Title of Project and Project Number:
Curriculum Development and Assessment of Methods to Enhance Communication and Life Skills in Veterinary Students (ECALS)

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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University of Queensland
Glen Coleman BVSc, GradDipBiotech, PhD
Michael Meehan, BVSc, B Psych (Hons)

University of Sydney
John Baguley BVSc(Hons) MACVSc MBA
1. Progress against specified outcomes and deliverables for Year 1 / Stage 1

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.

Intended Project Outcomes

- Educational tools to develop clinical consultation and communication skills using electronic and live simulation client scenarios
- Strategies to assess and apply Human (Client)-Animal bond in consultations, and to define client expectations and satisfaction
- Strategies to assess and enhance competency in communication, emotional intelligence and selected life skills; and methods of reporting this (including electronic portfolio)

<table>
<thead>
<tr>
<th>Murdoch University - Progress on outcomes and deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Improved student communication skills using simulation clients and case scenarios of varying degrees of difficulty, scaffolded into the curriculum with particular learning objectives</td>
</tr>
</tbody>
</table>

This current project has extended the range of client consultation simulations trialed for senior students based on the Calgary-Cambridge Guides, explored different assessment methods including self assessment, reflection and peer and client feedback. This project also offers students the use of e-portfolios to record and reflect on their skills and to create showcase portfolios. There is potential to extend the use of e-portfolios to collect evidence of students’ competencies during their rotations and in externship visits and to link with the Veterinary Professional Life program to record progress and facilitate career development.

A survey of final year Murdoch students views on Communication, Self confidence, Self management – self awareness, Management of others, Business acumen and Personal bias – assumptions in August 2007, found 50% confidence scores for consultation, 75% wanted more experience in consultation. Students perceived the need to be able to manage themselves and their communications with others and wanted more opportunities to practice communications with clients. Client simulations should meet this need and should involve medical and wellness visits.

Through consultation with Veterinarians and other disciplines (Medicine, Psychology, Chiropractic & Nursing) relevant experiential knowledge and strategies has informed the development of scenarios and reflective peer and self-assessment methods and materials. Dr Fiona Lake (UWA: Medical School) was consulted. Models were viewed at Royal Brisbane Hospital and Murdoch’s Chiropractic Clinic. Several real-life scenarios were written in conjunction with Eric Allen, the veterinarian-in-residence. A simulation exercise was held in a Clinical Pathology Rotation in 2007 with 11 students, and this has been extended to be available to all senior students in 2008.

A series of simulation case scenarios of veterinarian-client interactions has been delivered for use in two senior clinical rotations; clinical pathology and private practice; these involve medical and wellness visits:

Medical visits – student selects two cases from 40 clinical cases with supporting diagnostic data discussed in Rotation, for consultation with two clients. Task: to communicate effectively with clients and involve them fully in planning and management
Wellness/health visits – students prepare to discuss basic procedures (heartworm, flea control, vaccination). Task: *to develop rapport with a client while conducting a clinical examination*

Additional scenarios have been recently added in this Private Practice Rotation to include simple medical problems such as aural haematoma, urinary calculi and gastric foreign body. Emeritus Professor Bill Clark is involved with the development of these sessions.

2. Student-directed learning through the use of detailed rubrics as global ratings scales for formative, peer and self-assessment of skills.

A set of assessment rubrics for enhancing veterinary consultation skills based on the Calgary-Cambridge guides have been delivered:

Using models from Kurtz *et al* (2005) and Latham and Morris (2007) as a basis for identifying competencies in aspects of the consultation process, formal assessment rubrics have been developed and modified.

**Self and Peer Assessment sheets** have been developed, modified and successfully used. They incorporate reflections on changing levels of confidence.

**De-briefing sessions** have been useful in providing students with supportive feedback. A coaching style is evolving, based on work by Dr Cindy Adams.

3. Facilitate development of student skills through the creation of instructional material and learning tasks, such as critical incident analysis, expressions of empathy, condolence.

Instructional materials have been produced to develop specified life skills.

**Video of a client consultation** demonstrating appropriate and inappropriate communications by a Veterinarian during a dog behaviour problem to be used for instructional purposes.

A **podcast** recording was made of a conversation with Dr Eric Allan on factors contributing to Success in Veterinary Practice, for use with 2nd year students.

A **demonstration performance** was given of one of these simulations using features of the Calgary-Cambridge guides such as *Time Out* was performed by an actor working with Eric Allen to students in a lecture theatre.

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.

Progress has been made on delivering a model of an electronic portfolio as a method of recording and reporting student skills, progress and reflections:

The electronic portfolio has been purchased (CE6 e-portfolio ) and students tasks developed. Staff have also trialled PebblePAD portfolio and assessed other products (Desire2Learn). A Showcase competition has been arranged for senior students. A range of Veterinary employers were consulted to ascertain the concerns and requirements of employers and this feedback has been made available to students and will inform the selection criteria for the judging of showcase portfolios.

A talk by Alex Semmens, from the Careers Centre has promoted the usefulness of e-portfolios in developing your career portfolio. Dr Rob Phillips, a member of the Learning Technologies Steering Group, has joined the reference group. The Teaching and Learning Centre have provided advice on the use of Portfolio tools so that students can record a clinical log. Support from the Office of the Vet Dean is currently progressing the potential use of the e-portfolio.
The first assignment using the e-portfolio was introduced during a 5th year class in February 2008. Students may record evidence of competence from several assignments and from Rotations or extramural experience. This personal and professional record of Communication and Life Skills development however has not been fully embraced by students as it is not formally part of their assessment.

5. Improved facilitation of student’s formative experiences in consultation training by veterinary colleagues in the development of a module to ‘Train the Trainer’, including ‘Offering and Receiving Feedback’.

Veterinarians were consulted at a meeting in November 2007. Only a few AVA mentors were willing to undergo a formal ‘Train the Trainer’ process. However one or two veterinarians expressed interest by suggesting new initiatives in their role for training students in the consultation process.

Due to the general lack of enthusiasm by the AVA mentors, the preparation of a ‘Train the Trainer’ instructional workshop has been reviewed. However, recently the need to train our own clinical staff has arisen and is supported by the Dean, and this task will be progressed this semester.

<table>
<thead>
<tr>
<th>Sydney University - Progress on outcomes and deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Development of an educational tool that enhances communication and leadership skills through integration of emotional intelligence theory (Goleman 1998) into the professional practice curriculum</td>
</tr>
<tr>
<td>The plan to deliver a prototype module for integrating self awareness, self management, social awareness and relational competency attributes in the veterinary curriculum is proceeding as scheduled.</td>
</tr>
</tbody>
</table>

Reflections on difficult communication scenarios in veterinary practice
- Data collection phase of this component of the project is nearing completion (final group of students commence next month) and data analysis will proceed in November

| 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 |
| The delivery of three online simulation veterinarian-client interactions with accompanying teaching resources for students to gain formative assessment has commenced. |

Introduction to communication skills in the veterinary consultation
- Online case studies have been defined and are being prepared for online format and release to students (Y1) in September

| 3. Promotion of continuing professional development of communication skills by facilitating reflection upon clinical experiences during final year rotations. |
| The delivery of a prototype small group learning tutorial module for facilitating critical reflective skills and better integrating communication theory with clinical experience, supervisor feedback and self-assessment in the final year of the curriculum is under development. |

Exploration of attitudes towards animals
- Data collection and analysis phases of this research are now complete
- The results are currently being prepared for a lecture/discussion with first year students designed to explore the range of attitudes towards animals within the profession and some of
the antecedents to these attitudes and leading to a more general discussion on veterinarians and the human animal bond

### University of Queensland - Progress on outcomes and deliverables

An enhanced, clinically applicable understanding of the human-animal bond in veterinary students. This will be achieved by:

1. Investigating whether the strength of client-animal bonding influences client expectations of communication within a veterinary consultation.

   Reliable and validated survey tools for monitoring client satisfaction and veterinarian satisfaction have been delivered.

   **Client expectation & satisfaction – based on CCF**

   This has been developed and administered. We received 205 responses from 360 sent surveys, a response rate of 57%.

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.

   Novel teaching strategies for understanding the human-animal bond (HAB) (including on-line and experiential learning activities) are well under way.

   **HAB Questionnaire**

   The Client expectation & satisfaction survey above includes HAB measure nested within it. Undergoing analysis and preparation for publication is underway – aiming to submit for publication in next three months

   **Human-Animal Bond questionnaire validation**

   Has been refined further and validated to be reliable. Michael Meehan & Nancy Pachana are planning to publish this in a peer-reviewed journal.

   **On-line modules Human-Animal Bond**

   This is developed and is available on-line at Bayer Accelerate website. Collection of feedback on the module is continuing; most recent feedback was that 67% of veterinarians & nurses who had completed the course rated it as 4 or 5 out of 5 (5 is completed and worthwhile, 4 is would do this in future).

   Planning to gather more detailed feedback and use this module in undergraduate teaching.

   **Human Animal Bond and communication skills workshop for final year BVSc students**

   Training at the Royal Brisbane Hospital facility for half a day a week for three weeks in an elective has been negotiated and will occur in October.

   Four case scenarios have been written and have been piloted with 5thyear professional communication tutorials (these are delivered to ALL final year students).

   Methodology for intervention is nearly complete.
Michael Meehan has received RIAS training (this is a communication analysis tool that will be used to help assess the effectiveness of the intervention).

| 3. Evaluating the effects of teaching an elective human-animal bond and communication skills program/workshop to final year veterinary students. |

Reflections on clinical learning experiences are ongoing. In order to improve outcomes of clinical placements, and to encourage reflection, Trish Clarke has administered a modified questionnaire based on the Clinical Learning Environment Inventory to veterinary technology students. Responses are undergoing analysis. Plan to extend this to veterinary students in 2009.

2. Review of progress

2.1 Major achievements against schedule / project brief for Year 1 / Stage 1

Collaboration

This has been a collaborative project where the teams from Murdoch, Sydney and Queensland have remained in regular communication via email. The project group has had two major and highly successful meetings.

- 19th October 2007 at University of Queensland involving a visit to the Skills Development Centre at the Royal Brisbane & Women’s Hospital and the generation of plans.
- 28th May 2008 at Murdoch University to coincide with the AVA Conference in Perth. This involved a teleconference with associates who were unable to attend. This meeting addressed plans for the workbook and for a one or two day conference linked to Science Week to be held in Queensland.

The project leader at Murdoch is advanced in delivering communication scenarios with 5th year students and testing and adapting methods for reflective self and peer assessment and feedback. These experiences have been shared informally and formally at meetings.

The team at Sydney University has made good progress exploring the attitudes towards animals and in introducing communication skills into veterinary consultations and presented their findings at the conference in May 2008. Their reflections on difficult communication scenarios have benefited the project team members at Murdoch and UQ.

University of Queensland has completed the majority of work associated with Client Expectation Survey, incorporating Human Animal Bond measure. Their On-line Human Animal Bond module is completed and available and feedback is being collected. The major component of UQ’s contribution to the project is the intervention with final year BVSc students and this has made good progress in securing access to state of the art facilities at the Royal Brisbane Hospital in Brisbane. Their experiences in running pilot activities similar to those that will be used in this facility and in preparing their students for intervention proceeds, has provided learning for other teams.

Scenarios to be used in this UQ intervention and those at Murdoch are mostly completed and have been made available to the broader project team.

Several collaborators attended the Carrick Assessment workshop 28th & 29th Nov 2007 (Brisbane).
2.2 Lessons learnt

Murdoch
A series of client simulation scenarios were developed in response to student feedback and have been conducted within two Rotation units along with the trial of scaffolded reflection sheets whereby students rate their confidence before and after their performance and reflect on specific areas of their communications after peer feedback. This has worked well in that it has provided scaffolding to students and has encouraged deeper reflective learning. Some helpful modifications to the sheets have been made following independent evaluation. Matching case scripts to the degree of challenge desired by the students is also recognised as important. Better application of the coaching process is needed and is evolving currently.

Using well-informed but non-veterinary clients is helpful as they can honestly reflect if the information delivered is making sense. They can also respond directly as they ‘feel’ in the moment; eg. They may ask for a referral for a second opinion.

The debriefing component of the simulation exercise has proved important particularly as this may be a confronting experience for some students. Feedback has to be carefully delivered in a supportive and coaching way (eg, asking students for alternative phrases, etc.) Most students found that the “client’s” feedback is most valuable. Class discussion are also enhanced by the presence of a practicing veterinarian who can apply the principles to their experiences in practice adding the authenticity of stories from the field, but this should not distract from student’s personal experience in the simulations.

Sydney
Contingency planning for staff – the leader of stage 3 will be on maternity leave this semester and the person assisting her will also have left the university. It is possible as a result that 2-3 small group tutorials will not be implemented.

Incorporation of material into online case studies proved more difficult than expected due to both technical problems and limitations of this format compared to personal interactions.

UQ
We were very pleasantly surprised by the enthusiasm from the students for well constructed experiential learning tasks in a well equipped facility.

We have had numerous instances of feedback from students telling us that they have been prompted by these learning activities to re-evaluate and analyse communication strategies in their clinical consultations during other final year rotations.

We had not previously appreciated fully the significance of having well trained and experienced facilitators in the experiential learning tasks where students work through simulated clinical scenarios. Learning outcomes are heavily reliant on the quality of the facilitation – this is an important issue we will be addressing in the final intervention.

Use of simulated clients with veterinary knowledge was useful from students’ perspective – they believed it made the learning experience more authentic because they were given clinically appropriate information.
2.3 Challenges met

Murdoch
The real challenge for the sustainability of the curriculum and assessment methods developed in this project will be to facilitate the uptake by colleagues. Without the staff commitment to implementing e-portfolios and embedding the methods and materials within their units and driving student uptake through assessment much of the momentum could fade. To address this several key activities have been implemented. The Project Manager and Project Leader are serving on a committee assessing e-portfolio systems for the university and will ensure that the recommended system fits the needs of the Veterinary School. There have been discussions with Martin Cake who heads Veterinary Professional Life (VPL) at Murdoch about linking the use of e-portfolios to VPL and requirements for AVMA accreditation highlighted by the use of e-portfolios in the USA. Dr Cake was invited and attended this project’s second major meeting in May 2008 coinciding with the AVA Conference in Perth. The project leader attended a meeting, organised by Dr Cake, where representatives from across Australia discussed a collaborative national approach to veterinary leadership and professional attribute development. The Vet Dean has recent funding to foster good teaching practice amongst clinical staff and the Project Leader is involved in developing this project. These developments will assist to build the conditions to promote staff engagement.

The creation of a workbook has been identified as a way to facilitate the broader implementation of the projects findings and materials. To facilitate the collaborative development of this workbook an online space within the ALTC Exchange has been created. Teaching time commitments have limited progress with this shared facility.

Plans for our VetEd conference are underway, to be held at UQ in July 2009, and we are seeking support from the Council of Vet Deans and the Australian Veterinary Boards Council.

Sydney
Staff changes should have minimal impact upon stage 2 of this project overall and online case scenarios will assist students in preparing for video consultation sessions (not part of this project but a previous plan that unexpectedly will now be realised this semester). Discussion surrounding stage 3 and the video consultations has helped focus the learning outcomes for stage 2.

UQ
Gathering feedback from the on-line module has been problematic – busy practitioners and nurses need encouragement to commit the extra time to provide useful feedback. This suggests that engagement by professional people with these type of learning activities is probably not as high as we had anticipated.

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. This is not so much 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 and the budget? Please specify.

Murdoch
Although the lack of enthusiasm of veterinary practitioners means re-evaluating plans to Train the Trainer, it has not impacted the timeline and student sessions have been able to continue. The focus of Train the Trainer will now be on clinical staff rather than veterinary practitioners. The workbook will assist in disseminating this project’s findings and methods to Veterinary colleagues.

Sydney
This project is progressing well, to schedule and within budget and data collection and analysis for all three stages will be completed by the end of this semester. A draft paper for dissemination of results from stage 1 should also be available in December.

UQ
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.

3. Formative Evaluation
Please attach copies of evaluations of events / activities undertaken
Emeritus Professor, Trevor Heath OAM, BVSc, MA(Ed), MHPEd, PhD, FACVSc, FAIBiol has been engaged as an independent evaluator and his formative report is an appendix.

3.1 What Formative Evaluation Processes are being used?
Murdoch
Student evaluation forms are being used to assess the degree of response to the simulation activities; in particular self assessment of level of confidence. A recent student sums it up…

‘My confidence has increased (from 3 to 3.5) because I can now imagine what it feels like to talk to the clients as the vet and the responsibility it holds. The reason for the half is that my confidence is equally challenged by how prepared we need to be to be a knowledgeable and effective vet!’

Feedback on student performance from staff, “clients” and vets is also used informally and could be developed for formal assessment purposes.

Sydney
Supervisor feedback and self-assessment in a small group learning tutorial module in the final year of the curriculum is currently under development.
The results of the animal attitudes survey will be disseminated to next year’s students.

UQ
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.
3.2 What have you learnt from these processes thus far?
The evaluation undertaken and the formative report by the independent evaluator support our belief that this project is addressing an important issue in Veterinary education and that the project will be able to make a significant contribution to the sector through the planned Veterinary Education conference.

Being involved in client simulation exercises can be confrontational for some veterinary students. Students may feel very vulnerable having their communication skills and medical knowledge open to view and criticism by others. Some may chose not to attend or may exaggerate their fear and panic. It is most important to debrief these students immediately if this happens, but better to be proactive and make the simulation a safe learning experience where they CAN feel challenged if they want. I carefully explain their safety ‘escape’ mechanisms before the event and also get them used to peer evaluation in the Rotation. We recognise the need to develop a form of assessment of the learning environment and to proceed to develop a facilitation training program.

4. Year 2 / Stage 2
How have your plans for the next stage of the project changed from that proposed initially?

• Develop an Integrated Workbook for ALTC Exchange on teaching modalities and assessment of communication and life skills, including factors enhancing palatability to vet students. Plans for our VetEd conference are underway; this will be held at UQ in July 2009 around the time of Vet Science week, and we are seeking support from the Council of Vet Deans and the Australian Veterinary Boards Council.
• The type of e-portfolio to use is as yet undecided; the LMS module is still being assessed. The learning technologies group is assessing different products with different user groups. We hope to reach a conclusion in a few months, if not sooner.
• We have successfully negotiated with the University to fund just half of the trial cost of the LMS e-portfolio from our grant as other users are involved, leaving $5000 for trial of any other products.

5. Dissemination
What dissemination activities have you undertaken?

• AVA conference (May 2008, Perth) – papers presented in the education stream, all collaborators were involved
• Dr Jane Shaw at Argus Institute (USA) will be visited by Michael Meehan and possibly other collaborators in Nov 2008
• Presentations from UQ and Murdoch have been accepted at ICCVM conference in Canada in November 2008.
• Our VetEd conference plans are underway for July 2009.
• Papers are currently being prepared for publication by UQ collaborators

6. Impact
Is there any evidence of the impact from your project? If yes, where and how?
More staff are expressing interest in teaching communication skills and several have joined our team at Murdoch University (eg. Dr Melinda Bell, Dr Martin Cake, Dr Teresa Collins). The Dean has acquired additional funds to progress the development of learning and teaching activities closely allied with our project for accreditation purposes and is encouraging staff attendance the ICCVM conference, the Bayer Animal Health Communications Training program in USA and PhD research in communications area.

Students express a level of new learning and benefit from the simulation exercises. Some have recommended that the feedback form can be used in other rotations involving real client exposure.

Similarly at UQ the student response has been extremely positive.

Audience at the papers presented at the AVA conference expressed interested in the content.

The work from UQ in Human-Animal bond has informed development of teaching perspectives at Murdoch. And involvement in the Sydney survey has raised awareness of students and staff of these welfare issues.
7. Financial statement of acquittal of funds

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Please Note:
Dr Eric Allan, was originally to be paid as a visiting consultant however, his salary was cover by the Veterinary Trust Fund. These funds will be redirected to Key Note speakers for the Vet Edu Conference. This will achieve the outcomes of this project enabling dissemination to Veterinary Educators across Australia.

The Project Leader was able to negotiate that half the cost of the e-portfolio system be covered by Murdoch University allowing the project to redirect the remainder toward the trial of a second e-portfolio system which is currently being selected via a 'fit for purpose' review of various systems. As the teaching year started 6 mths after the project start date we have not fully spent the funds committed for simulation clients. This is an on-going major cost area in the project and may require funds to be drawn from the Academic staff category.

Also note that there has been one change to the earlier budget submitted. The expenditure under Academic staff has been transferred to Simulation Clients (This occurred due to internal finances...
taking this amount from the incorrect budget category as these people were paid according to Academic rates).

8. Revised budget for Year 2 / Stage 2

<table>
<thead>
<tr>
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<th>Year 2 / Stage 2</th>
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**Total requested for Stage 2 $97,647.00**

Please note:
Committed funds have arisen due to invoices and expense claims awaiting processing.
Some funds have been brought forward to cover the areas of expenditure, which commenced later than the start of the project eg: simulation clients. Areas where expenditure was covered unexpectedly by University funds will be redirected to the Veterinary Education Conference and workbook design which will enable the dissemination Goals to be met for this project.

9. Appendices (if applicable)
Formative evaluation report for project funded by the Australian Learning and Teaching Council (formerly Carrick Institute)
Trevor Heath, Independent Evaluator

Project title
Title in application:
Curriculum development and assessment to enhance communication skills for veterinary students

Changed in Evaluation Brief and Project Plan to:
Curriculum Development and Assessment of Methods to Enhance Communication and Life Skills in Veterinary Students (ECALS)

Chief Investigator
Murdoch University:
Jennifer N Mills, BVSc, Dip Clin Path, PG Dip Ed (Tertiary & Adult), MSc, PhD.

Collaborators
University of Queensland
Glen Coleman BVSc, GradDipBiotech, PhD
Michael Meehan, BVSc, B Psych (Hons)
with contributions from Dan Schull, Trish Clark and Nancy Pachana

University of Sydney
Imke Tammen, DVM, Dr Med Vet, M Ed.
John Baguley BVSc(Hons) MACVSc MBA
Christine Hawke BVSc (Hons) BVSc (Vet) (Hons) PhD MACVSc
Susan Matthew BVSc (Hons) BVSc (Vet) (Hons)

Project Manager
Linda Butcher, ALTC Projects Co-ordinator, Murdoch University

Independent Evaluator (IE)
Trevor Heath OAM, BVSc, MA(Ed), MHPEd, PhD, FACVSc, FAIBiol
Emeritus Professor, The University of Queensland

Aims of Project (from final Grant Application)
This project aims to develop student competencies in professional communication, through the development of innovative learning and teaching strategies throughout the curriculum and to enhance the understanding of the Human-Animal bond.
Communication skills are part of the generic skills of professional graduates and include aspects of personal and social/emotional intelligence and collaborative team skills. Assessment of both the curriculum and student competencies will be an essential part of the project, with a collaborative sharing of experiences and outcomes with staff at all Australasian veterinary schools. Whilst the initial focus would be on the undergraduate curriculum, there is clear scope for this work to be extended to postgraduate awards and/or concurrent awards in Leadership for Health Professionals.

**Formative evaluation report**

This report has been developed after considering comments from participants at the meeting held at Murdoch University 28 May 2008 and presentations at the AVA Conference (Perth 27/29 May 2008), together with discussions with participants (March-May 2008). These have been considered against statements of aims and objectives in the original application, as well as the Evaluation Brief and Project Plan provided by the Program Manager, and statements from each School. It contains some general statements, comments on the components from each School, and some conclusions.

**Significance**

This project is directed at improving a major deficiency in veterinary education, not only in Australia but world-wide. The deficiency results from a misunderstanding of the way veterinarians work. In most cases they depend heavily for diagnosis and treatment, control and management on their ability to communicate effectively with a person - the client. Despite this, virtually all veterinary education had been directed at providing knowledge and skills for working effectively with animals, and the skills for communicating with clients have often been ignored.

The Chief Investigator and her collaborators have been working towards overcoming this deficiency. At each of their Veterinary Schools, they have fostering the introduction into their curricula of modules designed to help students understand factors that affect people’s ability to communicate with one another, and to improve their own performance as communicators.

In the past these efforts have been limited by two main factors. The first is a reluctance by colleagues to accept the need to help students refine these skills, and to make teaching time available for this purpose. The second is a paucity of valid, effective tools to help students become more effective communicators.

**Contributors and components**

The leaders of this project have made significant inroads into each of these problems. At the Murdoch, Sydney and Queensland veterinary schools they have succeeded in having teaching time made available at appropriate times during the course, and have been developing teaching/learning programs appropriate to each stage of the students’ development. Although these programs have been moulded by the philosophies of each school, they have benefited from the strong sense of cooperation between the leaders of this project.

Funds provided by this project have enabled that sense of cooperation to develop into active collaboration, and this has happened in a most encouraging way.
The skills of the participants in education and psychology as well as aspects of communication have been harnessed in such a way that the project will yield:

- objective new and highly relevant information about important aspects of veterinarian-client interactions, and
- a range of tested techniques and approaches tested to help students understand and improve their interpersonal skills in professional settings.

Although the components undertaken at each of the three Schools have been dictated to a large extent by local skills, needs and opportunities, they link together to cover the overall topic in an impressive way. This has been helped by a strong spirit of willing cooperation, and given effect by free and open communication between participants. It has been facilitated mightily by the commitment and foresight of the Chief Investigator, who has played such a central role in gaining the grant and implementing the project. In this she has been aided by the Program Manager, who has oiled the wheels of university and ALTC (Carrick) bureaucracies and helped so willingly in so many ways.

The longer-term value of the project will depend to a large extent on the extent to which the relevant outcomes from these components can be promulgated and taken up more widely. This will be helped by high-quality presentations at local, national and international conferences and through papers published in appropriate journals. Another valuable vehicle will be the ‘Integrated Workbook on teaching modalities and assessment of communication and life skills’ mentioned in the ECALS Project Plan (LB 15.10.07), and elsewhere.

**Progress**

Observations of progress to date lead to a most optimistic projection, and the expectation that the project will yield significant material of considerable practical value to teachers and students in veterinary schools elsewhere in Australian and in other countries.

**Murdoch University**

The objectives of this segment, as provided by the Chief Investigator in May 2008, are:

1. Improved student communication skills using simulation clients and case scenarios of varying degrees of difficulty, scaffolded into the curriculum with particular learning objectives. (currently only 5th yr)
   a) medical visits - student selects two cases from 40 clinical cases discussed in Rotation, for consultation with two clients. Task: to communicate effectively with clients and involve them fully in planning and management
   b) wellness visits – students prepare to discuss basic procedures (heartworm, flea control, vaccination). Task: to develop rapport with a client while conducting a clinical examination on a dog
2. Student-directed learning through the use of detailed rubrics 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.
5. Improved facilitation of student’s formative experiences in consultation training by veterinary colleagues in the development of a module to ‘Train the Trainer’, including ‘Offering and Receiving Feedback’.
This represents a very heavy commitment by the Chief Investigator, especially with her responsibilities for the project overall (as so many other tasks at the workplace). Despite this, it has been undertaken with great enthusiasm and diligence and has progressed in an impressive way.

The development of materials to fulfil objective #3 has been especially noteworthy, though some are still undergoing refinements. Similarly, the work being done with ‘wellness’ and ‘medical’ visits (#1) and on educational value of the various aspects of these exercises, is most noteworthy.

With so many separate components, it is not surprising that one or two are not proceeding as hoped. Specifically, it may be seen as disappointing that #5 above may not be able to be completed fully because of a lack of enthusiasm by practitioners. Also the slow uptake of e-portfolios (#4 above) is also a bit disappointing especially as prizes are available. It is to be hoped that there will be more enthusiasm for it amongst the students as its value becomes more evident. As significant progress is being made on so many other facets, the slow movement on these two should not be seen as a major problem in relation to the project overall.

I will be happy to help in any way possible, especially with analysis of student feedback, critique of any materials including manuscripts, and to make myself available for discussion at any time.

The University of Sydney

As reported by the participants, this “component of this project utilises the framework of emotional intelligence to develop communication and life skills in veterinary students. There are three components to this project:

1. Exploration of attitudes towards animals. The purpose of this component of research is to enable students to develop a greater understanding of self awareness, self management, social awareness and relational competency within a suitable context for veterinary practice; attitudes towards animals.

Objectives

• Students to develop a greater awareness of their individual attitudes towards animals
• Students to develop a greater awareness of the range of attitudes towards animals within the veterinary profession and the public
• Students develop skills in managing their approach to conflict and ethical decision making
• Students develop skills to assist in developing relationships with clients and staff that promote the human animal bond
• Contribute to the literature regarding the potential influence of veterinary studies upon attitudes towards animals
• Contribute to the literature regarding the role of emotional intelligence in the development of communication skills in veterinary professionals

2. Introduction to communication skills in the veterinary consultation. The purpose of this component is to provide an opportunity to apply the Veterinary Calgary-Cambridge Consultation Model to a standard annual health visit and subsequently to difficult communication scenarios provided by final year students. These will be delivered using WebCT and the Faculty’s Case Builder framework to first year students.

Objectives
• Students develop awareness of the structure and function of the veterinary consultation
• Students develop skills in planning for and responding to difficult situations that may be presented in veterinary consultations through the framework of emotional intelligence
• Contribute to literature in the area of teaching veterinary consultation skills in using online tools

3. Reflections on difficult communication scenarios in veterinary practice
The purpose of this component is to enable students to be debriefed regarding experiences and approaches to handling difficult communication scenarios during final year and to facilitate sharing of experiences and peer group learning. Small group tutorial format is used, with emphasis on self reflection, social awareness, self management and communication skills within the context of ethically difficult clinical scenarios.

Objectives
• Students to develop self awareness of their readiness for difficult professional situations in final year
• Students to apply communication skills to achieving social awareness and shared decision making in difficult situations in clinical situations (including dilemmas concerning ethics and welfare, medical treatment and scarcity of resources)
• Students to apply principles of emotional intelligence (self awareness, social awareness, self management and relational competence) to dealing with conflict in other professional situations

This component seems to be moving at a commendable rate towards providing a greater understanding of the role and application of aspects of emotional intelligence in veterinary education. It is hoped that by making this understanding available to students through a range of educational exercises, they will be better able to understand their own actions in relation to animals and other people, and to communicate more effectively with their clients.

The first segment, designed to elicit information about students’ attitudes towards animals, is apparently moving along at a satisfactory pace: the on-line questionnaires have been completed and are now with the statistician. Discussion of the results with students will be a most interesting phase of the project, as it has the potential to give them a much better understanding of the divergence of attitudes towards animals, and of some factors that affect these attitudes. This should develop into a most interesting story which, when disseminated, will be valuable for educators in this and related fields.

The second segment, in which the Veterinary Calgary-Cambridge Consultation Model is used to help students develop their skills in the consultation process, is also most impressive. The approaches used have the potential to increase their understanding of their own thoughts and actions in relation to consultations, and their ability to deal with difficult situations involving clients and their animals. The value of these approaches will be even greater to the extent that students see this model being used by the veterinarians who act as role models for them, either at the Veterinary School or in private practices.

The third segment involves further development of personal and interpersonal skills related to clients and their animals. By discussing their experiences with peers in groups led by an experienced veterinarian, students are helped to understand their own actions and responses, and to realize that others are experiencing similar problems to them. This a most valuable approach, though it does depend on the extent to which an environment is created within which the students feel that they can be honest and open about what is happening in
their heads. It will be most interesting to read feedback from the students, and an analysis of the effectiveness of the segment.

The University of Queensland

The main aim for the University of Queensland’s component of the project was given as ‘to improve veterinary students understanding of the human-animal bond and provide them with the skills to use this knowledge in a veterinary clinical consultation.

This will be achieved by:

1. Investigating the expectations of highly bonded clients; in particular whether the strength of bond a client has with their animal influences client expectations of communication within a veterinary consultation.
2. Determining whether an on-line learning module and experiential learning activities enhances veterinary students’ knowledge, skills and aptitude in evaluating the human-animal bond.
3. Evaluating the effects of teaching an elective human-animal bond and communication skills workshop to final year veterinary students.

This has already yielded valuable data. In particular, the results of a questionnaire to clients of two clinics in Brisbane have provided confirmation of the importance of non-technical skills in determining the attitude of clients to a veterinarian. It is expected that this survey will provide much useful information on how the strength of bonding between owner and animal is related to the effectiveness of different approaches to communicating between veterinarian and owner.

In relation to #3 above it is evident that workshops at Royal Brisbane Hospital have been most effective in encouraging final year students to explore and enhance aspects of their own communication. The use of colleagues and, later, actors, as simulated clients, coupled with the realistic setting provided by the hospital facilities and the emphasis on maintaining a low-threat environment, have all been important in the success of this segment. Although it is clear that almost all students engaged in these exercises with enthusiasm and focus, it will be most interesting to see data on the effectiveness of the program in enhancing their communication skills.

As an aside: it is not yet clear how well the physical and interpersonal conditions of this project can be replicated elsewhere. One potential challenge is that of recruiting and retaining (a) simulated clients and (b) facilitators with suitable personalities and training. However, given the importance of the skills involved, it would be most valuable to have a complete description and analysis of this component available to other potential users. Although this may be in the form of publication(s) and conference presentation(s) it could be included in the Integrated Workbook described in the ECALS Project Plan (LB 15.10.07) and elsewhere.

It will also be most interesting to see data on the use and effectiveness of the web-based module for learning about the human animal-bond that is referred to in #2 above. This too has considerable potential in helping students and veterinarians gain a better understanding of the bond, and of its importance in communicating with clients.

Conclusions
The project overall, and each of its components, is seen to be progressing in a commendable way, and to be on schedule to yield an impressive array of data and insights.

This is due to the ability, enthusiasm and productivity of the Chief Investigator and all the participants, and the cooperative and collaborative spirit that exists between them.

Already the participants in this project have created much better conditions for students to enhance their personal and interpersonal skills than anything that has gone before.

The real challenge for the longer term will be to create conditions such that the momentum that they/you have generated will continue, and the principles developed though the project and elsewhere will form a continuous and positive thread throughout each veterinary course over the years ahead.

Two final comments

1. Projects of this type depend heavily on the interest, enthusiasm, sensitivity and understanding of those responsible. One example, a threat-free environment is essential if students are to reveal and discuss their thoughts and actions openly with their peers. This requires considerable understanding and sensitivity on the part of the supervisor.

A major value of the ECALS project is the involvement of a group of concerned and able people from each School, who are able to create a suitable learning environment with their School. The challenge will be to ensure that the momentum provided by the ECALS grant and its people is maintained. Two approaches that may help ensure that this challenge is met include the recruitment of key others at each school, and the creation of a Workbook encompassing the key findings and teaching/learning implications of the ECALS project.

2. The effectiveness of teaching/learning these personal and interpersonal skills will enhanced to the extent that their importance is re-emphasized at intervals throughout the rest of the course. Conversely, the effectiveness is likely to be diminished if other role models either denigrate the approaches taken, or reflect an alternative approach that may seem at variance with the those taken in the project.

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