

RVC interPOD: Design, implementation and evaluation of an interprofessional orientation and development programme for veterinary and veterinary nursing students

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Introduction

Overview

The Royal Veterinary College (RVC) is unique in educating a combination of undergraduate veterinary (BVetMed), veterinary nursing, bioveterinary sciences and biological sciences (animal behaviour, welfare and ethics) students. Each of these courses requires a core of uni-professional learning (in which students from a single professional group learn together) for the development of relevant specific knowledge, skills and behaviours and, historically, each has been taught in isolation at the RVC. However, this approach does not acknowledge the shared passion amongst students for animal health and welfare and the consequent opportunity for interprofessional education. Interprofessional learning facilitates the development of the positive attitudes, skills, mutual respect and understanding associated with collaboration. For veterinary nursing and BVetMed students, interprofessional education offers the added benefits of sharing practice and improving patient and client care.

The RVC has a reputation for innovative approaches to teaching, learning and clinical provision, putting the College at the forefront of veterinary and biological science. Research evaluating veterinary interprofessional education conducted at the RVC is also the first of its kind (as explored below). However, the RVC's current educational practice does not exploit this unique and valuable learning opportunity, as there is no integration of interprofessional learning across whole cohorts within the undergraduate curricula.

The aim of our proposed project is to pilot and evaluate a novel one-day, interprofessional experiential learning programme to inform subsequent integration of such a programme into RVC BVetMed and veterinary nursing curricula.

Interprofessional education (IPE)

In human healthcare, IPE has been defined as “when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes” (WHO, 2010 P7). The potential benefits of IPE and subsequent effective collaboration in the veterinary field are numerous.

Current initiatives at the RVC have focused on one main aspect of IPE – understanding roles. The only IPE session embedded into a curriculum (BSC Veterinary Nursing Year 4) involves veterinary nursing students exploring roles through a discussion and activity task with volunteer veterinary students.

IPE can also focus on general interpersonal skills, an area not currently addressed in timetabled learning opportunities, and only in part available through ad-hoc volunteer IPE sessions. Such skills include communication and recent research suggests that errors within veterinary practice are often related to some degree of sub-optimal communication (Kinnison et al. 2015). Improving interprofessional communication and collaboration may therefore reduce medical error, thereby improving patient outcomes and client satisfaction, and reducing complaints. Working interprofessionally should also involve individuals seeking advice from the most appropriate person

rather than only collaborating with members of their own profession ('homophily') (Wagter et al. 2012). As veterinary surgeons have historically been positioned at the top of a hierarchical workplace structure and have taken responsibility for all actions in their practice, this view may not come naturally. However its importance is increasing as the role of the veterinary nurse has evolved and changed significantly. The old-fashioned notion of being handmaiden to veterinarians is now being challenged, with the introduction of a Royal Charter and recognition of veterinary nursing as a profession. Registered Veterinary Nurses (RVNs) are now accountable for their own actions and required to "make clinical decisions according to their professional judgement, based on the best available evidence at the time and what is right for the individual animal/keeper" (Jorge and Pfeiffer 2012, p1). In general, good collaboration leads to a good team environment founded on respect, trust and mutual support (Horder 2004; Kinnison et al. 2016).

Interprofessional working also presents certain challenges, which IPE should seek to address. These include:

- Stereotypical views, interprofessional prejudice and lack of recognition, which can lead to veterinary nurses leaving the profession (Williams and Robinson 2014)
- Contrasting professional motivations for work, making understanding each other's actions challenging (Kinnison et al. 2016)
- Veterinary nurses feeling that they are not fulfilling their potential (Lewis 2016)

These challenges all reflect, to varying degrees, failures in emotional intelligence on both sides of the interprofessional team. We therefore propose that it is important to increase the provision of interprofessional learning opportunities at the RVC that work specifically on changing behaviours and culture. Such opportunities should focus on experiential learning of interprofessional skills including leadership of self and others, emotional intelligence, communication, active listening, trust building and mutual support, and not simply on the specifics of roles within the veterinary team.

Experiences learned from the BVetMed Professional Orientation and Development (POD) programme

A 3-day 'Professional Orientation and Development' (POD) programme designed to develop leadership, professionalism, clinical teamwork and a supportive community has recently been introduced to the RVC BVetMed curriculum. The programme focuses on the development of the emotional intelligence characteristics (understanding self, managing self, understanding others, managing relationships) on which these professional skills are founded, using an experiential learning approach. Emotional intelligence (mixed and ability models) is the most important contributor to job performance after cognitive ability and as such is an important skill for all our graduates (Joseph et al 2014).

Focus group data from RVC participants of POD pilot programmes indicate that students have found this training to provide a valuable foundation for group learning and other interpersonal challenges:

'It's helped me to understand that not everybody thinks the way I think or wants to do things the way I want to do it and I used to get frustrated about it but now I can sit back and go, 'yeah I can kind of see why they do this'. And then together we can kind of work on a middle ground that works for all of us and then you end up with a better result'

There was evidence that POD training encouraged a sense of personal responsibility in students:

'I think the main thing it taught me was that it's not - you can't just blame everything on other people and it's more what you can do to change a situation rather than it being other people's,

someone else to blame sort of thing. And how you can be a better person, not always blaming it on the establishment ...or that sort of thing'

Pilot programme participants have also reported increased engagement with and contribution to their student community, resulting from improved wellbeing:

'I felt I had more motivation to try to be a bit more involved with the student body because I was quite content to just sit back and be a hermit and like live in my flat and like just not meet anyone. But after the [POD] course I thought like you know - I'm part of [this community], I should try to maybe get involved in more things'

There is a strong evidence base for emotional intelligence underpinning good wellbeing (e.g. Schutte and Malouff 2011; Welch 2003). Currently a wide variety of initiatives to optimise veterinary student and professional wellbeing are being considered and proposed in different contexts. We propose that, at the RVC, we should build on the considerable groundwork and strong, evidence-based foundations of the POD programme in this respect, by incorporating the nuanced demands of interprofessional working and learning to develop an interprofessional team with good wellbeing.

Outside of the current project proposal, we are currently working to align the BVetMed POD with the wider BVetMed curriculum so that concepts introduced during POD are revisited and refreshed in different contexts, in a spiral curriculum approach. It is also intended that POD programmes will ultimately be provided for all RVC student groups. The integration of a POD course is already being investigated and planned for first year veterinary nursing students in 2018/19. This will follow a similar format to the already established and well-received BVetMed POD programme. With growing student numbers, the apparent difficulty for VN students to integrate as a class is becoming increasingly pronounced, with a rising number working in silos and choosing only to interact and converse with housemates. The introduction of a VN POD programme is considered essential to promote the development of a professional and social culture/community, an enhanced attitude to learning and improved interactions and relationships with lecturers and peers.

Interprofessional orientation and development (interPOD)

Delivery of an interprofessional orientation and development (interPOD) course is a new take on both IPE and POD at the RVC as demonstrated by Figure 1.

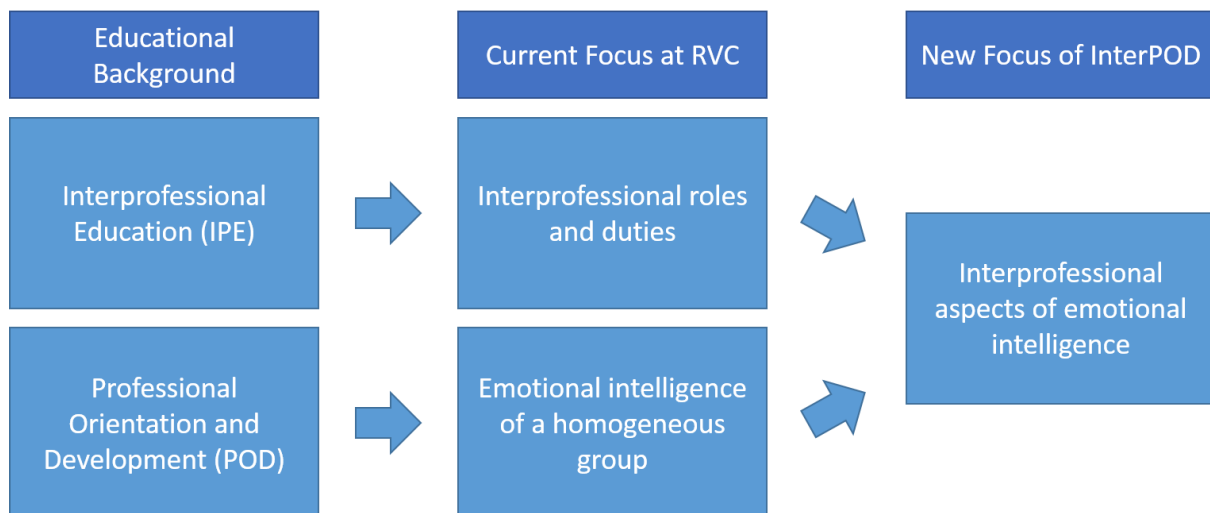


Figure 1. InterPOD’s addition to current RVC educational opportunities

InterPOD therefore provides a totally new addition to RVC curricula. However, it will benefit from our experience with delivering POD and IPE, and the students who have undergone previous POD training will be accustomed to its unique methods. In fact, BVetMed students who have participated in pilot POD programmes have expressed a desire to revisit the POD experience more directly and, in particular, prior to embarking on clinical rotations. The interPOD will therefore contribute to a spiral curriculum and help reinforce to BVetMed students the aspects of emotional intelligence which they learned previously, but will also focus on the importance of positive attitudes, collaborative skills and mutual respect of their interprofessional colleagues. The same benefits are anticipated for VN students who will have returned from their first placement block and be better able to reflect on these early experiences. It will also help to address VN students' continued requests for interprofessional integration.

By nurturing a supportive interprofessional culture during training, we will be setting foundations for, and feeding forward into, the workplace and the wider professional community.

Aims and Objectives

Aims:

To develop and pilot an evidence-based interprofessional learning experience (interPOD) for RVC veterinary and veterinary nursing students, which will subsequently be embedded into their curricula.

To promote staff awareness of interprofessional learning by exposing more staff to interprofessional teaching.

Objectives:

- To design and validate a questionnaire for exploring veterinary students' perceptions of interprofessional working and learning.
- To design the interPOD learning experience.
- To implement the interPOD learning experience with a pilot group of veterinary and veterinary nursing students.
- To evaluate the learning experience through an assessment of the impact on student attitudes and perceptions using the validated questionnaire and post-programme focus groups.
- To develop a plan to embed the interPOD into the undergraduate curricula of veterinary and veterinary nursing students.

Methods

- **Questionnaire design and validation**

Questionnaires have been developed and validated in human healthcare to assess students' views on interprofessional education and interprofessional working. Examples include the Readiness for Interprofessional Learning Scale (RIPLS) (Parsell and Bligh 1999) and the Interprofessional Attitudes Scale (IPAS) (Norris et al. 2015). It is recommended that scales be psychometrically tested to ensure validity for different groups and stages of training. However, no such scale has yet been validated for use with veterinary and veterinary nursing undergraduate students, which makes identifying any changes in their perceptions challenging.

This project will develop a bank of statements related to interprofessional learning and working, based on previously validated scales from healthcare, alongside evidence of interprofessional work from the veterinary field. An electronic questionnaire incorporating these statements will be created using SurveyMonkey and will then be sent to veterinary nursing and veterinary students at the RVC, veterinary students at a university without veterinary nursing students, and at a veterinary nursing higher education institute. This will ensure the validity of the questionnaire for different types of veterinary and veterinary nursing students. We will aim for a minimum of 600 responses. Half of these will be used in Exploratory Factor Analysis (EFA) and half in subsequent Confirmatory Factor Analysis (CFA). This will enable a questionnaire of a select number of distinct themes with converging statements to be created. This questionnaire will then be available for the analysis of this, and future, IPE projects.

This stage is planned to be offered as a summer studentship project. The project team will assist with questionnaire design and facilitate collaborations with other universities.

- **interPOD design**

The pilot interPOD will be a full-day learning experience for a group of volunteer students. Design of the experience will be led by the project team and informed by questionnaire and focus group data gathered from previous POD participants. The experience will use POD tools and frameworks relating to emotional intelligence, alongside theories from IPE, to promote interprofessional collaboration. The format will include minimal didactic teaching - most of the learning will be through small group experiential activities. Activities are abstract and generic, so that each member of the team has an equal chance of contributing to the team's success and no one is advantaged or disadvantaged by academic ability or factual knowledge. Facilitated debriefing sessions immediately after each activity help the group to reflect on how the experience is relevant to their current and future professional lives. The design will utilise theories such as Allport's contact hypothesis (Allport 1954), which suggests that common goals and equal status are important for interprofessional learning, therefore these factors will be emphasised.

- **interPOD implementation**

The interPOD will be piloted in January 2020. An invitation will be sent seeking volunteers from:

- All 4th year BVetMed students, who will have participated in their POD programme in September 2018 (at the beginning of BVetMed Year 3)
- All 2nd year Veterinary Nursing students, who it is anticipated will have participated in their POD between April and June 2019 (during their first year)

From these volunteers, thirty students from each cohort will be randomly selected to take part.

All equipment required for the interPOD has already been purchased by the RVC for the BVetMed POD, which means that costs of developing and implementing interPOD can be kept to a minimum. A large number of RVC staff (approximately 50) have already been trained to facilitate experiential learning exercises.

- **interPOD evaluation**

Immediately prior to the interPOD programme, the questionnaire will be distributed to the entire cohort of BVetMed and Veterinary Nursing students (i.e. including those not participating in interPOD) to assess baseline attitudes towards and perceptions of interprofessional teamwork.

Distribution to the entire wider cohort of students will allow a degree of assessment of any biases relating to the self-selecting group of students willing to participate in interPOD. The wider cohort will receive an electronic questionnaire via email, while interPOD students will be given a paper-based questionnaire at the beginning of the day's activities.

In order to evaluate the success of the interPOD experience, interPOD participants will be asked to complete the same paper-based questionnaire immediately following the interPOD experience. Data from the interPOD cohort will be analysed to identify any changes in attitude or perception following the interPOD.

In addition, students with a range of attitudes and perceptions (based on questionnaire responses) will be purposively selected and invited to take part in focus groups to explore their views. Focus group data will deepen our understanding of the value of the interPOD experience. We will aim for a conservative minimum of six students per focus group (maximum 10). Four core focus groups are proposed, comprising:

- (i) veterinary student interPOD participants only
- (ii) veterinary nursing student interPOD participants only
- (iii) veterinary students who have not participated in interPOD
- (iv) veterinary nursing students who have not participated in interPOD

These intraprofessional groups will allow us to explore students' views in an environment where they might feel less inhibited about voicing their views of the other profession. Hearing from students who did not participate in interPOD as well as from those who did will provide some insight into the degree of selection bias in our interPOD participants and allow exploration of reasons for not volunteering to participate, which will inform the development of a mandatory embedded experience for future cohorts.

Two additional focus groups are planned, although these will be desirable rather than essential, recognising the challenges of gathering volunteers from different groups during January:

- (v) mixed (veterinary and veterinary nursing students) group of interPOD participants
- (vi) mixed group of students who did not participate in interPOD

Mixed groups would allow us to explore opinions in an environment that would foster discussion of potentially contrasting opinions.

An experienced facilitator will conduct all focus groups and will establish ground rules emphasising the safe environment of both types of group.

Future value

Plan for embedding interPOD into core BVetMed and Veterinary Nursing curricula

Questionnaire and focus group findings will be our direct evaluation of the success of this project. The ultimate indicator of the project's success would be incorporation of interPOD into core curricula. The core project team will work with BVetMed and Veterinary Nursing course directors and relevant strand/module leaders to develop a plan to embed this activity for all 4th year BVetMed and 2nd year Veterinary Nurses. This is undoubtedly a challenging task due, in part, to the logistics of unequal student numbers in the two cohorts, and will require support from the College. It is anticipated that the feedback from the participants of this pilot will be instrumental in demonstrating the value of the approach and guiding the steps required to achieve this.

By embedding a new initiative into two curricula at the RVC, this project will acknowledge rising student numbers and help to address associated limitations relating to student engagement and interaction. In addition, this funding will encourage:

- Continued development of the skills of POD facilitators through their experience of facilitating an interprofessional initiative.
- Recognition and demonstration of the value placed on interprofessional working and learning at the RVC. For staff, the interPOD will demonstrate the potential for future collaborative educational projects, and for students it will raise awareness of important interprofessional issues prior to their rotations and external placements.
- Increased alignment of interprofessional activities with wider curricula (e.g. professional studies strand of BVetMed).
- Development and publication of a validated questionnaire to assess veterinary interprofessional perceptions.

It will also contribute to the following departmental objectives:

- To provide support and resources to promote the delivery of professional and interprofessional teaching, learning and research of relevance to all courses (Clinical Science and Services)
- To provide appropriate support and resources to inform, contribute to and implement the outcomes of the BVetMed Curriculum review – both in the short term through modifications of the current curriculum and longer term – and to support the delivery of all undergraduate and postgraduate courses across the RVC (Clinical Science and Services)
- To provide support and resources to ensure graduates are equipped with the required clinical and professional skills (Clinical Science and Services)
- To support, foster and encourage all departmental members to work as a synergistic team to deliver the college's strategic clinical, research and teaching goals (Clinical Science and Services)
- To optimise the student learning experience through the continued delivery of high quality teaching and further development of innovative teaching delivery, assessment and support systems (Pathobiology and Population Sciences)
- To capitalise on new opportunities for interdisciplinary research, teaching and diagnostic test development facilitated by the broad range of expertise within the department (Pathobiology and Population Sciences)

Budget

Item	Details	Cost
interPOD		
Leader of didactic content	External staff for course delivery x 1 day	£1200
Additional staff facilitators	6-12 members of staff	£0
Food provisions	Lunch & snacks for 60 students and up to 12 facilitators	£1440
Survey		
Validation of questionnaire	Summer studentship	£200/wk for 8 wks = £1600
	Survey monkey licence 2yrs (also used for interPOD evaluation)	£576
Printing for pilot study (60 students)	Printing of 120 questionnaires (before and after)	£30
Focus groups		
Participation incentives	Refreshments (≤60 participants)	£250
Transcription	4 x 1 hour transcripts of multivoice recordings. Costed at £1.40 per min	£350
Dissemination		
Conference attendance	Registration, accommodation and travel to VetEd 2020 and/or the AAVMC Veterinary Educator Collaborative Symposium for two delegates	£1500
TOTAL		£6946

Timeline

Current Proposal's Tasks	Timeline												Additional Information	
	2018	J	F	M	A	M	J	J	A	S	O	N		D
LIVE Teaching Development Prize awarded														
Apply for ethical approval at RVC														
														BVetMed3 POD
Development and Validation of Questionnaire – approach collaborating universities/colleges and ensure ethics approval in their institutions														
Development and Validation of Questionnaire – advertising and recruiting summer studentship														

2019	J	F	M	A	M	J	J	A	S	O	N	D	
Development and Validation of Questionnaire – Build bank of statements and pilot questionnaire. Edits to questionnaire													
Development and Validation of Questionnaire – Distribution, reminders (3wk deadline)													
Development and Validation of Questionnaire – Data analysis													
Development and Validation of Questionnaire – Write paper for Journal of Interprofessional Care													
interPOD – development													
Write interim report													
													VN1 POD
2020	J	F	M	A	M	J	J	A	S	O	N	D	
interPOD – Collect baseline attitudes and perceptions from participants (questionnaire 1)													
interPOD – run with 60 students													
interPOD – Collect new attitudes and perceptions from participants (questionnaire 2)													
Analysis of questionnaire data (changes in attitudes and perceptions)													
Contact purposively selected students to take part in focus groups (minimum of 24 and maximum of 60 students)													
Conduct focus groups													
Analyse focus group data													
Discussions with colleagues regarding plan for embedding interPOD into curricula													
Write final report and poster/workshop abstract for conference (suggested VetEd). Also draft potential papers for JVME.													
LIVE Teaching Development Prize 2 year deadline													

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