PTAS Project Report  (for REGULAR PROJECT GRANTS)

Project Title: Developing Business Together: student perspectives on a key employability mismatch in veterinary education

Project type (delete as appropriate) :
A Research Project (research focus on particular dimension of teaching, learning, assessment)

Principal Investigator : Susan Rhind/ Kirsty Hughes

Schools/department : R(D)SVS

Team members (including Schools and Departments) :
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Project teams must submit a report within 4 months of the conclusion of their project. Copies of dissemination material (e.g. journals/newsletter articles, conference papers, posters should be listed and attached (separate to the word count). The brief report will be published on the IAD web pages.

Report (maximum 1500 words)

What did you do?
As planned we carried out surveys and focus groups of entering students and also students towards the end of their degree programme. We also took an opportunity to collaborate with colleagues from University College Dublin and expand the entry students survey to their 1st year cohorts. We carried out preliminary analysis of data to allow presentation at the annual VETED conference in July. We then employed a group of 3 summer students to take the data and work with it as a student ‘curriculum think-tank’ over the summer. The students produced a report (Appendix 1) and are continuing to work with the project team moving forward to work on implementing some of their ideas.

What did you find out?
Perhaps unsurprisingly, we found that our graduate entry (mature) students were much more interested and ‘switched on’ to the project – reflected at the early stages by the relative ease with
which we gained an 80% response to our GEP survey but even with several reminders only managed an 18% response from our first year (largely school leaver) cohort. Quantitative data continues to be analysed however we were especially struck by 2 key findings in the qualitative data:

1. **Students feelings about making money**
   
The 3 groups we have identified have significant implications for our curriculum.
   
   - The first group are totally happy with the concept of veterinary medicine being a business and indeed appear to thrive in this context: ‘I think it is a good thing because it gives another dimension to the role of being a vet - another potential area for some people to excel in where they may not in other areas. It is unrealistic to feel unhappy about having to make profits as we could not provide veterinary care without making money’
   
   - The second group are less enthusiastic but are still content that this is part of the working world: ‘It’s necessary and I want to be certain I do earn money for my time, but it can be difficult to maintain resolve in the face of clients with financial difficulties or otherwise placing pressure to lower costs for treatment.’
   
   - The third (arguably most concerning) group is one where students really seem to struggle with the notion and indeed cannot imagine themselves being reconciled with it. The concern here is the dissonance which could lead to stress and wellbeing issues when faced with the reality of working in the almost inevitable world of business post-graduation: ‘It’s awful and horrible, but is obviously a permanent aspect of the career. Wish it wasn’t the case’

   This work will help us develop a curriculum that recognises the different positions students may be in when exploring issues in this space.

2. **Students views on the ‘ideal’ business curriculum**
   
   In terms of where to each the curriculum, our research showed strongly that students desire an approach that is embedded throughout the curriculum. Standalone business modules were not favoured: ‘...like, a slow, sort of, trickle-feed type thing, where I think the slow integration and building of that becoming something that you regularly think about would have quite a big impact, I think.’

   These data were made available to the student curriculum ‘think-tank’ and their ideas have recently been presented to the BVM&S learning and teaching committee and curriculum review committee (see Appendix 1)

   **How did you disseminate your findings?**
   
   We submitted an abstract for a short communication (attached as Appendix 2) to the annual VETED symposium July 2019. The abstract was accepted and delivered by SMR in a session focussing on student engagement with curriculum design and wellbeing initiatives. We also designed a poster aligned to the presentation (attached as Appendix 3). One of the attendees at this session was extremely interested in our work and as a result we have established a follow up collaboration to continue with this work moving forward (Dr Stephanie Reisner, University of Newcastle Business School).

   **What have been the benefits to student learning?**
   
   The benefits to student learning will now be that their voice is being placed central to the design of our new curriculum moving forward. 2 of our summer students are likely to choose this area as the
subject of their requires student selected research component which will involve them in these developments more longitudinally which will help with continuity of ideas.

A further tangible benefit is that the students involved are now exploring setting up a student chapter of the Veterinary Business Management Association. We tried as staff to engage students with this 6 or 7 years ago but there was no interest. It is fantastic that this project as ignited a student driven desire to engage with this and as a staff group we will of course fully support them in this endeavour.

**How could these benefits be extended to other parts of the university?**

In our original application we highlighted our intention to investigate this as an approach to dealing with curriculum areas which are known to be challenging – especially in the context of employability and graduate attributes. Our student ‘think-tank summer team’ proved extremely resourceful in this regard. Whilst it was our original intention to work more closely/ directly with the students, in actual fact this arrangement where the students were brainstorming the ideal curriculum from their perspective ‘untainted’ by any strong staff steer or influence has proved extremely exciting (albeit we accept the success of this approach was largely due to the motivation and abilities of this particular group of students).

We would encourage others to trust the students (with appropriate scaffolding) to lead on curriculum ideas and development in topic areas especially where student engagement is known to be a challenge.
Financial statement (please delete as appropriate):
This project has utilised the funding awarded to it by the PTAS adjudication committee and the Principal Investigator or School Administrator appropriate can provide financial statements showing the funding usage as and when required by the UoE Development Trusts who may require it for auditing purposes.

Please send an electronic PDF copy of this report to:
Email: iad.teach@ed.ac.uk
Appendix 1

Summer 2019 Project:
R(D)SVS Business Course Overhaul
By Ashley Genetti, Amanda Podgurski and Nur Syafiqah binti Mohd Shuhel (GEP 18/19)

Goals of course overhaul

● Building on competence frameworks by
  o addressing the disparity between RCVS requirements and employer expectations based on employer survey.
  o emphasizing the difference between “self” and “practice unit” in terms of fiscal responsibility - to that effect, discussions on how to manage personal finances, negotiate salaries and navigate taxes are imperative, etc.

● Promoting the importance of business comprehension where lacking by
  o consistently engaging the student body in interactive, fun ways to nurture their interest in developing business skills throughout their multi-year program.
  o producing graduates who are comfortable with charging their clients appropriately for their time, expertise and resources, and are fluent in detailing the breakdown and reasoning of such costs when inquired by their clients/employers.
  o highlighting the need for willing, experienced personnel well-versed in business skills in veterinary faculties to ensure the curriculum is delivered effectively.

● Improving employer’s perception of graduate’s competence by
  o advising graduates on the importance of communication and meeting expectations that are agreed beforehand with their employers, thus ensuring that they are adaptable in different practices throughout their career.
  o arranging simulated scenarios during practicals or tutorials that address common problems encountered by graduate veterinarians such as dealing with legal issues, clients with financial difficulties, estimating costs of services and values of consultation time, etc.

● Optimizing graduate outcomes by
  o ensuring graduates are made aware that having honed financial acumen would translate to many benefits such as higher average income, being in a better position to compete for positions that do not require veterinary medicine as a prerequisite, and increased employer satisfaction.
  o helping graduates realize the significance and benefit of charging appropriately for their time by reminding them of financial responsibilities that await them post-graduation such as student debt, paying off loans, income taxes and current cost of living, wherever they decide to practice in the world.

Details of course overhaul

Based on surveys done on cohorts in different years of study, supported by feedback from employers and alumni, we have come up with the following:
● Better teaching personnel
  o According to the review by Cake et al (2014)[1], 56% of DVM faculties feel that teaching their students about business skills is not their responsibility.
  o Thus, as a starting point, we feel that the school must ensure there are enough teaching personnel who are qualified and willing to teach about business skills specific to the veterinary profession on the course for it to be meaningful to the students.
    • Vets: with recent (within the last 2-3 years) experience working in either a corporate or private clinic with some managerial responsibilities, to teach students about the business skills required to survive in such a position. Including topics such as: starting your own business, business partners, and other business responsibilities
      • Including practice partners, practice owners, corporate vets, maybe even vets in a research setting that still deal with operations/management
    • Practice Managers: who can attest to what a vet needs to know in various positions, such as owner, practice partner, etc.
  o Note: Optimizing on this opportunity, the course coordinators could ask the practice owners/managers for input on scenarios that might be fit for a business simulation game, detailed shortly.
  o Students feel “guilt” from charging for their time because they might be “detached” from money - especially those without the responsibility of managing their own finances/paying their own bills.
    • Have talks from other professional fields/laborers to compare how different businesses charge their clients for their time/resources to show how graduates should perceive the worth of their services – anything from human health clinics and dentists, legal firms, and even plumbers or mechanics
      • One example might be the farrier employed by the school who could be invited to give an opinion on pricing skilled services.
  o Financial Counsellors: from different regions (US/Europe/Asia) most students are from/plan to practice, can provide in-depth knowledge of the monetary environment from those regions in terms of loans, funding, or career prospects.
    • Possibly have him/her come to campus once a month to have office hours for students who wish to discuss financial concerns either during vet school to preparing for life after vet school. (in the case where this is already readily available, student should be made aware of the availability of this service)
      • Recurring themes from these visits could be addressed to the class/vet school as a whole.
Business Simulation - “Virtual Vet Practice”

- Our assessment of the different surveys found that all year groups and even alumni wish they had more exposure to business practices, but some students – in particular the final years - profess that they are not keen on being directly put on placements that deal with managing a business. However, what if the course uses a simulation instead of a real business?

- Benefit: removes immediate anxiety of responsibility that being on an actual placement might inflict on students while giving them a playground on which to test and prove their mettle.

- We propose the implementation of a game that spans throughout the entire multi-year course to engage students in a fun way and develop their business skills.
  - This might be included under the umbrella of Professional and Clinical Skills, a pass/fail course.
  - Students would be broken up into groups and are assigned a “virtual practice” to manage during 1-hour tutorials (sign in or not necessarily examinable).
  - This can be repeated every month and a half to two months with different scenarios and can focus on different aspects of the business side of practice to broaden the scope of what is covered in the aspect of running a business. Students must be allowed to feel that they are involved in making business decisions, i.e. pricing, pro-bono, ordering, etc.

- This virtual practice can be broken into four or five main types and varies between a small animal practice, a large animal practice, a charity practice, an equine practice and a session where the students get to compare between corporate and private practices.

- During the tutorial, a main event happens where the virtual clinics are “hit” with a scenario (formulated by course-coordinators) which can either be good, bad, or disastrous. Each group must then come up with an action plan to deal with the scenario.

- Students are able to see progression of the practice over a number of years following the action taken in the aforementioned scenario, whether their clinic was impacted in a major way or not at all. (i.e. too many pro-bono cases could cause the clinic to go bankrupt)

- For a set amount of times in the simulation, the groups are updated on the state of their clinic - incomes (donations, profits, etc), expenditures (drugs, supplies, equipment, depreciation, etc), and gross net profits, along with inventory numbers or equipment states. This would be useful in explaining why the vet profession charges the way it does - how our time as vets is valuable and payment is necessary for a business to operate and grow.
  - Consider the financial obligations on a broad level with considering “breaking even” vs making some profit to help to improve the clinic.

- At the end of the tutorial session, each group would present their action plans to the rest of the class and there would be a discussion to address different opinions as well as compare practice types.
First year/GEP business scenarios during the simulation tutorials could initially also include personal finance scenarios to tie in with the personal finance course - based on charity/pro bono/private practice - emphasis on bills/salary/fiscal responsibilities - "life after vet school" in US, EU, or Asia.

- There might be issues with finding experienced personnel to teach region-specific living costs in the university - use education counsellors as mentioned above or make it self-research for the smaller regions.
- There are numerous resources available from SAVMA, VIN, etc.

**Portfolio**

- A goal of this new curriculum is to make sure that our students are well-versed in business skills by the time they graduate, and this could be achieved by advocating the upkeep of an ongoing portfolio similar to the Professional and Clinical Skills portfolio. By the end of final year, the portfolio is expected to contain all the pertinent business knowledge (complying with RCVS and employer expectations) for the graduates to carry confidently into their new careers.
  - After the tutorial session, every member of each group would individually write a reflective piece on the scenario and action plan (Did it go well, or did it go poorly? How could it have been improved?) to be submitted through Turnitin (minimum 200-300 words). The grading of the reflective essays is like the grading of reflective essays on professional dilemmas the GEPs were given at the end of their ABSC CBLs – there are no right or wrong. This essay is to be included in their portfolio.

the portfolio should correlate with what the survey audience think vets ‘should know’ - people management, business skills, pricing - but the content should be critical.

- Maybe make it critical by integrating with clinical EMS?
- Portfolio will also include a business reflection from clinical EMS (see below) – What did they do well in the business aspect of the placement? What did they do poorly? What kind of business dilemmas did you see at this placement?

**Addendum to the current course content:**

- **Personal finance course for GEP students** – we found that while students on the five-year program are given a personal finance course, this is lacking for GEPs. We must take into account that not all GEP students are financially mature, despite their age. Giving this simple course to GEPs (outside of AB1, which is already intensive), with adequate reinforcement in later years and a particular emphasis on being global (meaning it would cover handling UK and US debt or taxes), would prove useful as a basis for building a healthy outlook on personal finance and thus, a basic understanding of business finance. Focus on expected salary in their field of interest and expected amount of debt coming out of school. Consider other financial obligations—taxes/ healthcare/ insurance/ cost of living/ etc and write a reflection based on this.

- **Clinical EMS**: The inclusion of business/financial assessment in clinical EMS reports (structured reflection in Pebble+) – students may be required to answer questions
such as “what business-related mishaps occurred during your placement?” or “in your opinion how can the business be run better?” in the clinical EMS reports to invite them to think more on the financial health of a practice. As mentioned above, this should be a part of the business course portfolio.

- **Sample Invoices:** used in tutorials in final year rotations which would correlate pricing/valuation of services. This supports transition of graduates into their new career by providing them with an idea of what a business invoice could look like once they start charging clients. Some practices may use automated invoices or depend on the say of the vets.

- **Lectures:** ALWAYS include the current price ranges of procedures so that students are in touch with current market valuations. Make this material as non-examinable/for your interest only unless otherwise decided by the professor.

- **Note:** More effort needs to be made to reach out to the few students who are not comfortable with charging - why do they feel this way? What is their alternative to earning money in that case? As we personally do not feel this way, we need to understand the thoughts/opinions of someone who does.

**Conclusion**

The employers of today and tomorrow are actively looking for veterinary graduates with a wide variety of knowledge, not just in clinical skills, but also in basic business management. Enhancing the employability of graduates should be the topmost priority of the veterinary school, along with ensuring that graduates are confident and comfortable with the financial decisions they make, whether they relate to the practice in which they are operating or to their personal life. Significant early efforts must be made, even from the first year of study, in establishing a strong foundation on which a basic business acumen could be cultivated, and repeated emphasis must be applied throughout the course to allow students to acclimatize themselves to the idea of income versus outcome and the moralities of charging for their services. We are hopeful that the proposed overhaul above, taken as a whole or in parts, could improve the overall outlook of students towards developing business skills.

**References**

Appendix 2

VetEd abstract

Overall theme: Todays' Learners, Tomorrows' Professionals’

Authors
Kirsty Hughes, Susan Rhind, Carolyn Morton, Jessie Paterson, Andrew Gardiner, Jane Brown

Title: Developing business together: student perspectives on a key employability mismatch in veterinary education.

Introduction
Despite business skills becoming accepted as key competencies for veterinary surgeons, there is a mismatch between what employers and graduates regard as important in business skills education and perceived competence in these areas. The R(D)SVS is currently exploring with its students their understanding of the need for business skills in veterinary practice and in the veterinary curriculum.

Methods
The initial data collection phase of the study involved 1st year and graduate entry students at Edinburgh, and first year students at Dublin as well as final year students at both schools, being invited to complete an online questionnaire which was followed up with focus groups.

Results
Preliminary data analysis from new students entering the programme show that many do not appreciate the importance of business skills for veterinary surgeons in practice. When asked how they felt about making money to sustain a business, responses mapped to 3 main categories: a small proportion were comfortable with the need to make money to run a business and support themselves; another small proportion felt unhappy about making money from animals’ ill health, whilst the largest group understood that it was a necessity but were also uneasy about it.

Discussion
Results from the surveys and focus groups, along with an audit of what is currently taught on this subject will be used as a springboard for discussions with students and staff. Students will be invited to work with staff to develop new teaching ideas and ways to engage their peers in this important topic.
Appendix 3 – VETED Poster

Developing business together: student perspectives on a key employability mismatch in veterinary education.

Kirsty Hughes, Susan Rhind, Sarah Baillie, Sue Rackard, Diane Cashman, Steph Smith, Carolyn Morton, Jessie Petterson, Andrew Gardiner, Jane Brown

Problem
Employers often rate graduate's business skills relatively low in surveys; faculty find it challenging to engage students with business skills education in the curriculum.

Methods
Surveys and focus groups were carried out with 1st years and students towards the end of the veterinary programme on a variety of aspects relating to business skills. This poster presents findings in relation to feelings about making money and how business skills should be taught.

Results
Surveys completed by 62-91 (first year, UCD and R(D)J(S)VS), n= 30 (final year, R(D)J(S)VS).
Focus groups: one first year, one later years

Across both surveys, responses to making money could be grouped into one of 3 categories: students who were totally happy with the concept, those who had some reservations and those who found it problematic.

It's necessary and I want to be certain I do earn money for my time; but it can be difficult to maintain resolve in the face of clients with financial difficulties or otherwise placing pressure to lower costs for treatment.

Sad reality

Where and how should business skills be taught?

| Encourage more lecturers to integrate it into their lectures |
| We have the 'gold-standard' treatments, but if we could be taught more on prioritisation… |
| rather than a course on managing money |

The authors are grateful to the Principal's Teaching Award scheme at the University of Edinburgh for funding this study.