

## RVC OPEN ACCESS REPOSITORY – COPYRIGHT NOTICE

This is the author's accepted manuscript of the following article:

Armitage-Chan, E. (2016) 'Assessing Professionalism: A Theoretical Framework for Defining Clinical Rotation Assessment Criteria', *Journal of Veterinary Medical Education*.

The version of record is available at <http://dx.doi.org/10.3138/jvme.1215-194R>.

The full details of the published version of the article are as follows:

TITLE: Assessing Professionalism: A Theoretical Framework for Defining Clinical Rotation Assessment Criteria

AUTHORS: Elizabeth Armitage-Chan

JOURNAL TITLE: Journal of Veterinary Medical Education

PUBLICATION DATE: 3 August 2016 (online)

PUBLISHER: University of Toronto Press

DOI: 10.3138/jvme.1215-194R

## Assessing Professionalism: Developing a framework for use in clinical rotations

Elizabeth Armitage-Chan, Vet MB, Dip ACVAA, MRCVS.

Senior Lecturer in Veterinary Education, LIVE Centre, Department of Clinical Science and Services, Royal Veterinary College, Hawkshead Lane, North Mymms, Hatfield AL9 7TA UK.

Email: [echan@rvc.ac.uk](mailto:echan@rvc.ac.uk)

### **Abstract**

Although widely accepted as an important graduate competence, professionalism is a challenging outcome to define and assess. Clinical rotations provide an excellent opportunity to develop student professionalism through the use of experiential learning and effective feedback, but without appropriate theoretical frameworks, clinical teachers may find it difficult to identify appropriate learning outcomes. The adage “I know it when I see it” is unhelpful in providing feedback and guidance for student improvement, and criteria that are more specifically defined would help students direct their own development. This study sought first to identify how clinical faculty in one institution currently assess professionalism, using retrospective analysis of material obtained in undergraduate teaching and faculty development sessions. Subsequently, a faculty workshop was held in which a round-table type discussion sought to develop these ideas and identify how professionalism assessment could be improved. The output of this session was a theoretical framework for teaching and assessing professionalism, providing example assessment criteria and ideas for clinical teaching. This includes categories such as client and colleague interaction, respect and trust, recognition of limitations, and understanding different professional identities. Each category includes detailed descriptions of the knowledge, skills, and behaviors expected of students in these areas. The criteria were determined by engaging faculty in the development of the framework, and therefore they should represent a focused development of criteria already used to assess professionalism, and not a novel and unfamiliar set of assessment guidelines. This framework is expected to facilitate implementation in clinical teaching.

## Introduction

It is apparent from medical education that the successful development and support of student professionalism requires institution-wide dedication to the integration of professionalism into all aspects of teaching (Wasserstein et al 2007). However, the complexities of defining medical and veterinary professionalism, and the lack of defined frameworks for teaching and assessing this in the clinical workplace, contribute to a documented perception of low confidence and competence in the teaching, learning and assessment of professionalism amongst veterinary faculty (Lane & Bogue 2010, Fogelberg & Farnsworth 2009). The consequences of neglecting professionalism in clinical teaching go beyond a risk that students focus only on their clinical knowledge and technical skills. A lack of institution-wide faculty engagement in incorporating professionalism into clinical rotation teaching, and a superficial approach to assessment, also threaten to undermine the challenges of professionalism in the context of the clinical environment, eliciting a hidden curriculum message that professionalism is “easy” and therefore not worthy of attention in teaching time. This misconception risks contributing to feelings of failure when students enter employment and encounter challenges to their professional reasoning and behaviour, or suffer lapses in their professionalism due to stress, heavy workload or fatigue. The recognition through relevant CPD, that ‘being professional’ represents a complex combination of skills and attributes, and that the consistent external demonstration of inner moral values is vulnerable to significant demands from the clinic, provides practitioners with reassurance that they are not failing at a simple skill (Armitage-Chan et al, *currently under review*). Improving the clinical rotation attention to veterinary professionalism by providing faculty support in this area will not only support the competence of graduates when they enter the workplace, but also offers the opportunity to help support graduate mental well-being and career satisfaction.

Without existing frameworks for defining, assessing and teaching veterinary professionalism, previous authors have turned to medical education for guidance in teaching and assessment content (Mossop 2012). Recent reviews of this literature demonstrate an abundance of lists of terms to describe the desirable traits, behaviours and values of the professional, which frequently include normative descriptive terms such as honesty, compassion, respect and altruism (Wynia et al 2014). Lists such as these neglect the challenges associated with consistent demonstration of these values and behaviours, and risk professionalism being misconstrued as a state that individuals achieve by checking off elements from a list (Wynia et al 2014). Furthermore, higher-level learning outcomes such as the contextual application of knowledge and skills, recognizing the challenges of ‘doing’ (or being) rather than ‘showing how’, self-reflection, and problem-solving lapses in professional behaviours, are not included. The recent shift in focus from ‘teaching professionalism’ to supporting student professional identity formation (Cruess et al 2014) implies much greater emphasis on reflection, a student’s ability to recognise their own values and beliefs, and the process of successfully integrating these during the transition from learning environment to clinical workplace. During this process, the student must negotiate their own set of values, behaviours and beliefs, and those

that they perceive constitute “the good physician”, into the profession’s universally accepted core values (Hodges et al 2011). The process the student undertakes, of reconciling the competing discourses to which they are exposed, can be a source of distress, as they attempt to adapt pre-existing identities to conform to professional norms (Cruess et al 2014). The process of ‘professionalisation’ of students, in particular during their clinical rotations, is therefore one that requires much scaffolding support from their clinical educators.

The aims of this research were ultimately to provide clinical faculty with better teaching and assessment tools for supporting professionalism development in final year students. In order to achieve this the study was performed in two stages. In an attempt to better understand ‘where we are now’, data was collected from students and faculty regarding current criteria used to assess professionalism. This baseline data was collected in order to make a judgment on the need for faculty development, and to direct future development strategies. A faculty development workshop was then designed in which a framework for assessing students’ professionalism in final year rotations was developed.

## **Methods**

*Stage 1: How are clinical rotation students currently assessed on their professionalism?*

The clinical rotation assessment at this institution is currently divided into knowledge and knowledge application, practical skills, and professionalism. Veterinary teaching staff from various clinical services and university departments, and at different career stages, who are responsible for final year student clinical rotation teaching, were asked to write down three criteria that they used to make a judgment on students’ professionalism. Similarly, clinical veterinary students were asked to do the same, with the question phrased as follows: “Write down three things that you think you have been assessed on when a judgment is made on your professionalism”. All data was collected as part of undergraduate teaching activities and faculty development sessions, and all responses were collected anonymously. Some thematic interpretation was involved (for example a decision was made to group ‘appearance’ and ‘dress’ into a single category), however in general this data was analysed simply by describing the frequency of appearance of various criteria.

*Stage 2: Development of a faculty workshop, and creation of a framework for assessing and teaching professionalism.*

The faculty workshop started with a 20-minute introduction, in which various aspects of a contemporary framework to teaching medical professionalism were presented. This incorporated elements of the social contract (Cruess 2000), Freidson’s notion of discretion and autonomy in decision-making (Freidson 1999) and the co-existence of multiple valid professional identities, each defined by their differing priorities in career choice and decision-making (Castellani &

Hafferty 2006). The influences of human factors on demonstration of professionalism, and examples of non-technical skills (based on the Anaesthetists Non-Technical Skills framework, Flin et al 2010) were also included. Following this, participants engaged in open discussion, facilitated by the workshop tutor (EAC). This was triggered by an instruction to define the professional skills, competencies and attributes that participants consider when assessing professionalism on their clinical rotations. The facilitator collected notes from the discussion on a whiteboard, which included information about assessing the students, as well as ideas for teaching methods. The participants were aware of the aim of the workshop (to develop a framework for teaching and assessing professionalism for use in clinical teaching), and were asked repeatedly whether they felt all discussion was adequately represented on the whiteboard.

Following completion of the workshop, photographs were taken of the whiteboard notes; alongside field notes taken by the facilitator during and immediately after the workshop, these were analysed to create themed categories for assessing student professionalism. Thematic analysis involved coding the field and whiteboard notes, which were then used to generate broad categories for teaching and assessing professionalism. The field notes (analysed first) and whiteboard photographs were coded separately, in an attempt to capture any group discussion that was not represented on the whiteboard, and to avoid the temptation for coding themes to be generated only from the larger discussion titles portrayed on the whiteboard. Once themes were generated, whiteboard and field notes were analysed again, in order to obtain detailed descriptions of assessment criteria and ideas for teaching to support these, for each identified theme. The document created was then distributed to workshop participants, who were asked to verify the accuracy of the content in relation to the workshop discussion. The institutional ethics committee approved the reporting of student and faculty contributions.

## **Results**

In stage 1, all students and staff members who were asked to provide criteria for assessing professionalism provided at least three examples, and where more than three were provided, all were included in analysis. Staff members included seven Residents, two Assistant Lecturers, two Nurses, 17 Lecturers, five Senior Lecturers, nine Professors and seven others. The highest frequency responses from 49 staff members and 87 students to the criteria used to assess professionalism in clinical teaching are shown in Figure 1; the top three responses from the staff were communication (included by 29% of respondents), honesty/ integrity (26%), and teamwork (20%), and the highest frequency responses from the students were dress/ appearance (59%), communication (54%), and attitude (38%). Responses elicited by fewer than 5% of respondents (<3 out of 49 faculty members or <4 out of 87 students) are not shown graphically.

Although representing a very small response frequency, some of the student responses demonstrated additional insight into the expectations of the professional environment that are of interest, but are not evident on consideration of the quantitative data. Student responses in the category 'handling difficult situations' included "*Keeping cool in awkward or panicky situations*" and "*Appropriate responses to emotional situations*". Two further responses (not represented in figure 1) also demonstrated an emphasis on management of one's own emotions: "*Ability to understand another point of view and not be emotional/ take it personally when others don't share my view*" and "*Ability to maintain professional distance*". One student thought they had been assessed on "*Tactful bad news delivery*". Amongst staff, the graphical category 'Awareness of complexity' was typified by two comments (both from a Residents' teaching session): "*Avoiding conflicts or being mature to solve them*", and "*Dealing with stressful situations*". Three student responses included a comment about not compromising relationships with those responsible for teaching and assessing them ("*Knowing when to shut up*", "*Don't be a dick*") and one student wrote that they had no idea of the basis upon which they were assessed. One staff member and one student mentioned animal welfare. Five responses (three students, two staff members) mentioned the RCVS Code of Conduct.

Discussion in the stage 2 workshop lasted approximately 90 minutes. Discussion lasted approximately 90 minutes. One unexpected addition to the discussion of ideas for assessment criteria was the generation of teaching and learning strategies that could be employed to help students develop their professional competence was an unexpected addition to the discussion of ideas for assessment criteria. Some of these strategies were specific to the assessment criteria that triggered their inclusion, for example there was a discussion that centred around lapses in professional behaviour, students' awareness of their own behaviour, and empathy for professional lapses in others; this led to the suggestion of using non-exemplary behaviour amongst faculty as a basis for small group discussion, leading to improved awareness of the human factors that cause vulnerability in an individual's professional (as well as technical and cognitive) competence, and of a professional's innate human fallibility. Other teaching strategies were more generic in nature, for example using challenging client situations as a teaching method (as an alternative to attempts to shield students from such situations), and encouraging reflection on conversations (either their own or those witnessed), actions and behaviours. Participants also voiced the challenges they encountered in professionalism teaching and assessment, such as perceiving it as difficult to have 'professionalism conversations' with students (for example during student feedback sessions) because of the feeling that this is a judgment of the person, and not of their competence in defined tasks. The student with persistent extreme versions of unacceptable professional behaviours was also frequently cited as a particular challenge.

Initial discussion analysis yielded 5 themes for students' clinical professionalism:

- Inter-personal communication and interactions
- Awareness, tolerance and respect for different values and priorities
- Taking responsibility for learning and resolving challenging situations

- Teamwork, including students supporting each other and learning mutual trust
- Self-awareness of professional behaviour and understanding own identity

Further analysis generated more specific learning outcomes associated with each theme, and suggested strategies for supporting students in their development. In the iterative process of repeated analysis, and grouping of learning outcomes and teaching strategies, these were rearranged to generate a framework for teaching and assessment (Table 1).

## Discussion

The data collected in this two-stage study provided insight into the understanding of teaching and assessment of student professionalism of those directly involved in clinical teaching, and yielded a faculty-created theoretical framework upon which learning, teaching, and assessment of professionalism can be developed. The literature on professionalism assessment describes a strongly felt need to “develop concrete and operationalizable definitions, and from these effective teaching methods and defensible assessment approaches” (Hodges et al 2011). The current study offers a contribution to the professionalism assessment discourse. It is the hope that by creating an initial set of defining assessment criteria and aligned rotation teaching methods, defensible assessment methods will follow.

The workplace teaching of final year clinical rotations represents learning through a period of socialization: “*the process by which a person learns to function within a particular society or group by internalizing its values and norms*” (Cruess et al 2014). The highly motivated nature of clinical students, as well as the effectiveness of experience-based learning, makes the clinical year a powerful influence on student development. This learning environment therefore offers the potential for students to achieve high-level learning outcomes, as they experience the contextual application of earlier taught theory, and are exposed to the adaptations of clinical decision-making that necessitate from the combined influences of the patient, client, business and profession. However, if mishandled, and the profession’s values and norms are inappropriately conveyed, poorly explained or left to the vulnerabilities of the hidden curriculum, the complexity provided by the clinic may be detrimental to the students’ professional identity formation. For example, a student who is highly patient-focused may become distressed if they perceive the needs of the client, staff or business are prioritised over those of the patient in a clinical decision. Such dissonance between the student’s understanding of their own identity, and what they subsequently perceived as the essential professional identity, resulted in distress and thoughts of inappropriate career choice when observed in medical students (Monrouxe 2009, Martimianakis et al 2009). The complexity of the clinical environment, power of the hidden curriculum, and risks associated with identity dissonance if professional development is poorly supported, together with documented confusion and lack of confidence in how to support students in developing their professionalism (Fogelberg and Farnsworth 2009,

Lane and Bogue 2010) demonstrate that clear teaching, learning and assessment strategies are essential.

Learning outcomes and assessment criteria that are vague, subjective or non-specific offer students little direction for their learning. The highest frequency responses in stage 1 of this study (as depicted in figure 1) resemble assessment tools based on observed behaviours, such as the Professionalism Mini-Evaluation Exercise (Crues et al 2006). In such assessment methods, a student's professionalism is evaluated using the presence or absence of observed behaviours, and an assumption is made that these accurately reflect the student's inner values. As such, although widely used, they have similar limitations to the assessment of professionalism based on normative values, discussed in the introduction to this paper. Most importantly, the complexity of consistently demonstrating desirable values, and the scaffolding to facilitate this, are both neglected. Furthermore, without additional detail in the assessment criteria, the assessments tend towards subjectivity in their application. As a result, not only reliability but also validity becomes compromised, as students question the practice of being judged 'professional' or 'unprofessional' according to standards that are inconsistently displayed by members of the profession, in particular those responsible for assessing students (Brainard and Brislen 2007).

It was interesting to note the discrepancies that were evident between staff and student responses during stage 1, although without additional investigation (e.g., participant interviews), it is only possible to speculate on why this occurred. The discrepancies suggest that educational practice is far from ideal and is inconsistent with Biggs' 3P model of effective teaching and learning, which describes shared expectations of the learning process and outcomes between lecturer and student (Biggs 1996). The discrepancy between student and staff expectations is perhaps most likely attributed to the lack of clear definitions of veterinary professionalism (Mossop 2012), either evident from the literature, or available to students and teaching staff, and therefore both groups used traditional notions or lay definitions to define how they perceived the term "professionalism." The emphasis on communication skills was unsurprising, as this represents an aspect of the professional studies curriculum in this institution that is significant to both staff (as facilitators) and students. The high frequency of the response "honesty/integrity" among staff and yet its complete absence among student responses is harder to explain.

Although insignificant in overall response frequency, it was encouraging to see the descriptions present in small numbers of responses that reflected an awareness of complexity in professionalism, and an acknowledgment that achieving competence will be a staged, context-dependent process, ultimately leading to success in the most demanding situations. Although participants in the faculty workshop discussion were not the same as those generating the "where we are now" responses, these low-frequency "complexity" messages formed the basis of the detailed framework generated in stage 2. However, despite these low-frequency responses and the richness of the discussion in stage 2, the general outcome of stage 1 was the development of assessment criteria that tended to be based on superficial, observation-based judgments of a student's



appearance and behavior in the clinic. Even if a more complex understanding of professionalism was present (as would be suggested by the outcome of stage 2), this was perhaps difficult for faculty to apply confidently in a defensible manner. Faculty are also required to provide students with feedback on their assessment grade, and in the absence of a well-defined framework, it would be easier to resort to simpler criteria (e.g., a student did or did not communicate or dress appropriately). However, in the environment of the faculty workshop, underdeveloped ideas of a more complex conceptualization of professionalism could be explored and further developed in a social constructivist manner. Whatever the reasons for the findings in stage 1, they did demonstrate the need for a framework that incorporates a more developed notion of professionalism than one simply based on behavioral observations, and the need to align student and staff expectations of appropriate assessment measures.

Recommendations for professionalism assessment have been made following a discourse analysis of key assessment methods (Hodges et al 2011). These included giving greater attention to the theoretical knowledge base of professionalism and its application to a clinical environment, exemplified by a strategy of presenting students with a professional dilemma or challenging situation, and assessing the reasoning behind their actions and decisions (Ginsburg et al 2009). The teaching strategies generated in our faculty workshop mimic this approach, with the additional benefit of trigger scenarios being derived from the students' own experiences in the clinic. Incorporating the students' discussion into the assessment strategy has the potential to integrate the student's understanding of the complexity of professionalism, the values and motivations underlying their behaviours and decisions, and the extent of their success in exhibiting consistently appropriate behaviour. It also emphasises reflection on practice as a learning strategy.

An additional recommendation made by Hodges et al (2011) describes the ideal of defining professionalism as a multi-level construct, played out at personal, interpersonal and societal/institutional levels. Although the implications of professional culture, institution and society have not been included in our framework, professionalism assessment has progressed from the individual (personal behaviours) to the interactional domain (context dependency of behaviours and communication, and the differing challenges exerted by different situations). As part of this incorporation of context-dependency, additional detail is provided in the explanation of individual criteria, including an acknowledgment that a student may be competent in simple interactions, but that their professionalism may become vulnerable and lapse in more demanding situations. Such added description should facilitate consistency in assessment standards and improve inter-assessor reliability, as well as providing faculty with more information about the basis on which to assess the students. However it is important to recognise that, despite this additional detail, the framework cannot be implemented as a self-explanatory assessment tool. In order to assess students in a way that promotes ongoing learning, and to enable the effective provision of feedback, the assessor requires knowledge in such areas as the conceptualisation of professionalism that the framework is intended to represent, key aspects of the professionalism

knowledge base, and the application of the descriptors to student assessment. Although it may appear as such, the assessment criteria cannot be judged simply on the basis of observing students in the clinic, and will require methods such as evaluation of student discussions (and their reflective capacity), in order to gauge professional competence and understanding of complexity. Of course, this training need is equally applicable to assessments based on observations of values and behaviours, however weaknesses in faculty confidence and competence in defining professionalism may not be so apparent if they are simply being asked to make a judgment of behaviours observed. The suggested teaching and learning activities are intended to provide guidance for the types of group discussion that may help in evaluating students against the given criteria, but do not represent an exhaustive list.

It is unlikely that a single assessment tool will be effective in incorporating all aspects of professionalism. There are inevitably areas of veterinary professionalism that are not included in the framework produced, and therefore it should not be seen as an all-encompassing method of either defining or assessing professionalism. It was developed exclusively for use in clinical rotations, and therefore without adaptation would be unsuitable for either preclinical use (where greater attention would be given to building the required underpinning knowledge base in areas such as veterinary business, communication skills, animal welfare, and ethical reasoning) or postgraduate assessment (where one may expect a greater appreciation of the influences of the broader professional culture and societal influences). It is also likely that different institutions may feel it appropriate to add additional elements. Even more probable will be the need to continuously evaluate and update the framework, reflecting professionalism as a phenomenon that is not only context dependent, but also adapts and develops over time. Despite these potential deficiencies, it is hoped that the creation of clearer assessment criteria, that reflect a contemporary complexity view of professionalism, will provide support for faculty in performing assessments that promote student learning and development.

It is important to recognize that the framework produced does not represent a grading scheme. There has been no attempt so far to validate a “pass,” and neither the minimum standard required to pass the rotation nor an acceptable number of required criteria have been defined. This would be a desirable follow-up to the implementation of the framework, which is currently intended to facilitate formative assessment and feedback discussions with students, and to define assessment criteria more clearly for students and faculty. There is abundant literature on assessing professionalism in medical students but very little attempt to quantify the expected competence. In fact, the literature strongly recommends emphasizing formative rather than summative assessment to promote a culture that fosters continual, lifelong development (Hodges et al 2011). Even where reliable quantitative measures are used, such as in 360-degree evaluations using Likert scales, the data are used for personal improvement and the emphasis remains on formative and ongoing assessment (Wood et al 2004). Due to the known inaccuracy of making conclusions about professionalism based on observed behaviors, assessment should incorporate

greater interaction with the student than is achieved through passive observation, such as using interviews or “conversation with a purpose” (Rees & Knight 2007). During such a conversation, the teacher/assessor can evaluate many of the criteria defined in Table 1, such as students’ self-awareness and reflective ability, communication, responsibility for learning, empathy, and awareness of complexity in professional decision making. The replacement of the personal characteristic “unprofessional” with the situational dependent “lapse in professionalism” is a welcome conceptual change (Hodges et al 2011). To reflect this in assessment, the judgment therefore needs to be made with the “acceptable standard” of the professional having been defined not as someone devoid of lapses in professionalism but instead as someone equipped with the essential skills in reflection, analysis, and multiplicity in thinking to succeed in a professional environment. Grading schemes and pass standards (as well as higher level grade boundaries) would therefore usefully incorporate Perry’s scheme of intellectual development, recognizing the progression from dualistic thinking to an appreciation of multiplicity and commitment in the face of such complexity (Widick 1977). Grading schemes and pass standards should also incorporate Hatton and Smith’s framework for progression in which students learn to employ critical analysis in their reflection (Hatton & Smith 1995). A failing student might therefore be defined not by deficiencies in professional behavior, but by persistent inability to identify these lapses during reflective interviews, and a failure to view a situation from the perspective of others.

It is unlikely that a single assessment tool will effectively incorporate all aspects of professionalism. There are inevitably areas of veterinary professionalism that are not included in the framework produced, and therefore it should not be seen as an all-encompassing method of either defining or assessing professionalism. It was developed exclusively for use in clinical rotations, and would therefore require adaptation to be suitable for either preclinical use (where greater attention would be given to building the required knowledge base in areas such as veterinary business, communication skills, animal welfare, and ethical reasoning) or post-graduate assessment (where one may expect a greater appreciation of the influences of the broader professional culture and societal influences). It is also important to note that for implementation purposes, prior teaching and assessment in some of the fundamentals of veterinary professionalism is assumed. For instance, in the institution where this was developed, students entering clinical rotations have already passed assessments in areas such as ethical reasoning, veterinary business, animal welfare, and the professional code of conduct, and they have experienced formative assessment in communication skills and reflective practice. One would expect students to demonstrate competence in integrating and applying this earlier taught material into clinical situations, but this explains the apparent lack of specific inclusion of these areas in the produced framework. It is therefore likely that different institutions may feel it appropriate to add additional elements, depending on the particulars of their individual pre-clinical curricula. Even more probable will be the need to continuously evaluate and update the framework to reflect professionalism as a phenomenon that not only depends on context but also adapts and develops over time.

## **Conclusion**

The main aim of this study was to provide students and faculty with a framework defining the expected professionalism knowledge, skills, attributes, and behaviors of the clinical student. The framework produced offers the opportunity for more structured and specific student feedback. It also allows students to engage in deep learning approaches. Although there remains work to be done in defining standards that are reliable and reflect career stage (e.g., the standard that is required for entry to the profession), it is hoped that the creation of assessment criteria that are clearer and reflect a contemporary complexity conceptualization of professionalism will encourage the use of assessments that promote student learning and development.

## References

- Armitage-Chan E, Maddison J and May S. What is the Veterinary Professional Identity? Preliminary findings from web-based continuing professional development in veterinary professionalism. *Veterinary Record, Currently under review*.
- Biggs J. Western misconceptions of the Confucian heritage learning culture. In: Biggs J, Watkins D, editors. *The Chinese learner: cultural, psychological and contextual influences*. 1st ed., Camberwell; 1996. p. 45–67.
- Brainard, A. and Brislen, H. (2007). Viewpoint: Learning Professionalism: A View from the Trenches. *Academic Medicine*, 82(11), pp.1010-1014.
- Castellani, B. and Hafferty, F. (2006). The Complexities of Medical Professionalism. *Professionalism in Medicine*, pp.3-23.
- Cruess, R., Cruess, S., Boudreau, J., Snell, L. and Steinert, Y. (2014). Reframing Medical Education to Support Professional Identity Formation. *Academic Medicine*, 89(11), pp.1446-1451.
- Cruess, R., McIlroy, J., Cruess, S., Ginsburg, S. and Steinert, Y. (2006). The Professionalism Mini-Evaluation Exercise: A Preliminary Investigation. *Academic Medicine*, 81(Suppl), pp.S74-S78.
- Cruess, S. (2006). Professionalism and Medicine's Social Contract with Society. *Clinical Orthopaedics and Related Research*, PAP.
- Flin, R., Patey, R., Glavin, R. and Maran, N. (2010). Anaesthetists' non-technical skills. *British Journal of Anaesthesia*, 105(1), pp.38-44.
- Fogelberg, K. and Farnsworth, C. (2009). Faculty and Students' Self-Assessment of Client Communication Skills and Professional Ethics in Three Veterinary Medical Schools. *Journal of Veterinary Medical Education*, 36(4), pp.423-428.
- Freidson, E. (1999). Theory of professionalism: Method and substance. *International Review of Sociology*, 9(1), pp.117-129.
- Ginsburg, S., Regehr, G. and Mylopoulos, M. (2009). From behaviours to attributions: further concerns regarding the evaluation of professionalism. *Medical Education*, 43(5), pp.414-425.
- Hatton, N. & Smith, D. (1995). Reflection in teacher education: towards definition and implementation. *Teaching and Teacher Education*, 11(1), pp.33–49.
- Hodges, B., Ginsburg, S., Cruess, R., Cruess, S., Delpont, R., Hafferty, F., Ho, M., Holmboe, E., Holtman, M., Ohbu, S., Rees, C., Ten Cate, O., Tsugawa, Y., Van Mook, W., Wass, V., Wilkinson, T. and Wade, W. (2011). Assessment of professionalism:

Recommendations from the Ottawa 2010 Conference. *Med Teach*, 33(5), pp.354-363.

Lane, I. and Bogue, E. (2010). Faculty perspectives regarding the importance and place of nontechnical competencies in veterinary medical education at five North American colleges of veterinary medicine. *Journal of the American Veterinary Medical Association*, 237(1), pp.53-64.

Martimianakis, M., Maniate, J. and Hodges, B. (2009). Sociological interpretations of professionalism. *Medical Education*, 43(9), pp.829-837.

Monrouxe, L. (2009). Negotiating professional identities: dominant and contesting narratives in medical students' longitudinal audio diaries. *Current Narratives*, 1, pp.41-59.

Mossop, L. (2012). Is it Time to Define Veterinary Professionalism?. *Journal of Veterinary Medical Education*, 39(1), pp.93-100.

Rees, C.E. and Knight, L.V. (2007). The trouble with assessing students' professionalism: theoretical insights from sociocognitive psychology. *Academic Medicine* 82(1), pp.46-50.

Wasserstein, A., Brennan, P. and Rubenstein, A. (2007). Institutional Leadership and Faculty Response: Fostering Professionalism at the University of Pennsylvania School of Medicine. *Academic Medicine*, 82(11), pp.1049-1056.

Widick, C. (1977). The Perry Scheme: a foundation for developmental practice. *The Counseling Psychologist* 6(4), pp.35-8.

Wood J., Collins J., Burnside ES., et al. (2004). Patient, faculty, and self-assessment of radiology resident performance: a 360-degree method of measuring professionalism and interpersonal/communication skills. *Academic Radiology*, 11(8), pp.931-9.

Wynia, M., Papadakis, M., Sullivan, W. and Hafferty, F. (2014). More Than a List of Values and Desired Behaviors. *Academic Medicine*, 89(5), pp.712-714.

Figure 1: Responses provided to the question: “How is professionalism currently assessed on clinical rotations?”

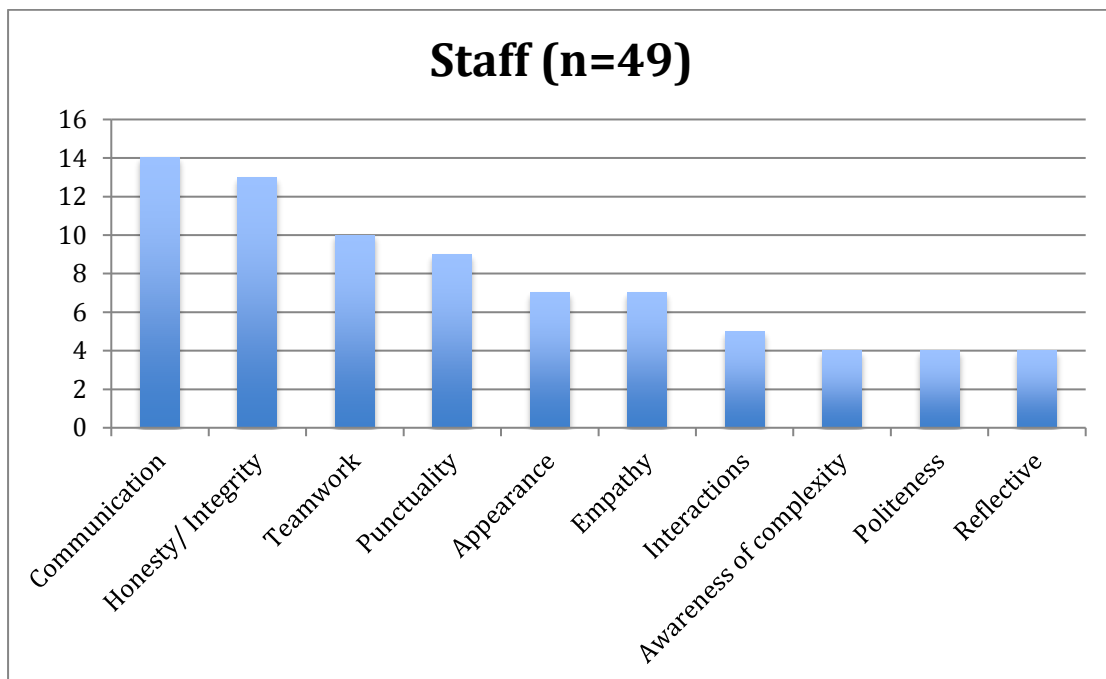
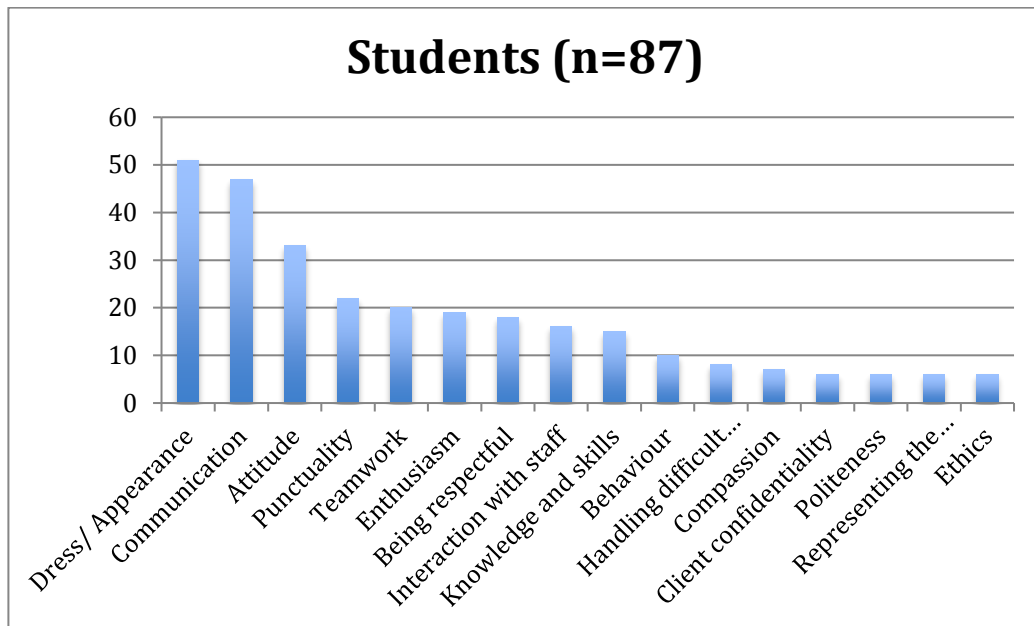


Table 1: Framework for Assessing and Developing Student Professionalism in Clinical Rotations

<b>Assessment Criteria</b>	<b>Teaching &amp; Learning Activities</b>
<p><b>Interactions with clients and colleagues</b></p> <p>The Student:</p> <ul style="list-style-type: none"> <li>- Demonstrates behaviour, communication style and personal conduct appropriate to different situations</li> <li>- Is aware of different situations and client needs that require a change in behaviour or communication style</li> <li>- Considers the client's needs as a factor in their clinical decision-making, but without pre-judging the client or situation</li> </ul>	<p>Discussion: Faculty verbalise and explain when they have altered their behaviour, communication and personal conduct in situations experienced by the students</p> <p>Reflection: Analyse own behaviour and communication style in different situations</p>
<p><b>Understanding the importance of different professional and personal identities</b></p> <p>The Student:</p> <ul style="list-style-type: none"> <li>- Understands that there is not a single 'correct' way of being, or solution to a clinical or professional problem</li> <li>- Respects a colleague's right to autonomy in their professional decision making</li> <li>- Demonstrates self-awareness: ability to identify their own priorities in professional and clinical decision making based on individual ethical values and beliefs</li> </ul>	<p>Discussion: Highlight alternative resolutions in clinical and professional problem-solving, and how these may be influenced by the values and priorities of those involved (client, vet, colleagues, animal welfare)</p> <p>Reflection: Consider the clinical or professional decisions observed, and rationalise these in the context of their own identity ideals, and those of the individuals involved</p>
<p><b>Recognizing limitations of professional behaviour</b></p> <p>The Student:</p> <ul style="list-style-type: none"> <li>- Recognizes that traditional notions of 'professional behaviour', based on exemplary behaviour at all times, is an aspirational ideal but is challenged by the realities of the clinic</li> <li>- Demonstrates self-awareness: identifies own lapses in professional behaviour, and the environmental challenges that contribute to these</li> <li>- Demonstrates empathy (rather than criticism or judgment) with peers and colleagues</li> </ul>	<p>Discussion: Examples of faculty members own non-exemplary behaviour are used as a trigger to discuss the challenges of consistent outward expression of inner professional values, and to demonstrate the fallibility of the professional</p> <p>Reflection: Analyse own communication, behaviour and conduct in the clinic, and identify situations where these have been challenged</p>
<p><b>Mutual respect and trust</b></p> <p>The Student:</p> <ul style="list-style-type: none"> <li>- Demonstrates respect and trust not only to staff on the rotation but also to student peers</li> <li>- Works effectively as part of a team, including supporting other students in the group</li> <li>- Communicates effectively with peers in difficult conversations</li> </ul>	<p>Discussion: Students assess their own teamwork and discuss whether they would work with each other</p> <p>Reflection: Analyse mutual trust and respect within the group</p>
<p><b>Taking responsibility for learning and management of self</b></p> <p>The Student:</p> <ul style="list-style-type: none"> <li>- Takes responsibility for their own learning</li> <li>- Offers assistance in different situations</li> <li>- Engages with all environments in the clinic</li> </ul>	<p>Discussion: Student-led discussion of experiences in the clinic and what was learned from them</p> <p>Reflection: Analyse own learning opportunities and the outcomes achieved during a rotation</p>



