Warman, S. M., Pritchard, J., & Baillie, S. (2016). Faculty Development for a New Curriculum: Implementing a strategy for veterinary teachers within the wider University context. *Journal of Veterinary Medical Education*, 42(3), 1-7.
<https://doi.org/10.3138/jvme.1214-124R1>

Peer reviewed version

Link to published version (if available):
[10.3138/jvme.1214-124R1](https://doi.org/10.3138/jvme.1214-124R1)

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Institutional Policy

Faculty Development for a New Curriculum: implementing a strategy for veterinary teachers within the wider University context

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Abstract

Faculty development in veterinary education is receiving increasing attention internationally, and is considered of particular importance during periods of organisational or curricular change. This report outlines a faculty development strategy developed since October 2012 at the University of Bristol Veterinary School, in parallel with the development and implementation of a new curriculum. The aim of the strategy is to deliver accessible, contextual faculty development workshops for clinical and non-clinical staff involved in veterinary student training, equipping staff with the skills and support to deliver high quality teaching in a modern curriculum. In October 2014 these workshops became embedded within the new University of Bristol Continuing Professional Development (CPD) scheme, “Cultivating Research and Teaching Excellence” (CREATE), ensuring that staff have a clear and structured route to achieving formal recognition of their teaching practice as well as access to a wide range of resources to further their overall professional development. The key challenges and constraints are discussed.

Keywords: Faculty development; staff development; teaching and learning; curriculum

Introduction

Over recent decades, faculty development (or “staff”, “academic” or “educational” development as it is alternatively described) has emerged as an important field of practice within higher education

(HE), encompassing activities ranging from those designed to develop individual teacher's practice and motivation, to development of institutional policies to support excellence in teaching and learning¹. In the field of medical education faculty development has been described as "an institution-wide pursuit with the intent of professionalising the educational activities of clinical teachers, enhancing educational infrastructure, and building educational capacity for the future"². Faculty development initiatives can lead not only to improved teaching performance (and better learning outcomes for students), but can also improve staff morale as "an outward sign of the inner faith that institutions have in their workforce"³. A recent review of faculty development in veterinary education identified a paucity of literature within the veterinary context⁴.

Curricular review is a challenging time for institutions. Modern curricula in the health professions focus on improving both horizontal and vertical integration between disciplines, emphasising clinical context, and promoting interactive teaching formats^{5,6}. There is an expectation of a shift in focus from teacher-led to learner-centred approaches, with an overall aim of encouraging deep learning embedded in the context of practice⁵. These approaches can represent a major change from traditional teaching practices, and it is well established that faculty development plays a vital role in successful curricular review⁶⁻¹³.

This paper describes the faculty development strategy at a UK veterinary school, designed to support and equip staff with the skills and understanding required to embrace major curricular change. It outlines how the local veterinary school strategy became embedded within a revised University-wide faculty development scheme, and discusses the associated impact, benefits and challenges.

The Veterinary School experience: The Langford teaching and learning workshops

The University of Bristol Veterinary School is based at the University's Langford campus, some 12 miles from the main city-centre campus. The University has a 5 year veterinary programme typical of those elsewhere in the United Kingdom, with the majority of students enrolling straight from high

school education at around eighteen years of age. In 2012, the Veterinary School undertook a major curriculum review, embracing the principles of a modern professional programme^{5,6}. The revised curriculum was put in place for the Year 1 intake in 2013; the final (fifth) year of the programme was restructured concurrently as it was not considered appropriate to delay this for a further five years. The new curriculum has a focus on horizontal integration, with basic science disciplines aligned under systems-based elements and clinical disciplines aligned by system and species where possible. Vertical integration is emphasised with the clinical relevance of basic sciences articulated to the students from Year 1, using live anatomy and case-based learning to motivate and contextualise learning. Vertical themes crossing all 5 years include Professional Studies, Veterinary Public Health, Evidence-Based Veterinary Medicine, and practical and clinical skills. There has been a reduction in content by identifying unnecessary repetition and a focus on relevance to Day One competences¹⁴, and a move from teacher-led to learner-centred approaches. There is increased emphasis on lifelong and independent learning skills and professionalism, and yearly plenary sessions on career options as well as increased student choice in selection of final year clinical rotations. Assessment practices across the programme have been extensively modernised. For example in the final year of the program, an assessment strategy has been developed that incorporates formative feedback during rotations (with a “must pass” requirement for each rotation), assessment of practical skills through the use of Directly Observed Procedural Skills (DOPS)¹⁵, coursework, and final computer-based examinations comprising single-best answer multiple choice questions. Throughout the curriculum review process, a collaborative approach was taken, involving student, recent graduate and employer consultation, as well as ensuring that faculty from throughout the school were involved in the design and decision-making processes^{8,12}.

In parallel with the curricular review process, it became clear that there was a need for significant staff training but a relative lack of accessible faculty development opportunities, particularly for clinical staff. Some staff had undertaken teaching and learning courses organised centrally by the University of Bristol, leading to a Post-Graduate Certificate in Higher Education (PGCert HE) and

Fellowship of the Higher Education Academy (<https://www.heacademy.ac.uk/>), a nationally-recognised benchmark of teaching excellence. Whilst inter-professional education, a feature of these centrally-run courses, can be a positive feature of staff development workshops^{2, 10}, the perceived lack of clinical context and the geographical location of the courses (12 miles distant to the Veterinary School campus) meant that engagement with and attendance at these workshops was not optimised. Additionally, results from the National Student Survey (a nationally-run survey of all UK students in the final year of their degree programme^a) indicated that student satisfaction with assessment and feedback during the veterinary programme was unacceptably low. There was a need for local delivery of faculty development workshops that focussed on teaching in the clinical veterinary environment, as well as addressing the need for training in new assessment methods and more learner-centred approaches to teaching throughout the curriculum.

In common with the faculty development needs recognised in other professional contexts^{10, 16-18}, seven workshops were introduced over the following two years; an overview of the workshops, linked to training needs identified by curriculum review, is provided in Table 1.

INSERT TABLE 1 HERE

During the 2012-13 academic year, workshops 1, 2 and 3 were considered key training for staff involved in the delivery of the new Final Year curriculum. As such, senior management made it clear that attendance was expected (especially for any staff without a teaching qualification), and these workshops were held twice as evening sessions, and additionally in an abbreviated form as a lunchtime session. Other workshops were held during normal working hours. The workshops continue to be run regularly, usually on a twice-yearly basis. All staff within the school are also required to engage in peer review of teaching, both as observer and as an observed instructor.

The workshops were led primarily by two of the authors (SW and SB), both of whom had extensive experience of teaching in the clinical environment although one (SW) had no prior experience of facilitating faculty development workshops. Other colleagues provided input to some of the

workshops (see acknowledgements). Workshop 3 was initially led by a colleague from another School (Dr Catriona Bell; University of Edinburgh), who kindly gave permission for her material to continue to be used internally in future workshops. Workshop 5 was also run for pre-clinical teachers on the veterinary, medical and dental programmes. After the first iteration of the series, certain changes including the improved feedback culture in clinics ¹⁹ and changes in assessment processes led to staff reporting that conversations with students relating to professional behaviour were proving more challenging than anticipated. This led to the development of Workshop 7, co-facilitated by a clinician (SW) and a clinical psychologist (Dr Annie Moreland). Each workshop was supported by handouts of the slide presentations and key articles, and used a variety of teaching approaches including buzz groups, videos and role play. Further reading material was made available on the School's virtual learning environment, and a feedback form was handed out at the end of each workshop. Examples of selected workshop resources are available from the authors upon request.

Attendance figures and evaluation of the first year of the programme are summarised in Table 2. Forty of 58 clinical faculty, 28 of 34 interns/residents, and eighteen veterinary technicians participated in the workshops. Forty people attended a single workshop, 14 people attended 2, 22 people attended 3, and 8 people attended all 4 workshops. Of the faculty members who did not participate in the workshops most already held, or were working towards, a Post-Graduate Certificate in Higher Education (PGCertHE) run by the University.

INSERT TABLE 2 HERE

Evaluation data was collected at each workshop. Participants completed a paper form to indicate their level of agreement (on a 5 point scale: strongly agree, agree, neutral, disagree and strongly disagree) with statements relating to the usefulness of individual components of the workshop, and how enjoyable the workshop was overall. This form also asked participants to note the most interesting and least useful aspects of each workshop, and to provide ideas for future workshops.

Overall, during the first year of the programme, 89.5% of participants agreed/strongly agreed that individual components of the workshops were useful, and 96.1% of participants agreed/strongly agreed that the workshops were enjoyable. Further detail is provided in Table 2.

Contemporaneously with the training of staff via the workshop series, the National Student Survey (a major national survey which is widely used to inform media league tables and rankings of courses between UK Universities^a) indicated a marked improvement in the scores for student satisfaction with assessment and feedback in the Veterinary programme (from 51% in 2012, to 64% in 2013 (64%)¹⁹ and 2014 (71%)^b. Whilst a direct link cannot be easily demonstrated, we feel that staff development is likely to have played a key part in this improvement. We have previously reported on the School's strategy and initiatives for improving the feedback culture within clinics¹⁹; the feedback workshop was considered to be the most useful of these initiatives.

This series of workshops was developed over a short period of time to address an immediate academic need and was well attended and well received. The next section considers the workshops within the context of the wider professional development of faculty members, which encompasses skills beyond those required for effective teaching such as leadership and scholarship^{20, 21}.

The University Perspective: CREATE

Veterinary faculty at the University of Bristol have access to the faculty development programmes run centrally on the main campus, 12 miles from the veterinary school. Traditionally, new staff members have been required to undertake a Post-Graduate Certificate in Higher Education (PGCertHE). In October 2014, the Certificate programme was replaced with the CREATE (Cultivating Research and Teaching Excellence) continuing professional development (CPD) scheme^c, which aims to provide academics and professional service staff with opportunities to enhance their practice in the context of working in a research-intensive university. The CREATE scheme encompasses faculty development in learning and teaching, research/scholarship, and leadership and professional skills, and is designed to support staff throughout their academic career. Levels 1 and 2 are expected to

be completed within the first four years of a faculty career, and encompass attendance at a variety of core and optional workshops, a reflective portfolio, peer observations, and regular attendance at disciplinary learning group (DLG) meetings (groups of 5-8 participants from cognate disciplines, led by an experienced facilitator).

The CREATE scheme is aligned to the UK Professional Standards Framework (UKPSF)^d, a nationally recognised framework for benchmarking success within the context of teaching and learning support in higher education. The framework outlines three dimensions of professional practice as i) areas of activity undertaken by teachers and support staff; ii) core knowledge needed to carry out those activities at the appropriate level and iii) professional values that individuals performing these activities should exemplify. Alignment of the CREATE scheme within this framework has enabled the scheme to be accredited by the Higher Education Academy (HEA) so that upon successful completion of the initial two levels, faculty members are awarded Fellowship of the HEA.

During discussions between the teams responsible for the Langford teaching and learning workshops and the CREATE scheme, it became clear that there was overlap in learning outcomes between some of the workshops on the two schemes. Thus, prior to the launch of CREATE in October 2014, the Langford workshops were mapped onto the UKPSF and agreement reached that Langford workshops 1-6 would be included within, and recognised by, the CREATE scheme. Additionally, it was agreed and made clear to Langford staff that those registering for CREATE would be able to claim retrospective recognition for attendance at Langford workshops for up to three years.

Impact and benefits: overcoming challenges

The following section reflects upon the potential impact and benefits of this strategy of local workshops within a centralised faculty development scheme, by discussing the ways in which it addresses some of the recognised challenges and constraints associated with effective faculty development described in the veterinary literature⁴. Bell (2013) lists four main constraints and challenges to effective faculty development: time, access and awareness; motivation and resistance

to change; relevance, recognition and reward; and evaluating the success of a programme. Each of these areas is considered in turn, whilst also considering the contribution of our strategy within the context of curricular review.

Time, access and awareness

It is well recognised that clinical staff in particular find it difficult to prioritise attendance at educational development activities; clinical work inevitably takes priority and attempts to protect staff time are not always successful ^{16, 22}. Additionally, the economic and service implications of staffing a busy hospital are such that training events can usually only be delivered to a small cohort of faculty at any one time. The development of training courses at the Langford campus overcame the geographical issues with access. In order to overcome the time challenges, in the first year of the Langford workshops the key sessions were held on two different evenings, food and refreshments were provided, attendance was strongly encouraged by senior management , and it was emphasised that attendance would contribute towards CPD requirements. Each year the series is marketed widely on site with posters and email reminders, with participants asked to sign-up to workshops using on-line scheduling software^e. An administrator is then able to put entries in individual's online calendars^f to act as a reminder of attendance. The main challenge remains that of facilitating attendance by faculty with extensive clinical commitments; lunchtime sessions are more practical than half-day workshops and are offered as an alternative to those unable to attend the longer sessions. It is important that there is ongoing support from senior management and flexibility on the part of both facilitators and participants to optimise opportunities for engagement with teaching and learning development within the constraints of clinical demands ²².

Motivation and resistance to change

Change can be perceived as a threat, particularly when there are competing time, academic and economic pressures on busy clinical staff. It is recognised that four things are needed for change: a personal desire to change, knowledge regarding what and how to change, a supportive occupational

environment, and rewards for change^{9, 22, 23}. Whilst the process of curriculum review⁸ and the content of the workshops could address the second point, for success it was important that other requirements for change were met. Curriculum review drove major changes (particularly in assessment practices and interactive teaching techniques) which impacted on many faculty members, highlighting the need to engage with and embrace the change process at both an individual and community level. A positive culture of engagement with teaching and learning development was enhanced by the unwavering support of senior staff, many of whom attended and actively participated in the workshops, and the strong encouragement from both school and hospital management that attendance should be prioritised. The implication of the final requirement for change, reward, is discussed below.

Relevance, recognition and reward

One of our priorities was to ensure that faculty development was contextual; embedding workshops in the context of veterinary teaching and in particular clinical teaching, was essential to engagement with and effectiveness of the Langford workshops. However, it is also important that staff with wider-ranging responsibilities in e.g. assessment and curriculum development have access to a broad base of other high quality opportunities for staff development, and integrating with the CREATE scheme is key to this.

Steinert and Mann (2006) highlight the importance of a culture that recognises and rewards teaching and learning among individuals. Lack of such recognition can be a barrier to attendance at CPD workshops^{4, 10}. The launch of the CREATE scheme, with retrospective recognition of attendance at Langford workshops, gives a sense of value of staff time and engagement with the faculty development strategy. Engaging in the CREATE scheme and gaining FHEA status is a condition of appointment for staff at lecturer/senior lecturer level (or equivalent), and is a requirement for staff seeking to progress from lecturer to senior lecturer. Additionally, both the School and the University award annual prizes to individuals for excellence in teaching and learning (some of which are voted

for by students); these prizes are highly valued by staff and help foster a sense of a culture that genuinely supports development of staff in this area.

Evaluating the success of a programme

It is recognised that effective evaluation of faculty development programmes can be challenging, and there is surprisingly little evidence regarding the impact programmes can have on teaching ability, student outcomes and, eventually, patient outcomes ⁹. Recent studies have evaluated the impact of a longitudinal faculty development programme on teacher self-efficacy beliefs ²⁴, and teachers' perceptions of their competence ¹¹. As described above, (and summarised in Table 2), evaluation of the Langford workshops centres on post-workshop questionnaires relating to the usefulness of the workshop; additional evaluation was undertaken to assess the impact on the feedback culture in the clinics ¹⁹. A collaborative needs-assessment is currently being undertaken for further development of teaching and learning workshops at the University of Bristol and University of Edinburgh veterinary schools.

In conclusion: developing a community of practice

Academic developers have long been cognisant of the importance of strategies for faculty development that extend beyond training of individual faculty members. Enthusiastic, skilled individuals can have demonstrable impact at an organisational level ²⁵, but community-wide engagement is important to maximise the impact of any faculty-development initiative ^{1, 26}. Faculty development strategies should strive to develop a strong community of practice ²⁷: a community with a shared knowledge and common goal, an emphasis on relationships both internal and external, and a sense of value of the work of the community.

With this in mind, Steinert ²⁸ suggests a typology for faculty development along two continuums: from informal to formal, and from the context of the individual to that of the group, emphasising the importance of mentoring in staff development. Others consider that faculty development is

embedded in two communities of practice, the faculty development community and the workplace community; to achieve change interaction is required between 4 primary components (facilitator, participants, context and programme), and the associated processes (mentoring and coaching, relationships and networks, organisations, systems and cultures, and tasks and activities), all within the workplace ¹³.

The Langford workshops, in tandem with the development of a new curriculum, have contributed to the emergence of a community of practice amongst staff in the clinical years of the programme; we have now started to work to extend this community to include pre-clinical teachers ²⁹ as well as offer workshop-based training days to veterinary surgeons mentoring students on external placements. Staff from preclinical departments have attended Langford workshops, selected workshops (e.g. feedback, and writing MCQs) have been run for preclinical teams, and increased vertical integration within the curriculum has necessitated (and facilitated) increased collaboration amongst staff. This integrated approach has clear benefits for the staff, students and curriculum.

Whilst the Langford workshops are likely to have raised the profile of teaching and learning within the community, an acknowledged limitation of the Langford workshops was the lack of structured opportunities for ongoing reflection within a supportive peer group. There is evidence that engagement in longitudinal programmes of faculty development has advantages ^{9, 11, 24}, enhancing participants competence, self-efficacy beliefs, and opportunities for reflection. It should be expected that engagement with the CREATE scheme will create an ideal opportunity for enhancing faculty development, and further foster a community of practice within the School, enthused and dedicated to pedagogical improvement and scholarship.

Notes

^aThe NSS can be accessed at <http://www.thestudentsurvey.com/>

^bThe NSS results can be accessed at <http://unistats.direct.gov.uk/>

^cDetails about the CREATE scheme can be accessed at

<http://www.bristol.ac.uk/staffdevelopment/academic/create/>

^dThe UK Professional Standards Framework can be accessed at

<https://www.heacademy.ac.uk/professional-recognition/uk-professional-standards-framework-ukpsf>

^eDoodle scheduling software can be accessed at http://doodle.com/en_GB/

^fThe University of Bristol uses Google Calendar

Acknowledgements

The authors would like to acknowledge Professor Alistair Barr, Dr Catriona Bell, Dr Annie Moreland and Dr Pamela Murison for their contribution to the development of the Langford Teaching and Learning workshops.

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Table 1 Overview of Langford Teaching and Learning Workshops

Workshop number	Title	Duration	Significance in relation to curriculum change
1	Curriculum and Final Year overview; introduction to learning styles; constructive feedback	2.5 hours	Staff understanding of the new curriculum; need for improved formative feedback, particularly in the final year of the program
2	Teaching and assessing in clinics	2.5 hours	Restructuring of final year assessment practices
3	Small group teaching	2.5 hours	Increase in learner-centred approaches to teaching
4	Lecturing	1 hour	Increase interactivity and learner-centred approaches when teaching in large group setting
5	Writing quality multiple choice questions	2.5 hours	Modernisation of assessment practices
6	Teaching practical and clinical skills	1 hour	To equip staff with skills to teach and assess practical skills, in tandem with the opening of a new clinical skills lab (2012) and increased use of Objective Structured Clinical Examinations (OSCEs)
7	Having difficult conversations	2 hours	Need for improved formative feedback

Table 2 Evaluation data from Year 1 (2012-13) of Langford Teaching and Learning workshops

Evaluation data was collected via paper feedback forms at the end of each individual workshop.

	Workshop 1		Workshop 2		Workshop 3		Workshop 4	
Topic	Overview of Curriculum and Final Year; Introduction to Learning Styles; Feedback		Teaching and assessing in clinics		Small group teaching		Lecturing	
Number of times workshops held	3		3		2		1	
Total Attendance	62		48		32		24	
<i>Faculty</i>	25		33		25		16	
<i>Interns/residents</i>	25		10		7		5	
<i>Nurses/technicians</i>	13		6		2		3	
Number of evaluation forms received (% of participants)	53 (85.5%)		47 (97.9%)		28 (87.5%)		11 (45.8%)	
Percentage of participants agreeing that aspects of workshop content were useful (%)	Curriculum overview	84.9	Roles and qualities of a clinical teacher	93.6	Session planning	89.3	Examples of good and bad lecturing	100
	Introduction to learning styles	91.8	Strategies for clinical teaching	89.4	Encouraging individual student contribution	100	Tips for presenting	100
	Constructive feedback	90.6	Assessment in final year	85.1	Strategies for dealing with challenging students	96.4	Interaction in lectures	90.9
	Group task on feedback	75.5			Ideas for small group teaching	96.4	Use of interactive voting software	81.8
Percentage of participants agreeing that workshop was enjoyable (%)	81.1		91.5		96.4		100	