Project Title: Vets at “Play”

Project type: B Innovation Project (introduction and evaluation of an educational innovation, usually taking a practical approach)

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Report (maximum 1500 words)

What did we do?
Essentially the aim of this project was to explore the use of “play” as a learning methodology within the Vet course – a course that has firm foundations in fact and theory, underpinning clinical practical and professionalism. Yet, a key part of being a Vet is focussed on using this knowledge to determine a course of action, often with the decision making process not being clear cut, and with no one correct answer (or indeed any answer at all). This is a concept students struggle to come to terms with. In addition, failure is an unfortunate part of the profession e.g. through the unexpected death of an animal in their care. Can the use of “play” provide a safe means of exploring these issues with our students and help them to start to build up strategies to help them in their working careers?

The project team developed a set of “play” scenarios using the “Kobayashi Maru” concept from Star Trek where it is impossible to win. From these we chose one based on “Zombieitis” potentially attacking the town of Roslin, the last remaining safe town. We recruited a number of then third year students to help us build up the scenario and produce something that we could pilot with a group of first year students with these same students helping us run the developed workshop. While this worked well we had very few first year students volunteer but from the small amount of feedback it was clear that this was something worth exploring further.

From this initial step, we decided to next embed this workshop within the first year Professional & Clinical Skills course as required part of the course. This was a “big leap” and in many ways a scary one for the project team. It also meant changing the setup to run with 20 participants to run with 30 and also be able to run in different rooms with four differing groups of students. Again we turned to our now fourth year students to help and they agreed in groups of three to facilitate each of the classes making this a peer-led workshop of two hours; with the final hour used by the programme team to debrief the class.
This run for the first time in November 2018 as a 3 hour class. The class was branded as “Negotiation skills” and the first year students were required to attend. The first year cohort of around 100 students was split into four groups with each group allocated its own room. Each student was given a character pack and asked to sit in small groups designated by the team. All the students in their room were given the same introduction (pre-recorded video) to the “game” and also how it would all work. The students were then left to run through the scenario under the watchful eye of the fourth year students. Members of the project team sat in each room to observe and help as required – in reality little intervention was needed by the project team with the peer students more or less running the sessions. In all the rooms it took some time for the “game” to start but once it did the first year students really engaged with the whole thing and interestingly each room went in different directions and in all cases they “failed” to save Roslin.

For the last hour the first year students as a whole year cohort attended a debrief run by the project team. This was split into 3 parts – the first part running over how the scenario had played out and explaining where they had “failed”; the second part talking about how to deal with failure; the third part playing a series of videos of current clinicians talking about their experience of failure. One of the fourth year students agreed to evaluate the project for us as her “student research component” (SRC) all students are required to do as part of the BVM&S degree. She pre-surveyed the students before the “game” started and immediately after the “game” had finished but before the debrief session. She then surveyed the students at later times to assess longer term learning.

**What did you find out?**

**Evaluation**

The evaluation of the student perspective was led by Katie Stein, one of the project’s student partners. Two paper surveys were administered to student participants before and after the session was run (n = 84, 82% response rate). In the pre-survey, students rated their communication skills, teamwork, ethical decision making, and ability to cope with failure on a 5-point Likert-like scale. In the post-survey, students were asked to rate how well they felt the scenario helped them improve their communication skills, teamwork, ethical decision making and ability to cope with failure on a 5-point Likert-like scale. Students were also asked a series of ‘yes/no’ questions regarding the operation of the scenario, whether it was clear, ran for an appropriate length of time, was stressful, enjoyable, and whether it should be used in the veterinary course. Students were also given the opportunity to comment on the scenario in the post-survey. Due to on-the-day timings, the post survey was administered prior immediately after the scenario concluded and prior to the whole-class debrief. A retention survey was delivered in the second semester via email, with only 9 respondents (10.7% response rate) which asked the same questions from the pre-survey again. KS thematically coded the comment. Additionally, Sarah Chinnery ran a focus group with the staff members involved in designing the activity, and a transcript of this was thematically coded by Stephanie Smith to explore the value of running a playful session such this one.

Four incidences of scenario were run and each scenario explored different narrative ‘outcomes’, with students pursuing different agendas. All four groups ‘failed’ in their ability to contain the zombie disease, with different ‘mistakes’ being made. The branching narrative subplots played out in different ways. For example, in one playthrough, a ‘concerned citizen’ character used the political coup subplot to become the elected Mayor, leading to an open election held in that version of the ‘town’ which was not seen in the other regions. The player’s motivation was to obtain a rare vaccine, which they were able to use their newfound Mayoral powers to do. This character role did not pursue this path in the other three groups (although in one group, the character had obtained a vaccine through another method). Players used the letter based communication system conservatively, with only some players thinking to use items like pharmaceutical leaflets to write on and send additional information to other players. Some students invented their own narratives, such as a crowd funding resource to develop more effective vaccines.
Only 25% (n = 21) students considered the scenario stressful. The majority of students felt the aims and objectives of the scenario were clearly explained (76.2%, n = 64), that the scenario itself was clearly explained (86.9%, n = 73), and that their own role was clear (82.1%, n = 69). The scenario was also considered enjoyable (91.7%, n = 77) and to have lasted for an appropriate time (77.4%, n = 65). 84.5% (n = 71) students felt the scenario should be used within the veterinary curriculum.

Most of our evaluation has been based on the findings from the SRC student project. Incidental feedback such as at the SSLC for the course indicated that the students had found the session generally fun but also a very strong learning opportunity – students talked about team working, negotiation, communication skills, etc all being built on through this class.

The data showed that most students enjoyed the class, was not too stressful and most wanted more “play” in the curriculum. The data also showed there was some things we need to work on for the future like better clarity around the game and the roles but generally the feelings were very positive. One quote from later reflection said: “Gives a chance to learn in a more fun and interactive way, I learned more from that one class we had then half my lectures if I hadn’t studied. Making learning fun increases likelihood of people remembering and enjoying the course they take. Majorly helps with the usual learning high intensity vetmed stress too”.

From this we have now embedded the class within the curriculum as a peer-led class. We are working on the issue raised and also surfaced more “failure” which was rather lost in the initial running of the class.

How did you disseminate your findings?
We have presented at a number of conferences (national & international). All have been co-presented with a few of our 4th year students except those marked with a *:
*University of Edinburgh Medical Educators Forum – 11th April 2019
University of Edinburgh Learning & Teaching conference – 19th June 2019
VetED 2019, RVC – 3-5th July 2019
Playful Learning, University of Leicester – 10-12th July 2019
*18th Biennial EARLI Conference, Aachen University, Germany – 12-16th August 2019
* University of Glasgow Psychology for Pedagogy Group April 2020

Article in Teaching Matters - [https://www.teaching-matters-blog.ed.ac.uk/co-creating-a-zombie-apocalypse-learning-how-to-deal-with-failure-through-play/](https://www.teaching-matters-blog.ed.ac.uk/co-creating-a-zombie-apocalypse-learning-how-to-deal-with-failure-through-play/)

A paper is being prepared for Journal of Play in Adulthood, based off of the work presented at the Playful Learning Conference

What have been the benefits to student learning?
Our evaluation data has indicated that this had a significant impact on student learning but at this early stage we are not able to assess the long-term impact. Our thoughts are that this method of teaching shows open interesting methods of exploring learning not only for the participants in the game but also for the peer students involved in running and facilitating the sessions. We plan to continue running the class and exploring the impact in the years to come.

How could these benefits be extended to other parts of the university?
The model we have developed is highly cross-transferable across all disciplines and indeed at our internal dissemination events we have had a number of colleagues interested in exploring this further. We plan to release the scenario under Creative Commons and meantime are happy to share with anyone interested.