The “hidden curriculum” has long been supposed to have an effect on students’ learning during their clinical education, and in particular in shaping their ideas of what it means to be a professional. Despite this, there has been little evidence linking specific changes in professional attitudes to its individual components. This study aimed to recognise those components of a hidden curriculum at a UK veterinary school that led to a change in students’ professional attitudes, as well as identifying the attitudes most affected. Observations were made of 11 student groups across 5 clinical rotations, followed by semi-structured interviews with 23 of these students at the end of their rotation experience. Data were combined and analysed thematically taking both an inductive and deductive approach. Views about the importance of technical competence and communication skills were promoted as a result of students’ interaction with the hidden curriculum, and tensions were revealed in relation to their attitudes towards compassion and empathy, autonomy and responsibility, and lifestyle ethic. The assessment processes of rotations and the
clinical service organisation served to communicate the messages of the hidden curriculum, bringing about changes in student professional attitudes, whilst student selected role models and the student rotation groups moderated the effects of these influences.

**Key Words**

Hidden curriculum, professional attitudes, clinical teaching, veterinary education, clerkship format.

**Introduction**

Professional studies are now an accepted part of modern clinical education. Their inclusion in the formal curriculum aims to address a perceived decline in moral characteristics, such as altruism, as well as growing concerns over the ever-increasing commercial pressures placed on clinicians. Formal education in professional, non-technical skills is believed necessary to prevent the breakdown of medicine’s social contract; otherwise how can the health professions be trusted to regulate themselves if they are likely to be acting in their own self interests rather than for the greater good? Although some have questioned whether the health professions have ever actually achieved such selflessness or if this is simply a case of misplaced nostalgia, empirical studies have revealed a concerning decline in student moral reasoning and empathy over the course of their medical education, particularly during their clinical years, and at the institution under study the authors have previously established a decline in the perceived importance of altruism with career stage of veterinarians. One of the challenges facing medical and veterinary educators is the lack of a consensus on what constitutes professionalism. Although it is widely acknowledged that technical competence alone is insufficient, the other components of “professionalism”, lying in the non-cognitive domain, are contested. Some of the debate over the definition has been attributed to generational differences, and, within veterinary medicine, recent trends including the feminisation of the profession, an increase in specialised referral practice, and changes in regulations relating to practice ownership. Within medical education, recent work by Castellani and Hafferty suggests that the lack of agreement is due to the complexity of professionalism, leading them to conclude that multiple perspectives exist dependent on how an individual practices medicine and therefore prioritises key aspects of their professional work. The same argument could also be made in a veterinary context where a plethora of ways of practising has emerged, for example in terms of speciality (varying from academic to specialist-dinician to general practitioner) and in terms of the types and range of interpersonal interaction required (solitary laboratory work through to consultations with clients and their pets).

Accepting that different members of the same profession may hold different views depending on how they practice, and that this may lead to a lack of consensus over which non-cognitive attributes should be included in the teaching of professionalism, it is perhaps unsurprising to discover that formal teaching of professionalism rarely
produces the desired lasting effects.\textsuperscript{13} A general assumption in education is that there is a direct correlation between what is taught and what is learnt by the student. However, this has been shown to not always hold true,\textsuperscript{14} especially in cases where what is to be learnt is not clearly defined.\textsuperscript{15} If students are left unsure after their formal education, they are more likely to develop attitudes about acceptable professional practices from their real-world experiences; namely their interactions within the clinical setting and the hidden curriculum.\textsuperscript{16}

The hidden curriculum within this context sits alongside both the formal curriculum, identified as planned and documented content, teaching and evaluation, and the informal curriculum, identified as the unplanned, opportunistic teaching that takes place as a result of encounters with clinicians leading to unplanned discussions surrounding the particular cases seen in the clinics.\textsuperscript{17} The hidden curriculum has been defined by Hafferty\textsuperscript{18} as, ‘a set of influences that function at the level of organisational structure and culture, buffeted by external forces and internal integration,’ and has been recognised as being communicated through the student-teacher relationship, behaviour of staff and students, reward and punishment systems, institutional structure, and government education policies.\textsuperscript{19,20}

Despite a new wave of interest in the subject,\textsuperscript{21,22} there is still very little published regarding the hidden curriculum of veterinary education, particularly in comparison to medical education, where much of the focus has been on the enculturation process of young professionals,\textsuperscript{23} together with their professionalism and professional identity formation. In this regard, there has been considerable interest in the interactions students have with role models during their clinical training.\textsuperscript{23-30,17}

Much of the early work on the hidden curriculum of medical education, which has many similarities with veterinary education in the English-speaking world, relied on anecdotal evidence of its existence. More recently researchers have applied qualitative research techniques to reflective narratives, such as student essays\textsuperscript{31,32} and professionalism journals,\textsuperscript{30} as well as student and faculty interviews and focus groups.\textsuperscript{25,33} Despite the success of this research there is still limited knowledge of the specific processes within medical education that directly influence the perceptions fostered. As such, the aim of this study was to identify messages of the hidden curriculum, relating to professionalism, present within the clinical year of a single institution, and the processes through which these are communicated. This was addressed through the following research questions:

1) What are the prevailing messages, relating to professionalism, communicated through the hidden curriculum experienced by the students during their intra mural (clinical) rotations (IMR)?

2) What processes within IMR are leading to the communication of these messages?

\section*{Methods}

\section*{Design}
Jackson\textsuperscript{34} described the study of the hidden curriculum as the study of the students’ lived experience - in this context their experience of the final year clinical rotations of the BVetMed programme - and such research has been recognised as requiring a multifaceted approach.\textsuperscript{35} Thus, for this exploratory study, two different qualitative methods were chosen to complement each other; observations and interviews. Whilst individual interviews have been established as an appropriate methodology for gathering an in-depth understanding of the students’ perceptions of the hidden curriculum, the timing of these interviews, at the end of the clinical year, mean that the students may have become enculturated, i.e. adjusted to the norms and values of their environment, and therefore less able to identify institutional idiosyncrasies as being just such. As an outsider to the veterinary culture, the primary researcher (CR), a PhD student with an interest in the hidden curriculum, also took on the role of observer, not only to triangulate findings with those from the interviews and therefore improve the dependability of the findings,\textsuperscript{36} but also to identify things that may otherwise be missed by someone who is already part of the culture under observation. The detailed design was approved by the RVC Ethics Committee.

\textit{Context}

This study took place at the Royal Veterinary College (RVC), University of London, and followed students on the five-year Bachelor of Veterinary Medicine (BVetMed) program, graduating in 2012. The RVC is the largest of the UK providers of clinical veterinary education, with an annual intake of over 240 students, and employs over 70 clinical educators across its three on-site hospitals. The BVetMed course is undergraduate entry, with the majority of students entering straight from high school. The first phase of the formal curriculum consists of courses focused on the organ systems, with parallel, longitudinal professional studies classroom elements. As in similar medical curricula, this includes elements such as the social contract that frames the professions, codes of practice, professional ethical reasoning, business ethics, communication and interpersonal skills such as leadership and team-working, empathy, informed consent and shared decision-making. From the third year onwards, organ systems modules are concerned more and more with abnormalities and their treatment, and the students experience increasing clinical exposure. Clinical education comprises 26 weeks of Extra Mural Studies (EMS) in non-affiliated veterinary practices and 28 weeks of Intra Mural Rotations (IMR), based on 1-2 week placements in each of the various clinical services offered by the on-site RVC hospital services, from radiology to anaesthesia, dermatology to surgery.

The IMR are split into 22 weeks of core rotations, which every student must complete and pass, and a further 6 weeks of elective rotations where students can pursue a rotation of particular interest for them, for example, oncology. On all rotations, students receive one of four grades: distinction, pass, borderline or fail, in each of three categories: professionalism, technical knowledge and practical skills. For the compulsory 22-week core, the students remain with the same group of 3-5 students. Students choose their elective blocks which, together with clinical project choices, dictate the order in which they will complete the rotations. Additionally, in this cohort,
students were also able to select two other students to be in their group, as well as indicate any student they wished to avoid. This study focused on their experience during these core intramural rotations.

**Sample**

Sampling for the study was purposive, in that participants were chosen that would represent the diverse range of attitudes to professionalism previously identified in the academic community under study. The previous study, by Roder et al., identified four clusters of views of professionalism within the institution. These were broadly recognised as aligning with Castellani and Hafferty’s groups, comprising: those displaying a naïve view (cluster 1); those experiencing dissonance (cluster 2); those valuing professional dominance, with a somewhat nostalgic view (cluster 3); and those valuing their autonomy (cluster 4).

**Observations**

Eleven student groups were contacted via email for permission to be observed across five core IMR rotations, with each group being observed for 6-hours on each service. With regard to the students’ professional cluster membership, the groups identified were either homogenous or heterogeneous in their composition, ensuring that diversity in both student characteristics and group dynamics were represented. To observe how students were affected by interactions with staff of similar and differing professional attitudes to their own, we chose the five service rotations based on the cluster membership of the teaching staff, identified from the previous study, again ensuring all the four identified views were represented. We chose to focus only on the core rotations experienced by all students as part of their clinical learning, and only chose those rotations in which students would have direct contact with both animals and their owners as it was thought these would maximise opportunities for observing acts of professionalism.

During the observations, the researcher (CR) took the role of an embedded but silent observer, remaining detached from, yet sympathetic towards, the group in order to access genuine behaviours, a method recognised as naturalistic participant observation. This was made easier as the researcher had had no prior contact with the students in a teaching or assessment capacity, and with a background in education, rather than veterinary science, was not in a position to provide students with help or guidance with their learning. The selected students were observed continually over the 6-hour period, with data collected during consultations, clinical procedures and rounds, whilst on wards administering treatments and during husbandry duties, and also during less formal moments such as tea breaks. The only time observations were suspended was during simulations as this was deemed formal teaching and, therefore, outside the boundary of this research. To remain minimally intrusive the researcher took simple field notes, including noting contextual details, before expanding these into a personal reflection of the observed events immediately following the end of the observation. Particular attention was paid to ‘critical incidents’ that may have taken place.
Interviews

Following the observations, at the end of the IMR rotations, the same researcher conducted semi-structured interviews with some of the students from the groups that had been observed. Three students representing each of the four identified views of professionalism were initially recruited for interview, with further participants added until data saturation was obtained. A total of 23 interviews were conducted with each lasting 40-60 minutes.

The individual, semi-structured interviews were conducted face-to-face, so that the researcher could note non-verbal cues and explore these further where appropriate. With the interviewees’ consent, the conversations were recorded and later transcribed for analysis. The final anonymised transcripts were returned to the interviewees for approval before analysis began.

Data Analysis

Data from the observations and interviews were combined and analysed thematically, to capture and interpret meaning, by the primary researcher (CR) who has prior experience with qualitative data analysis. Initially an inductive approach was applied whereby the observer reflections and interview transcripts were repeatedly read and revisited in order to identify and refine codes. Once the codes were refined they were then clustered into emerging themes before a final coding of all data.

Following this, a deductive approach was applied whereby the reflections and transcripts were revisited in light of defined themes from the literature on hidden curriculum and professionalism. This allowed the researcher to not only refine the themes identified inductively, but also to question both these and the interpretation of the hidden curriculum within the existing literature. Once the final themes had been determined the reflections and transcripts were revisited one last time and illustrative text identified. Credibility of the final themes was established through feedback from dissemination of the initial findings both within the institution and to the broader medical education community.

Results

Following thematic analysis of the data nine core themes were identified, initially split under two headings: aspects of professionalism affected by the IMR experience, and environmental and contextual factors contributing to changes in professional attitudes (see Figure 1).
Five aspects of professionalism affected by the IMR experience were identified, and can be further sub-divided into two categories: those aspects of professionalism most prevalent during observations and in the students’ discourse on the subject, *technical skills* and *communication skills*, and those where the researcher recognised conflict or tension both in how the students spoke about them and reacted to their experiences whilst on rotation, *compassion and empathy*, *lifestyle ethic*, and *autonomy and responsibility*. Under environmental and contextual factors, four themes emerged: the *clinical service organisation*, *assessment*, *role models*, and the students’ *rotation group*. Initially classified into two sub-divisions, systems and people, these were then renamed in light of how they were seen to operate as mediators and moderators of the hidden curriculum; the mediators of the hidden curriculum, *clinical service organisation* and *assessment*, bring about either a positive or negative change in student views, and the moderators, *role models*, and the students’ *rotation group*, protect or expose the students to the influences of the mediators. The mediator and moderator terminology has been adapted for this purpose from its use in both the natural sciences and social psychology, whereby a mediator variable is one that accounts for a relationship between two variables, whilst a moderator variable affects the strength or direction of this relationship.39

Aspects of professionalism most prevalent during the IMR experience

The emphasis on improving technical competence as the primary function of the IMR experience was clearly evident across all rotations observed. The students’ attitudes to improving their technical skills appeared to mirror this with opportunities received with enthusiasm and at times generating competitiveness between learners. During interviews, students were consistent in their perception of the importance of technical
competence to their level of professionalism, with some even believing the two were synonymous.

“...you become more professional as your knowledge grows, as your confidence grows” [F1]

Second only to the students’ view of the importance of technical competence to their professionalism were their views regarding communications skills and, more specifically, good clinician-owner communication.

“I’ve seen people who communicate really well with the clients and the way it helps them, and then people who communicate really badly...even though what they’re saying may be right, they’re still not listening because of the way they’re saying it.” [F12]

When reflecting on their previous communication skills training prior to starting their rotations, students demonstrated a change in their attitudes following their IMR experiences, acknowledging their initial overconfidence and dismissal of such skills as not needing to be learnt. During the observations it was clear that in a substantial number of cases students showed nervousness during client communications, either visibly shaking or avoiding direct eye contact, and in the interviews their new lack of confidence was confirmed. Despite this, most did not think such skills could be explicitly taught, but instead were learnt through observing clinicians with good communication skills in action.

Sources of tension with professionalism

Unlike the students’ views towards technical competence and communication skills, which were generally aligned, students demonstrated widely differing behaviours and attitudes towards the three areas of the professional role identified as sources of tension.

Some students considered demonstrating compassion and empathy as a fundamental part of the professional role and expected staff to demonstrate compassion and empathy towards animals and owners. These students were left disappointed when observed practice fell short of their expectations, reinforcing their resolve to behave differently when faced with similar situations.

“...we had to put a dog to sleep, and the lack of empathy that the vet was, he was so cold about putting this dog to sleep in front of the owners who were crying...I’m going to vow to try to never forget that and put myself in their shoes.” [F15]

These students also expected the staff to extend this compassion and empathy towards themselves, and there were multiple instances of students feeling aggrieved when they felt were unduly punished for learning they had missed as a result of family bereavements and other extenuating circumstances. Such incidences led the students to believe that the staff prioritised technical competence over compassion. Further examples of this prioritising of technical competence over compassion were also observed, for example, one case on which all five students within a rotation group were encouraged to palpate a distressed cat’s fluid-filled stomach just minutes before it was euthanised.
"I think, a lot of the time, they need to remember that they have to put the welfare of the animals first. And I’m not saying that there’s poor welfare standards, but, for example, they might take longer on something because they’re trying to teach so many people." (F7)

In contrast to this, other students perceived this emotional detachment as a necessary part of the professional role, allowing them to focus on the technical side of their role without becoming clouded by emotions.

Similarly, students were divided on their thoughts regarding the lifestyle ethic expected of someone entering the profession. Despite a near consensus of opinion amongst the students on the exhausting nature of the rotations, and indeed students were observed to be working consistently hard, they were split as to whether this was an accurate portrayal of their future career, or merely a by-product of conducting a majority of their rotations in a specialist referral hospital. Those that saw being a veterinarian as a vocation expected nothing less than to give themselves wholeheartedly to the profession, and were often students for whom being a veterinarian was a lifelong ambition.

“I understood when I went into rotations that I’d basically, wasn’t going to have a life. I went into this whole university course knowing that I wanted to be a vet and knowing that, as a vet, I’d have to do out of hours and unsociable hours and everything, which doesn’t bother me because it’s what I want to do.” (F4)

The desire for a more balanced lifestyle ethic was more evident in comments made by mature students. Many of these students chose to sacrifice their originally preferred career path for a more fulfilling personal life. For these students, clinicians in predominantly referral hospitals were considered inappropriate role models as they did not demonstrate this balance.

“It’s hard here because most of the staff members you encounter are specialists and I don’t want to be a specialist. I don’t want to work those sort of hours and I don’t want to basically live life just through work. It’s hard to look at that and be like, ‘I want to be like you,’ because actually I don’t.” (F13)

There was evidence that some, recognising the lifestyle ethic tension, were able to take evasive action to protect themselves in both the short and medium term. Some planned breaks in their rotation schedule to reconnect with friends and family, whilst others had undertaken a radical rethink of the most appropriate career progression for them.

The final aspect of the professional role over which there was perceived tension was autonomy and responsibility. Whilst students welcomed the level of autonomy and responsibility they were afforded during their time as a student, they were conscious of the “unrealistic” setting in which they were learning; that of a referral hospital with access to the latest tools in diagnostic testing and in which a majority of patients were funded by insurance.
“...you never think about [how much things cost whilst you’re on rotations] you do what’s best for the animal. The animal’s health is your goal. It’s not like when you have a boss breathing down your neck telling you how much everything costs.” (F14)

Indeed very few of the cases observed were constrained by the finances of the individuals concerned, and only one clinician on one service was observed to consistently explore alternative treatment options in the light of possible constraining factors.

Mediators of the hidden curriculum

Both the assessment processes employed for the rotations and the clinical service organisation were influential over students views of the professional role. On each service, students were graded and given feedback in three areas of their practice: technical knowledge, practical skills, and professionalism. Faculty assessment of both practical skills and technical knowledge was transparent during both rounds and interactions with patients, with some departments even recording instances of successful procedures, such as catheter insertion, on tick charts on the walls.

Instances of assessment of the students’ professionalism were far more difficult to observe, and during interviews students also highlighted what they perceived as a lack of an evidence base for their assessment in this area, particularly in comparison to the other two areas. In part, this may be attributed to the clinical service organisation, where students initially undertake consultations with owners unaccompanied then report back to the leading clinician, meaning they were rarely accompanied by a member of staff during their interactions with clients, something they believed was a key indicator of their professionalism.

“I haven’t had a single clinician watch any of my consults. Or, like, they always say, ‘client communication is good,’ but I don’t know how they know that because they haven’t observed it.” (F14)

This, coupled with a view that the terminology used in the grade descriptors for professionalism was too subjective, allowed them to dismiss negative feedback or poor grades as a failure on the part of the assessing member of staff, not a reflection on their own performance. These problems were exacerbated in instances when all rotation group members received the same feedback, but diminished when staff took the time to also provide verbal feedback.

The clinical service organisation also proved to promote the importance of technical competence above, and often at the expense of, other aspects of the professional role. A vast proportion of the students’ time is spent in referral services, with clinicians who have been attracted to work in such a technical and highly specialised service. The cases seen, and the tools at their disposal, are more advanced than those they are likely to encounter in first opinion, primary care practice where most will begin their career, and they are also rarely confined by budgets not covered by insurance. Whilst for some this gave them confidence, others raised concerns over the lack of transferrable skills they were gaining and their ability to tackle cases under real-world constraints. One, almost unanimous, effect of being in such a specialised environment, was the impact it had on the students’ views of what it meant to be a
successful veterinarian, with the implication being that, as a general practitioner, you could only be mediocre at best:

“...going through rotation where it is so specialised, it makes you realise you need to be specialised. Not necessarily in a certain aspect of medicine, but at least in a species...I'd rather be good at one thing than mediocre at all of it.” (p.14)

Not all the implications of working in a referral setting were negative however, and being in an environment where everyone, from senior clinicians to student nurses, was learning gave students confidence to ask for help when needed and ideas as to where to source information.

Moderators of the hidden curriculum

During the interviews it emerged that both the strength and direction of the students’ attitude changes during their IMR experience were effected by their relationships with individual clinicians as role models and their rotation group. For this reason, these have been termed as moderators. They both also had an effect on the students’ enjoyment of their rotations.

Choosing role models was an active process, with students looking for individuals exhibiting characteristics they already deemed important; for example, students for whom compassion and empathy were a key part of the clinical role looked for individuals who were able to demonstrate this. Other key characteristics consistently mentioned included enthusiasm, calmness, and approachability, particularly with respect to the students’ learning. Perhaps unsurprisingly, in the light of the observations made regarding the emphasis on technical competence, if they were unable to pick a role model based on other non-cognitive characteristics, they often opted for those at the forefront of their respective field. Those students for whom lifestyle balance was a priority found identifying a role model within the institution difficult, instead looking outside the university to veterinarians they had encountered during their extra mural studies.

Identification of suitable role models allowed students to feel safe in their learning environment, as did a supportive rotation group. Even in groups seen not to socialise during their breaks, peer support in the learning process was still frequently observed. However, for most groups, the provision went beyond this, affording individuals emotional support as well. Both the support received from their rotation group, and their identification of role models exhibiting the characteristics they believed important, allowed students to hold on to, or even build on, their pre-existing attitudes regarding professionalism in the light of challenges faced during their IMR experiences.

“...one clinician failed my friend and he didn’t deserve to fail. He’s not the sort of failure student. And you think, ‘oh, you failed that? Why?’ And then you look at the clinician and you know why.” (p.1)
Discussion

Principal findings and their meaning

This study has established that those aspects of professionalism most prominent in students' minds following their interaction with the hidden curriculum during their clinical rotations were their technical competence and communication skills, which fits with the ranking of these aspects of professionalism in an earlier study. Their views on compassion and empathy, autonomy and responsibility, and lifestyle ethic, and their importance to the professional role, were also affected as a result of their interactions with staff, students and animal owners. The assessment processes employed during rotations and the clinical service organisation communicated the messages of the hidden curriculum, acting as mediators and leading to observed, and reported, changes in students’ views. The extent to which students were affected by these mediators appeared dependent on their ability to identify appropriate role models and their relationship with their rotation group, both of which emerged as moderators of the hidden curriculum.

As well as identifying the effects of the hidden curriculum of the clinical rotations on final year students at the RVC, this study has also identified different components of the hidden curriculum and their modes of action: the mediators and moderators. Categorisation as either a mediator or moderator appears dependent not only upon whether the influence is a system (mediator) or related to individuals (moderator), but also by the level of consciousness the student has of their possible effect. Whilst students expect the clinicians to be potential role models, and are able to analyse their behaviour objectively, they have demonstrated little awareness of the effect of the clinical service organisation and its subtle yet continuous messages. In relation to the work of Portelli on the “hiddenness” of the hidden curriculum, this would suggest that the hidden curriculum can be, but does not have to be, hidden from the student, but whether it is recognised by them or not appears to affect whether it is likely to be characterised as a mediator (unrecognised) or moderator (recognised).

Of concern to students’ developing views of professionalism is the subtle means by which systems such as the clinical service organisation and assessment processes contributed to the erosion of certain values in the group of students. In the past, the erosion of these values, and a general hardening of students, has been attributed to insufficient role modelling. However, the evidence presented here suggests that role models are secondary to influences of the identified systems-related mediators, namely because of the selective process through which the students are choosing their role models. The clinical service organisation and assessment processes, however, consistently promote and reward technical skills and knowledge, and students who wish to express compassion potentially hamper their own learning. Similar dilemmas have been reported in medical education, with concerns raised over the impact this can have on the students’ ethical growth if it is not appropriately addressed.

Although the students often used different terms from those identified by Castellani and Hafferty, which were used in the survey to establish their view of
professionalism, a majority of what was discussed could still be classified under the headings of technical competence and interpersonal competence. This is perhaps unsurprising considering, when surveyed, both students and staff consistently ranked these in the top two positions in terms of importance, indicating that they are at the forefront of everyone’s minds. The students’ increased focus on the importance of interpersonal competence post-rotations, and in particular the importance placed on client communication, mirrors the findings of Rhind et al. in their study on attributes considered important by recent veterinary graduates. What may be of concern here, however, is the lack of other aspects of professionalism referenced by the students during the interviews, indicating a somewhat narrow view of the subject. This was particularly evident in those few for whom technical competence and professionalism were synonymous. Certain aspects of the professional role, including those pertaining to personal morality and the wider societal implications of being a member of a profession, such as the social contract and social justice, were barely acknowledged.

Implications for practice

It is known that assessment drives learning, and that the hidden curriculum contributes much of what is learned. Yet, despite this, the contribution of assessment to the hidden curriculum has been under-examined since the early work of Snyder, and has been relatively unexplored in the clinical education literature. The observations made in this study, coupled with the detail provided by the students during interview, indicated two primary issues in relation to assessment and the hidden curriculum: firstly, the assessment processes determined what they considered important in rotations, and secondly, with regard to the professional role, students were left questioning staff competence in assessing the non-cognitive aspects of their professionalism.

Whilst practical skills and technical knowledge are assessed independently of one another, all other non-technical skills are branded together and assessed under the heading “professionalism”, a term already noted here as being widely undefined. In order to be considered effective, some understanding of what is being assessed under this heading is a necessity for both staff and students, particularly when using feedback to aid progression. Alongside this, the opportunity for what is being assessed within the clinical setting to be observed by staff adds validity to the assessment in the eyes of the student. Direct observation of students in the clinical setting has been acknowledged as variable at best, yet in order to accurately assess a student’s competency in any task, the teacher needs to gather direct evidence of their current attainment. Lack of direct observation limits the opportunities for meaningful feedback and, for the student to value the assessment and any feedback given, the process needs to be linked to specific events directly observed by the assessor. In this regard, there was a stark contrast in this study between the way technical skills were well understood by both students and staff, and directly observed, and the way professional skills were poorly defined and understood, and only indirectly evidenced.
In addition to the assessment procedures, consideration should also be given to how clinical service organisations provide opportunities for the explicit teaching and role modelling of non-technical aspects of the professional role. Although it may be assumed that being immersed in the hospital environment, observing day-to-day interactions, students would naturally develop these skills, research into apprenticeships reveals that, unless explicitly taught, they are not just “picked up”. Of concern for veterinary education in this regard is the finding by Lane and Bogue that, despite recognising the importance of non-technical skills to the professional role, faculty showed very little recognition of their responsibility to teach them. Consideration must also be given as to how specialist service exposure is balanced with primary care experience and explicit recognition of primary care expertise particularly in light of the Vet Futures report. The hidden curriculum of a specialist block structure in rotations had a powerful influence on the students’ views of what constituted “a good vet”.

As a case study of the hidden curriculum of a single institution, this project benefitted from an in-depth analysis of the complex interactions that take place in a real world setting. Although this may limit the transferability of the findings, it is hoped that by providing adequate details of the context in which this research took place, others may draw parallels with observations made at their own institutions. Both the case study methodology, and the use of researcher-led observations and interviews for data collection, also leave this study open to criticism regarding the influence the researcher’s personal subjective feelings may have had on the findings. However, by demonstrating that the research has been conducted rigorously, with authenticity (evidence the researcher was there and their description of events is genuine), plausibility (there is a link between the observations made and the readers own world), and criticality (making readers re-examine their underlying assumptions on the subject), it is hoped that this has been minimised.

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Figure captions

Figure 1: Categories of codes found during analysis of the qualitative data.

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