

Development of a generic evaluation inventory for a new curriculum with increased self-directed learning

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Background

The Royal Veterinary College (RVC), University of London, recently implemented a new Bachelor of Veterinary Medicine (BVetMed) curriculum with a strong focus on self-directed learning. A generic evaluation inventory was developed to assess the quality of the curriculum through student perceptions.

Summary of work carried out

Using a modified version of the Delphi technique, a panel of expert stakeholders (including senior management officials, academic development staff, an educational researcher, a student support officer and student representatives) reviewed a draft inventory in two stages. Experts rated the statements on a scale of 1 (strongly disagree that items should be included) to 5 (strongly agree that item should be included).

Summary of results

Excluding statements with a mean value less than 4 resulted in an inventory with 92 items, distributed to first year students towards the end of the first term. Students rated statements on a 1 to 5 Likert type scale, where 1=Strongly Disagree and 5=Strongly Agree.

The scores for negative statements were reversed, and exploratory factor analysis of the results, using the principal components extraction method, varimax rotation, and a suppressed value less than 0.5, produced 41 statements strongly correlated with one of seven main factors:

1. directed learning classes
2. private study
3. practical classes
4. tutors and tutorials
5. learning objectives and assessment
6. timetabling
7. interactive self-assessment tools

The reliability of each scale of the evaluation inventory was measured using Cronbach's alpha coefficient, and was shown to be moderate (0.65) to high (0.85). Two representative items of each factor are shown opposite.

Conclusion

This work has resulted in the production of a user-friendly evaluation inventory for assessing students' perceptions of a new curriculum with increased self-directed learning, available to other veterinary schools and colleagues in allied disciplines. Please contact the authors for a complete version of the inventory.

Factor 1: Directed learning

- The DLs encourage me to contribute as part of a team
- Teamworking in DLs is preferable to independent study

Factor 2: Private study

- I am unsure how to utilise private study to best effect *
- There are not enough lectures *

Factor 3: Practical classes

- At practical sessions (not dissection) there are adequate staff numbers to assist me
- At dissections, facilitators are helpful in aiding my learning

Factor 4: Tutors and tutorials

- Tutors' feedback improves my understanding of the subject
- Tutorials fail to fulfil my own learning requirements *

Factor 5: Learning objectives & assessment

- Assessment methods were clearly described in the introductory lectures
- Lecturers generally provide clear signposting as to what I'm expected to do

Factor 6: Timetabling

- I know when all my classes are scheduled to take place
- I know where all my classes are scheduled to take place

Factor 7: Self-assessment (MCQs & TurningPoint)

- The feedback I receive from self-evaluation MCQs aids my learning
- The lecturers use TurningPoint in a meaningful way

* Ratings reversed