

Investigating and adapting the student interactions and student activating teaching methods of the course ‘Veterinær retsmedicin og dyrevelfærdsvurdering’

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My motivation to work on the course of Veterinary jurisprudence and Animal Welfare Assessment is mainly because the evaluation of this course in the last years was ‘improvable’, I was told, and that means there has to be a change in the course to create a more positive learning environment for the students. This course is mandatory, but is also responsible to provide very important knowledge for the future Veterinarians they need every day in their profession; in my opinion, such a course should have a constructive learning atmosphere (Course information, 2014) and room for moral discussions and development (Bebeau, 2002). Veterinarians are key players in drafting animal protection laws, supporting and guiding legislation bodies and educating and informing society in animal ethics. Whenever there are no alternatives they are responsible for animals (eg. in pharmaceutical experiments) and their humane treatment until re-homing or of the professional euthanasia. It is the responsibility of Veterinarians to investigate and support alternatives to the killing of actually healthy animals, engage and ask for the agreement of ethical committees and mind everyone to the ethical considerations about sentient beings, such as animals, that we should have as humans.

Due to the great importance of the content of the course, I would like to take the challenge and modify the course as there are some reasons (or problems I hypothesize) why it might not receive full attention by the students. First of all it is an e-learning course and I think those bare a very

challenging structure in themselves as a very important aspect of learning – the social aspect – might be missing (Insel, 2003). Students-teachers and students-students interactions are very limited by the format (Dohn, Thorsen, and Larsen, 2015) as they are not in direct and immediate communication and writing in a forum offers different possibilities as speaking in the class room. Secondly I would like to take a closer look on the student-centred and activating elements in the course that were already included and if necessary modify them to build a more motivating environment for learning and for being active and communicating students. I would therefore like to analyse how much interactions were going on in the last year, and then implement some interventions to try to improve the quality and quantity of social interactions. Finally I would like to evaluate the implementations in the sense of how frequent they were used by students and therefore quantify the student interactions in the new forums and tasks in this year.

Materials and Methods

For comparing the last year (2015) and the current year (2016) I analysed first how many interactions were in the recent 2015 course from students-to-students and students-to-teachers in the online forum in Absalon (the moodle system at KU). The threads in the discussion forum for the course members 'Diskussionforum for kursister' was regarded as place where student-student communication could take place. The folder 'Spørgsmål til undervisere vedr. Dyrevelfærdsvurdering' was regarded as teacher-student communication platform. The threads in the specific folders were counted and also the answers to the threads registered to arrive at a final number of 'interactions' (for further details see also table 15.1).

To enhance the communication between students I introduced more student activating methods of different kinds. First thing I introduced was a comment they have to write and upload in a discussion forum, phrasing one argument each of the three classical definitions of animal welfare and including the citation. This exercise corresponded with the papers they had to read for the module of the course and shall help to activate their passive knowledge from reading to build up competence on definitions of Animal Welfare by paraphrasing and categorizing. Secondly, I included an exercise where they could build up skills in learning to assess a welfare parameter which is frequently included in assessment protocols for dairy cows. They could watch a training video, try out to measure and control their results

and finally compare themselves with colleagues, which was also partly a communication possibility. To give support and scientific background they got the reference of a paper investigating the same parameter and additionally giving advice on methodology. Thirdly, I added a new discussion forum and task in the Modul 6 - Adfærdsbehov og dyrevelfærd. Here the students could describe a behaviour-sequence in animals which they think represents a stereotypy and discuss among each other's if this is in line with the descriptors they have learned and the scientific definitions. This is in addition to video-examples they can see and papers for basic understanding of the topic. See also a summary in table 15.1.

Results and Discussion

Last year (2015), there were 5 topics in total opened by students in the 'discussion forum' of which two stayed unanswered, one had only one answer, one thread had 4 answers and one 8 with several students involved. Altogether there were 12 'interactions' from student to student. All the threads were on questions of 'retsmedicin'. Teacher-student: Six threads were opened by students in the 'velfærdsvurdering' folder, of which two have no answer by a teacher, two have only one answer by a teacher and two have involvement of a second student in the answers. Altogether there were 16 'interactions' counted.

This year (2016), 3 students in total used the new interactive exercises and forums, with two students answering existing threads. Two students were asking questions to their colleagues in the students' discussion forum, with no answers so far but no student was writing in the teacher-student – forum so far. For details pls consult table 1. This means that at the moment the comparison between the year 2015 and 2016 showed a much lower participation of the students in the current year.

At the moment less than half of the 138 students have been active in (at least parts of) the course, as they can go through it from April to end of August, whenever they find the time for it.

Looking at the mandatory parts of the course, such as the QUIZZES, they have to answer before they can go to the exam, I can see that 67/76 students (Modul 2) and 81/82 students (Modul 6) still didn't answer the quiz in the 'Dyrevelfærdsvurdering' – part. Many of the students had to follow other courses during block 4 and will, most likely, go through the course in their summer break.

Table 15.1: Participation of students in the modules of ‘dyvelfærdsvurdering’ and the interactive parts (Absalon, last visited on 29/08/2016)

Modul in the course	Topic	Student activating element	Method	threads 2015	answers 2015	threads 2016	answers 2016
2 – Velfærds-vurdering og velfærdskontrol	classical definitions of animal welfare	write and present own definitions for the 3 main definitions of AW	Discussion forum	NA	NA	1	0
2 – Velfærds-vurdering og velfærdskontrol	lying down behaviour and IOR	Learn and practice how to measure the parameter with videos; present and discuss results; discover the meaning of reliability	Training presentation Training video, Data to assess, Discussion forum	NA	NA	2	6
6 - Adfærdsbehov og dyrevelfærd	stereotypy	write and present own observation of a stereotypy	Discussion forum	NA	NA	11	2
Spørgsmål til undervisere vedr. Dyrevelfærds-vurdering	Q&A with the course leader for animal welfare assessment	write a question	Discussion forum	6	9	0	0
Diskussion-forum for kursister	Q&A with other students	write a question or answer	Discussion forum	5	11	2	1
Total interactions				11	20	16	9

However, even now it can already be derived from the participation in the different parts, that the mandatory QUIZ-part is used by much more students than the voluntary TASK-part or the discussion forums that I introduced. My interpretation is that students are focusing on the obligatory parts of the course and mainly try to answer the questions correct (which they can try as often as they want). I further conclude that they work very target-orientated rather than subject or content-orientated and their main goal is to be accepted for the exam and not to practice animal welfare assessment. We could, of course, exchange this for next year: the exercises are mandatory, whereas the quizzes, with potential exam questions, are voluntary; then we might succeed in enhancing the competences and skills of our students with these exercises. Another possibility is to include the content from the exercises into the exam questions and quizzes; this might be a bit trickier as from their nature they are hard to cover by multiple choice questions. A slightly more positive assumption is of course that the students are in a phase of exploring the online-course at the moment and will intensify their studying through-out the summer and towards the exam. It is possible that they first want to gain knowledge through the materials that we provided and reading before they want to shift to the more practical and experimental part of the course. In the case of two students participating in the TASKS this could be verified as they were practicing with the QUIZ 1-5 days before they were writing in the discussion forum for the TASK.

Looking at the participation in the student-forums and the student-teacher forums, the opposite result as expected occurred: this year nearly no entries (so far). Either it was not attractive to communicate in the forums with colleagues and teachers or the questions will come later, once the students have worked more with the content and the practical parts.

I will, therefore, check all the results and forums again after the course has finished end of August to finalize my data collection and to be able to make a full comparison between the two course years and to evaluate the amount of student participation in the new TASKS and forums.

Conclusion

The low student participation in the forums, TASKS and discussions, which were implemented as improvements of social interaction in the e-learning course, make it, at the moment, hard to interpret the success of the intervention. A further analysis end of August will most likely give a clearer pic-

ture due to higher participation and progress of the students in the course in general. Furthermore we will aim at getting a form of evaluation of the new elements by the students and consider the option to have them as mandatory parts or exam questions for the next year to enhance the student activation and learning success.

References

- Bebeau, M. J. (2002). The Defining Issues Test and the Four Component Model: Contributions to professional education. *Journal of Moral Education, 31*, 271–295.
- Course information. (2014). Kursusinformation SVEK13009U Veterinær retsmedicin og dyrevelfærdsvurdering (2014/2015). English title: Veterinary Jurisprudence and Animal Welfare Assessment. Obtained on 15/04/2016. Retrieved from <http://kurser.ku.dk/course/svek13009u/2014-2015>
- Dohn, N. B., Thorsen, M., & Larsen, S. (2015). E-learning. In L. Rienecker, P. S. Jørgensen, J. Dolin, & G. H. Ingerslev (Eds.), *University teaching and learning* (1st ed.). Samfundslitteratur.
- Insel, T. R. (2003). Is social behaviour an additive disorder? *Physiology & Behaviour, 79*, 351–357.

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