

This proforma should be used to collate information from School Annual Monitoring Summaries.

The aims of Annual Monitoring are to maintain quality and improve provision encourage reflection. The form is designed to capture a **reflective summary** of annual monitoring activity at school and subject level. Bullet list format is encouraged.

College	Medical, Veterinary & Life Sciences
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Reflection

Comment on what is working well? What needs work?

What is going well?

The reports indicated significant general satisfaction with regard to teaching performance across the three schools and noted positive feedback had been received from students (School of Veterinary Medicine, SVM) and 'national bodies' such as the National Student Survey and the Complete University Guide and the GMC (School of Medicine, SM).

The reports noted significant areas of course development; within SVM, the role out of a radically new integrated curriculum (year 1) and a new structure for year 5; within SM, both MBChB 1,2 and 3 have recently been significantly altered with provision of additional lectures, small group teaching, clinical sessions, highlighting of anatomy teaching. In each case, the changes/consolidation had gone well and had been well received by students and external examiners.

It was clear from the reports that teaching teams across the three schools are actively updating material delivered, methods of delivery and are refining assessment methods. Within the SM report, numerous benefits of the VLE and e learning resource development were noted, such as use of virtual microscopy for histology teaching, 'lift Upp' a data and electronic data management and assessment system, Mahara for portfolio creation, interactive workbooks and the innovative use of social media. The SLS report also highlighted the use of informatics to allow monitoring of grades between cohorts or between courses taken by a cohort and the ability to track degree cohorts as they progress through their degree. Additional innovative practices noted, that reflect the progressive attitude of the teaching staff within the college, included inter-professional learning between MBChB3 students and Pharmacy students (University of Strathclyde) and between nursing and medical students (SM), inclusion of exchange students (University of Queensland (SM)), a traffic light system to identify both placements that need attention and teaching excellence (SM), peer assisted learning and peer feedback (SM), review of new and existing examination questions by a multidisciplinary team (SM and SVM), use of statistical analysis on multiple short answer questions to identify discriminatory questions (SM), use of patient questionnaires to assess patient management skills (SM), special study modules that provide learning opportunities beyond the core curriculum (SM), peer observation of teaching (SM), student ambassadors at international conferences (SM).

It is worth noting that the college has initiated a Head of College Scholars List Scheme. This is a cross school initiative which brings (high scoring) students together from across all parts of the College and funds up to 10 Summer Research projects, many of which involve students from one School working with Supervisors from another or a Research Institute.

The school reports indicated active involvement with external academics with regard to course content, delivery assessment and consideration of results were deviations from 15% for both grades A and E-G were observed. It was noted that external examiners consistently commented on the high standard of courses and stated that current practice within the schools was often 'examples of use of best practice'. External examiners also commented positively on the inclusion of MCQs in assessments to increase the breadth of assessment (SM) and the opportunities provided by the viva voce to get a rounded picture, not just of an individual student or a class cohort, but of teaching and learning, particularly at final honours (School of Life Sciences, SLS) and the well written and challenging OSCEs (SM).

With regard to the SVM it was noted that there was a reduction in the number of identified concerns regarding teaching space and equipment which was attributed to investment by the school in this area.

What needs work?

Staffing was a concern noted across all schools. It was noted that course leaders need increased administrative support, with particular regard to PBL (SM), practical classes and managing assessments (SVM). Assessment management was also noted as a concern with regard to the BDS programme (SM) where a request was noted for a computerised system to enhance the organisation of final year examination part 3 OSCE. Staff workload is a concern both with regard to absolute load and equality. The staff:student ratio was noted as being of concern within SLS and a number of factors were identified that lead to this being an issue; these included insufficient numbers of staff available, a mismatch between staff expertise and teaching need and barriers to making efficient and maximum use of the discipline expertise of some research Institute staff. With regard to the later, it is noted that teaching responsibilities were supposed to have been a discussion item within the 2014 PDR process for all staff.

Attendance was noted as being a concern (SVM, Vet Biosci and SM Radiology BDS2), in SVM this was linked to poor performance in assessments and it was suggested that better access to matriculation card scanners would be beneficial as existing systems were paper based (SVM).

With regard to the AMR process the new data collection process and form were well received, however, AMR as a concept continues to attract criticism due to a perceived lack of effect. As seen later in this report deficiencies in closing the loop remain, which likely lead to this perception.

The ongoing changes to the MBChB and BVMS programmes will be continued in academic session 2014-15, within SVM it was noted that, in light of the lessons learned in 2013-14, there would be a minor rebalancing of the contribution of continual assessment and examination performance towards the final grade for the 'new' foundation phase year 1. Within the MBChB programme; additional work is still required to get over the message to students and staff that PBL is not central to the learning but one of the different modalities for delivering the curriculum; better alignment of Vocational Studies (VS) and Clinical Skills (CS) with topics in the teaching blocks; consideration of the methods and timing of assessments of MBChB1; increased student guidance on how to use the e-portfolio system. Within the BSc (Med Sci) Clinical medicine it was noted that the timing and weighting of assessments would be considered and modes of delivery of some course material reviewed and e-portfolio use developed so as to be more user friendly. Within the BDS programme, the integration of Biological and Medical Sciences (BAMS) for BDS1 will be revised and the examination questions database for the written components for BDS1 expanded. In addition to standardise the student experience with regard to mock case presentations, mock examiner induction sessions will be organised and work continues to map BDS ILOs so that they meet the requirements of the GDC. The development of Management and Leadership components within BDS5 continues.

The allocation of rooms continues to be a concern with students allocated rooms across campus for back to back lectures, or allocated unsuitable teaching spaces (SM).

While it was obvious from the reports that the VLE and e-learning is being embraced by the schools within MVLS continued work into alternative packages of delivery are needed to move with changing work place needs, for example, to encourage and facilitate guest lecturers to contribute by video link and podcasts (SM).

Good Practice

Comment on innovation? What practices should be recommended?

Course design and delivery

SVM had approached the development and delivery of the new BVMS curriculum, using a holistic approach incorporating best practice in delivery, feedback between staff and students, and assessment (including standard setting). This has resulted in a radically new teaching model for BVMS 1 with short modules (3-5 weeks) in which teaching materials are delivered around clinical cases. Each module ends with a consolidation week, in which students review materials and undertake self-directed learning activities (formative and/or summative) and present materials to their peers. During BVMS 5 the changes introduced provided flexibility to allow students to adapt the

course to meet their particular learning needs and uses a combination of assessment approaches to address key clinical skills, critical thinking and professional behaviours.

Improving communication within courses, between courses and between years = better course "alignment" (SLS)

Web based evaluation of teaching on a weekly/module basis (SVM, FP1; SM, MbChB3)

Mapping of teaching content to the electronic curriculum matrix in order to align and harmonise teaching across all years of a programme (SM, MBChB3).

Clinical attachment mentoring scheme, Foundation Year Doctors taught students practical procedures (SM, MBChB3).

iTunesU clinical skills teaching resources (SM).

Development and implementation of MCQ writing groups (SM, MBChB).

PAL to integrate learning both horizontally and vertically (SM, BDS).

On line standard setting via moodle (SM, BDS1)

Delivery of operative techniques material in clinical skills laboratory using a 'flipped learning' model (SM, BDS2)

Use of Mahara for development of reflective analysis/portfolios (SM, BN1-4; SVM BVMS1-5)

Investment in electronic data capture devices on key pieces of teaching laboratory equipment (particularly for the Biomolecular Degree Group) to modernize and streamline data capture and subsequent analysis by students (SLS).

Elective study projects promote learning and reflection relevant to many aspects of their role as health professionals including their future careers. (SM, BDS; SVM, BVMS5)

Laboratory guide to help Year 2 Veterinary Bioscience students understand how practical classes from the different courses follow a logical sequence and to address ethical concerns over the source of some material (SVM, PPD3 BSc)

Use of *wiki* to support learning (SVM, PPD3 BSc; SM, BN2; SVM, BVMS1)

More problem-solving sessions (SLS, L3 biomolecular degrees)

Stimulating creativity/imagination: e.g, the "Million Dollar Question" where students are presented with big, real-world scientific questions/challenges (SLS, Human Biology); also a "design exercise" where students design experimental strategies. (L4 Animal Biology Option)

More Interaction with primary literature and associated "open book" examinations (SLS, L4 Biomolecular degrees)

Feedback

Efficient delivery of 360 degree feedback through use of technology (SVM, EEC & Tier 1 Small Animal rotations)

Timely feedback, using digital or scanned assessments (SLS).

Provision of weekly feedback for students on their knowledge using the EVS (SM, MBSHb1)

Use of FAQ boards, MCQ-style quizzes and post-boxes for feedback via Moodle (SM, MBChB1).

Use of mail merge with mark spreadsheet to personalise assessment feedback (SVM, VPCS3 BVMS)

Providing feedback in operative classes using digital imagery (with the option of hard copy), (SM, BDS)

Turnitin as an assessment and feedback tool (SLS)

Staff development

Peer observation and compulsory revalidation training for experienced facilitators (SM, MBChB1 and 2)

Near-Peer Teaching in which FY Doctors undergo a formal training day and then plan, recruit and teach senior medical students on a selected topic (SM)

MBChB Prizes, Medals & Vivas (more than 80) - reactivated and awarded to reward excellence and re-engage senior clinical staff, who conduct the vivas (SM)

Analysis of individual examiners' marks for OSCEs and student selected components. Each examiner is sent an individual report detailing their station statistics and how this compares to other examiners and/or previous years. If the mean mark is 2 or more standard deviations from their station's mean mark then further OSCE examiner training is offered (SM).

Student performance/welfare

"Cause for concern" system to flag poorly performing students and enable early intervention (SVM, FP1 & PP5 BVMS courses)

Monitoring attendance and contacting students with repeated absence (SVM, BSc: SM, BSc (Med Sci) clin med)

Head of College Scholars List Scheme. This is a cross school initiative which brings (high scoring) students together from across all parts of the College and funds up to 10 Summer Research projects, many of which involve students from one School working with Supervisors from another or a Research Institute.

Improvement Plans

What actions are being taken forward?

SVM

- It was noted that course leaders were addressing comments raised by the external examiners, in addition to aspects of their courses identified for change by the teaching teams" because I think that this better reflects the School Summary.
- It was noted that the SVM-QA Officer would take forward the following
 - Discuss statistics relating to *examination performance* with Veterinary Bioscience and Bachelor of Veterinary Medicine and Surgery programme leaders
 - Communicate need for course leaders to discuss *course changes* with external examiners and for external examiners to be given the opportunity to review a representative sample of the *feedback given to students on their performance in assessments*
 - Ensure that course leaders and external examiners are aware of current *assessment policies* to clarify any confusion over the use of grading scales, annotation of examination scripts by markers and oral examinations
 - Chase *missing QA data*

SLS

- Addressing immediate problems with some teaching spaces (particular West Medical Building): small works

completed over the Summer to address acute problems

- Strengthening of laboratory skills training, modules being altered and new modules introduced on a reflective cycle.
- Revisions of a number of L3 courses to diversity delivery and make material more engaging, with ongoing review of student feedback and student performance planned to inform the process
- Exploration of factors influencing student choice of different honours degree streams to allow for better forward planning of resources or remedial action or both.
- Improving alignment between and within courses that originated separately but are being taken in parallel or in sequence by students. For example, Improving the preparation of L3 students (Infection and Immunity) for their honours research project in L4.
- Improving staff "ownership" of teaching blocks, particularly in L2, to drive up the quality of design and delivery.
- Quantifying student attendance across the SLS and addressing poor attendance where and when it occurs: diverse set of strategies being explored across the SLS to address the issue and to develop good practice in responding to drops in attendance.
- Scanning/digitization to streamline grading, writing and delivery of feedback to students
- Supplementing in-class teaching with more online support material (bespoke or already existing).

SM

MBChB1-5

- Introducing lecture capture for MBChB1 and 2 (already in place for MBChB3) with lecturers' consent.
- Introducing Slidepath (virtual microscopy for Histology and pathology teaching) for MBChB 1 and 2.
- Increased use of GTA facilitators to address staff issues and provide College PGR students with training and experience in teaching.
- Introduction of a summative MBChB2 MCQ examination in semester 1 and the implementation of a new "People and Illness" block.
- improving examination questions (MBChB2) to test reasoning power as well as factual recall.
- Reduction in the 9 MBChB3 student booklets which will be streamlined for the next run.
- A pilot study to investigate a new method of standard setting was undertaken for the MBChB3 OSCE (at present use borderline pass but piloting borderline regression).
- The use of the e-portfolio will be mandatory for MBChB1 and 4 next academic session with a view to rolling this out in the future.
- Transfer of teaching Material from VALE to Moodle for MBChB4.
- Further development and population of a MBChB curriculum mapping tool which allows blueprinting of ILOs to the GMC outcomes, and to basic and clinical sciences domains, with the aim of ensuring appropriate coverage.
- Introducing additional teaching material to create an online resource to support students on clinical placement for MBChB4 (online lecture series for Medicine and Surgery will be developed initially).
- Individualised domain based exam feedback – There is a proposal to develop a banking system for the written exams which would hold the mapping information i.e. which aspect of the curriculum is covered in each question. The software could be used to group questions in specific domains. A proposed system whereby this mapping data could then be merged with the data from the VALE assessment package. This would allow the generation of individualised feedback for each student.

BSc (Med Sci) Clinical Medicine

- The implementation of a working group to consider elements of the content and assessment of the Core Course.
- Consultation with appropriate individuals to identify and embed a robust method of online submission and assessment of course work.

BDS1-5

- Transfer of BDS1 histology teaching to newly appointed academic staff from Life Sciences.
- reviewing and proposing changes for the integrative teaching of BAMS within BDS1.
- Develop, check currency and standard setting of exam bank questions for BDS1 and 2 and 3 and run all standard settings for written papers and MCQ online, via Moodle.

- The BDS2 case report in restorative dentistry has been moved to BDS3 to be completed at a time when the students have had more relevant clinical experience.
- The ability for BDS2 students to both provide and receive feedback during operative classes using their personal devices via Wi-Fi is being introduced.
- increased use of Echo 360 lecture recordings (BDS2).
- Continued development of BDS4 examination blueprint to incorporate new topics in order to satisfy the General Dental Council 'Preparing for Practice' requirements.
- Further refinement of implant symposium week for BDS4.
- Ideas and plans which originate at BDS5 course team meetings level are enacted promptly e.g. development of additional SSMS in orthodontics/cleft palate, inclusion of quality management processes in management and leadership.
- Review endodontic teaching (BDS5)

BN1-4

- Combine anatomy and physiology lectures and make science lectures one hour in duration (BN1).
- Review nursing and the science subjects to ensure delivery of core knowledge, greater integration and further development of ILOs and the appropriate assessment strategy (BN2).
- Introduction of a new course Advanced Clinical Skills (BN3).
- Increase peer assessment and introduce peer learning.
- Introduce dissertation workshops for BN4 and increase IPL with medical students.
- Review the timing of the assessment in semester 2 (BN4).

Graduate Diplomas: Specialist Lymphoedema

- Exploration of available technology and usefulness to potential students, so that online developments are meaningful and accessible for our students.

Burns and Plastics Care

- Development of pre-course workbooks for all 3 courses to ensure that all students have core knowledge of the subject on which to further develop their learning. It will also facilitate learning for students who are joining the programme mid-way; those who are only undertaking one course; those who come from a non-specialised background.
- Introduce, to induction day, a session on using Moodle and Turnitin.

Closing Loops

Comment on progress made on actions identified in last annual monitoring cycle

It is evident that a number of approaches are being made with regard to 'closing the loops', some of which are passive and are often rolled into annual course development i.e. changes are introduced and are 'experienced' by the stakeholders without specific notification e.g. texting of lecture changes in response to complaints about the timing of notification of changes; changes to course delivery/assessment which benefit subsequent student cohorts but not those that initially raised the issue. In addition, there is evidence that active dissemination of information is also being undertaken e.g. posting responses to evaluations on moodle, listing changes in course information documents and verbal feedback to degree groups which are also attended by staff, and dissemination of information through the education committees and discussion at school learning and teaching and management groups. However, it was commented that this was an area where improvements could possibly be made. The difficulties being the disparate nature of the items identified requiring action (Course, School, College and University level) and the differing timescales over which these actions occur.

<p>What matters (if any) need to be brought to the College or University's attention?</p> <p>College Issues identified by schools as requiring attention at College level or which could have significant impacts at College level.</p> <p>Staffing</p> <ul style="list-style-type: none"> • Staff workload, an equitable workload model is required (SVM, SM). • Shortfalls in both academic, atypical and administrative staff (SVM, SLS). • Shortfalls in support & administrative staff with particular regard to assessment (while this could be argued to be under the auspices of the 'head of school', the development of blueprinting of assessments and an increased need for feedback systems are present across the college and would benefit from suitably qualified IT support potentially at college level (SVM, SM)). <p>HR</p> <ul style="list-style-type: none"> • The extended teaching day results in technical staff being asked to work past core hours which attracts overtime pay (SVM) • College approach to recruitment of postgraduate students as demonstrators for practical classes in order to improve availability (SVM) • Recruitment of staff from Research Institutes and other Schools within MVLS can be challenging due to competing priorities. As appointments to institutes are largely informed by research strengths, it is becoming increasingly difficult to find staff equipped to teach, for example, Physiology to undergraduate medical students (SM) • Matching staff expertise with teaching need (or visa versa) to make efficient use of time and deliver top quality research-driven teaching (SLS) • Most new Hospital Consultant staff contracts do not include teaching provision (SM) • Recognition of the diverse contribution that staff make to teaching: that diversity is not efficiently captured or rewarded (SLS) • Greater recognition for teaching in the PDR process (SVM) <p>Infrastructure</p> <ul style="list-style-type: none"> • Cochno Farm: continues to require investment and development (SVM) • Suitability of the Millport Marine Station as a teaching space (SLS) • Decay in physical spaces (e.g., West Medical Building stands out for particular attention) (SLS) • Greater support for School in managing impact of new curriculum with respect to workload, teaching space and other resources (SVM) • More teaching spaces with Echo 360 (SM) <p>Room bookings</p> <ul style="list-style-type: none"> • Room availability, appropriate size and allocation for both small and larger group teaching (SM). <p>IT</p> <ul style="list-style-type: none"> • Improved technical support for the VLE (SVM, SM) • Greater and improved wifi coverage, is required given the increased reliance on e learning to support teaching (SVM)
<p>University Issues identified by Schools as requiring attention at University level or which have significant impacts above School and College level.</p> <p>Infrastructure</p> <ul style="list-style-type: none"> • Cochno Farm: continues to require investment and development (SVM) • Provision of a regular shuttle bus between Gilmore Hill and satellite campuses, particularly Garscube. This

issue is seen as key to facilitate research and teaching links between these campuses, and to be a serious safety matter for students, particularly female students, undertaking research projects in Garscube (SVM, SLS)

Room bookings

- Allocation of examination rooms across campus makes resolution of any difficulties by staff difficult (SVM)
- Room availability, appropriate size and allocation for both small and larger group teaching (SM).
- Access required to the Western Infirmary Lecture Theatre (SM)

IT

- Deadline for finalising timetables currently coincides with a period of already heavy workload for the Undergraduate School (SVM)
- Suspension of room booking system whilst timetables are being finalised is unsatisfactory (SVM)
- VLE policy has restricted access to full Moodle and Mahara functionality, constraining innovation and ability to personalise the learning experience for students; improved VLE performance during periods of heavy use (SVM, SM, SLS)
- Technological support for the VLE (SVM, SM, SLS)
- Improving MyCampus performance & support during periods of heavy use, improving MyCampus functionality, e.g. direction of student absence notes (SVM, SM)
- Greater and improved wifi coverage, is required given the increased reliance on e learning to support teaching (SVM, SM)
- Staff would like more freedom to explore and test emerging TELT-related technologies outwith the strictures of institutional IT systems/policies (SLS).

Hot Topics

Do you have any comments on the following topics?

How would you like to see the VLE (moodle or other) develop to enhance the delivery of your courses?

- Greater VLE flexibility and user influence/control. VLE policy has restricted access to full Moodle and Mahara functionality, constraining innovation and ability to personalise the learning experience for students; improved VLE performance during periods of heavy use (SVM, SLS)
- Computer Assisted Learning (CAL): explore sharing CAL packages (and other teaching resources) by veterinary schools to avoid unnecessary duplication of effort; development of new CAL packages/re-engineering of existing to improve access; support for CAL development (SVM)
- Support and training sessions (support and academic staff) for implementation of more complex activities and advanced features (e.g. online submission and marking) or provision of job aids for these tasks (SVM, SM, SLS).
- "Articulate Storyline" recommended for creation of interactive quizzes & lectures (requires purchase) (SVM)
- Development of the VLE to support assessment (formative and summative) and coursework (SM).
- Training sessions with regard to basic functions for new staff (SM)
- Development time and / or access to individuals with appropriate expertise working with Mahara (SM, SLS).
- Use VLE for staff only activities such as creation of exam content and standard settings (SM)
- Integration of the VLE with virtual microscopy for BDS(SM).
- Integration of two way feedback using students' own devices with Moodle and the development of the VLE to enhance its facility on mobile devices (SM).
- Rolling-out of Scottish Dental Education Online (SM).
- Greater support with Adobe Connect, Big Blue Button and faster broadband (SM).

Was student attendance at your courses maintained at an acceptable level throughout the year? If not, what strategies would you employ to improve attendance?

SVM

Attendance with regard to the BSc Vet Biosci courses was noted as being low and linked to performance; a mechanism for following up students with a poor attendance record has been established but an efficient method of collecting and analysing attendance data is required.

SLS

Variable attendance particularly in the earlier years (when class sizes can be very large) and near the end of semester when examinations are looming.

All L1 and L2 classes will have attendance taken by ID card scanning in 2014-2015 to quantify (and possibly stimulate) attendance across SLS. This exercise is at considerable expense to the School.

Courses with particular attendance issues are exploring the origins and possible solutions, including considering or actually changing the teaching to make it more engaging. There are likely to be many reasons for variable attendance and a range of good practices (or range of pitfalls to avoid) are likely to emerge rather than any one all-encompassing solution.

SM

Level of attendance for MBChB and BSc did not appear to drop despite use of Echo 360. Back to back lectures were a greater source of attrition. BDS noted some attendance issues

Use of the barcode scanner was successfully piloted for MBChB and BSc and is being considered by BDS

Are there any other topics you wish to comment on?

A brief reminder to all externals just before or upon arrival at the University of the nature *and limits* of their role should help unify the decision-making process of the BoEs (SLS)

A brief reminder to course leaders that external examiners would like to be and expect to be consulted about *course changes* and should be given the opportunity to review *feedback given to students on their performance in assessments* (SVM)

There is a feeling that the criteria for placing a student in a discretionary zone are too restrictive – and can exclude students from consideration based on a single very poor performance (e.g. reading a single question incorrectly). Preponderance could also be considered in deciding discretionary zones: such a change would likely be universally welcomed and has some considerable grounding in rational argument (SLS)

The AMR process might be effective for triggering reflection at the local (course and School) level. However, the AMR process is not seen as an effective mechanism for triggering any meaningful change in the centre on issues that are controlled by the centre but that do affect our L&T design and delivery (e.g. assigning discretionary zones) (SLS)