‘Obtain Informed Consent’ in 4th yr.
5. Develop scenario for ‘Disclosure’ of adverse medical event for 5th yr. Include ‘Disclosure’ option in list of consultation task options.
6. E-portfolios need to be compulsory, otherwise students are unlikely to use it. The CE-6 Blackboard portfolio module is unwieldy and created many problems. Exploration of other products (PebblePAD and Desire2Learn) showed that the latter is most appropriate to our needs.
7. Guidelines for E-portfolio tasks have been developed for junior vet classes following the experience gained in 2008.
8. Conference organisation requires significant commitment of time; needs to be coordinated by a dedicated team!

University of Sydney
1. The online survey of attitudes to animals from UK research in Australia revealed some of the difficulties with online questionnaire administration such as design and response rate challenges. The offer of a prize for participation proved to be less effective in stimulating a response than personal appeals to students. Subsequent statistical analyses revealed options for further refinement of results in the future.
2. The practical application of clinical case materials in a way that focused upon consultation structure and communication rather than standard diagnostic approaches proved to be an effective and well-received method for assisting development of consultation skills prior to practical experience and the acquisition of clinical skills. Concepts linked to emotional intelligence theory assisted students in the development of these skills.
3. Reflective tutorials benefited from having a fairly open structure that enabled key learning points to be explored. Issues linked to financial concerns, dealing with client stress and handling staff conflict were consistently rated highly by final year interns. Integrating more material throughout the earlier years of the curriculum to deal with these common issues may prove valuable for future interns.

University of Queensland
1. Training of simulated clients is essential. This involves time and rehearsal of scenarios to check for standardised responses to questions etc.
2. Facilitators need to be experienced and trained (train the trainer). This was addressed to some degree in the final intervention, however there is room for improvement. Dr Jane Shaw also reiterated this point as essential when Mr Meehand visited her facility.
3. Personalised feedback to individual students via email was greatly appreciated by them.
4. Students felt less nervous when they knew the simulated clients were not veterinarians. This may result in a more relaxed approach to their consultations.
5. RIAS analysis very expensive!

2.3 Challenges met
In general, there has been excellent collaboration and communication between members of the project in the different institutions, aided by face to face meetings for most participants (and telephone hook-up for others) at a national Veterinary Association conference, and participation by several members in the ICCVM.
Murdoch University
1. Choice of e-portfolios is dictated by the University’s Learning Technologies group, however the University will fund a trial PebblePAD in 2009. (Our preference is Desire2Learn).
2. Time availability for the project has been a challenge given the shortage of staff and increased work commitments in 2008.
3. The Dean has cut my coordination of all Units in Veterinary Professional Life, where some of this work is applied, however I am still on the curriculum team for these units.
4. Coordination of the Education Symposium has met with frustrating delays due to workloads of collaborators and the Summer holiday period. However we now have a great logo and we are still working on a website for the Symposium and the call for papers; additional key speakers are yet to be confirmed.

University of Sydney
1. The most significant challenge for this project was dealing with the unexpected withdrawal of one member of the research team due to maternity leave and the inability to fully address this shortfall through temporary staffing or the uptake of additional project work by other members of the team. This challenge was not fully met by the team and hence the project timeline will need to be extended to achieve all desired outcomes.

University of Queensland
1. Gathering feedback from veterinarians about the on-line human-animal bond module has been problematic – busy practitioners and nurses need encouragement to commit the extra time to provide useful feedback. This is being addressed by broadening our evaluation strategy, and also including feedback from UQ veterinary students (it will be used as part of the undergraduate teaching program in 2009).
2. From last report → “The “Learning for Life” skills theme is an area of focus for the School, and several projects, not all of which are related directly to the ATLC project and there is the potential here for confusion between different staff in the School. However staff involved have viewed this not so much as a challenge as an opportunity. Drs Trish Clarke and Dan Schull have been contributing to both the ATLC project as well as developing other, related projects of their own.”

2.4 Indicate if and how these challenges will impact on the outcomes, the timeline or the budget? Please specify.

Murdoch University
Funds for the e-portfolio will now be directed to the Education Symposium.

University of Sydney
1. The final outcomes of each of these sub-projects will not be affected and there will be no impact upon the budget although as a result the timeline for completion will be delayed. Specifically, whilst major project outcomes have been achieved, the following outcomes linked to dissemination will be delayed until mid-2009:
   • Journal article on student attitudes toward animal welfare (follow up to Paul and Podberscek 2000)
   • Journal article on teaching consultation skills using online tools
   • Journal article linking findings to student internship program outcomes
   • University ITL or Faculty L&T seminar on learning through reflection with respect to professional placements

However, there have been some unexpected outcomes such as:
   • Assistance with development of the whole Professional Practice curriculum
   • Opportunities for longitudinal research involving students at three veterinary faculties in Australia and with this a greater understanding of attitudes towards animals in veterinary students and graduates
   • Further development and refinement of the veterinary student internship program
   • Poster presentation at the National GAP Symposium held at the University of Sydney, October 2008
• Development of contacts with other ALTC project teams and opportunities for further collaboration through the up-coming ECALS Australasian Veterinary Education Symposium
• Strengthening of bonds between academic staff among the three participating universities with potential for further research collaborations and development of veterinary curricula more broadly

**University of Queensland**

As flagged in our last report, the on-line learning module is likely to be a less significant component of our contribution than we had originally envisaged. We are still developing strategies to improve feedback from the on-line module. It will also be used in undergraduate teaching, and we will receive feedback from this cohort but this feedback will be of a different nature to that flagged in our original proposal.

**2.5** In terms of the planned deliverables, what is your estimation of how far the project has progressed? Please indicate percentage below:

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65% to 75%

**3. Formative Evaluation**

**What Formative Evaluation Processes are being used?**

Independent Evaluator, Professor Trevor Heath, has provided a formative evaluation of the project, and will continue to do so. Members of the project team have met with Professor Heath, and he had provided written feedback to the group. He has also been invited to attend the Australasian Veterinary Education Symposium which will provide further opportunities for project team members to interact with him.

Student feedback has been collected and analysed from the various initiatives arising from the project. These data will be used to modify approaches in the future, as starting points for discussion with colleagues and future publications.

Members of the team from the three different institutions are in regular contact with each other (email and telephone) as well as interested academics from other institutions (e.g. Massey, Colorado veterinary teaching institutions). Team members also met at the Australian Veterinary Association annual convention in May 2008, providing ample opportunity for sharing of ideas, experience and informal feedback between institutions.

**What have you learnt from these processes thus far?**

Students greatly value stories from the field for teaching these generic skills and working in groups to explore communication themes; appreciating and utilising the variety of skills and experiences contributed by their colleagues.

There is enormous enthusiasm among relevant teaching staff in the different institutions to work together and develop this area of veterinary education.

We believe we are on track with the project and need to work more actively on developing the Workbook for inclusion on the ALTC website.

Please send report via email: projects@altc.edu.au