

The aim of Annual Monitoring is to maintain quality and improve provision through identifying action that can be taken to improve future student experience.

This form should be used to capture a focused and concise reflective summary of annual monitoring activity at school and subject level. Bullet list format is encouraged.

College	Science and Engineering comprising the Schools of Chemistry; Computing Science; Engineering; Geographical and Earth Sciences; Mathematics and Statistics; Physics and Astronomy; Psychology.
---------	--

Reflection

What is working well?

All of the schools reported instances of good practice. Often these are subject specific approaches, which do not necessarily transfer well to other disciplines. In this college report, I have selected some examples from the SAMs which could have wider applicability.

- Chemistry: inclusivity initiatives for under-represented groups have been particularly successful in part as a consequence of there being a more diverse teaching team. Development of on-line pre-lab materials and auto-marking has led to enhanced feedback for students who report appreciation of the timely nature. NSS scores have increased as a consequence of personal support and attention to students as individuals.
- Computing Science: levels 1, 2 and 3 year heads have worked with student learning services to continue to benefit students who had previously failed a year or performed poorly the previous year. One member of the level 1 team won the College teaching award. Student applications have increased particularly at MSc level.
- Engineering: open-ended assessments / assignments are used to challenge students and allow better differentiation of ability within classes. A pilot study focussing on creativity was successful and will be rolled out to early year Design classes in future years. Online marking is becoming increasingly common.
- Geographical and Earth Sciences: the time and effort put in by enthusiastic and passionate staff in both areas have been very much appreciated by students. A conference style event for geography dissertation presentations met with high approval and reduced students' previous perceptions of "unfairness" in marking. The introduction of tutorial sessions in L1 earth science classes was well received by students.
- Mathematics and Statistics: a mix of assessment styles, including those in online format, has been well received in statistics classes.
- Physics and Astronomy: student feedback, particularly that the School has created a sense of community was positive in the periodic subject review report.
- Psychology: students reported a high level of satisfaction with research-led teaching. Students were also very popular about the introduction of coursework assignments and an undergraduate conference. Online marking has been adapted as experience has grown and is now being used in various forms for coursework.

What needs work?

Across the College, the large student numbers and lack of sufficient teaching administration continues to load excess burden on already overloaded academic staff.
(All Schools)

What action is being taken forward?

University / Colleges / Schools need to focus on locating / diverting funds to appoint more academic and administrative staff.

Form AM2 – College Annual Monitoring Summary - Review of Session 2017-18

<p>There is a continuing negative impact on staff workload as a consequence of Byzantine policies and processes such as room bookings, timetabling, good cause, exam provision for students with special needs and exam processing (Chemistry, CompSci, P&A)</p> <p>In particular, the 15 working day assessment and feedback turnaround system should be reviewed to ensure time for staff to give provide adequate feedback given the increasing size of student numbers, particularly for the large level 1 and 2 cohorts. There is a concern that the quality of feedback is decreasing because of this tight turnaround policy and that this lowering of quality is something that is exacerbated for staff working in shared offices and noisy environments (all schools).</p>	<p>This has been raised in previous years and is largely outwith the College control, it should be addressed centrally at University level.</p> <p>This has been raised in previous years and is largely outwith the College control, it should be addressed centrally at University level.</p> <p>Provision of staff laptops for staff to mark online in locations of their own choosing rather than shared offices would improve this.</p>
<p>Students entering direct to level 2 undergraduate, particularly from the <i>Glasgow International College</i> (GIC) struggle academically, most failing to enter honours (Chemistry, CompSci, Engineering).</p> <p>Schools also report a significant academic under-performance of taught MSc students (Chemistry, Engineering).</p>	<p>University admissions should be directed to consider oversight of applications at all levels.</p> <p>University admissions should be directed to consider oversight of applications at all levels.</p>
<p>EvaSys responses from students often include derogatory personal comments about members of staff (Engineering, P&A)</p> <p>EVASYS procedures that dictate that only the staff member delivering the course and the Head of School see the results of course evaluations means that any student dissatisfaction with teaching provision may go largely unrecognized. There is not an effective system for closing this particular loop either from a student perspective or with regards to the long-term health of the degrees we offer. (GES)</p>	<p>While it is true that comments can be removed from EvaSys surveys by administrative staff prior to sending to academic staff, the University should seek to further enhance a positive and respectful student culture alongside the “Full Stop to Bullying” programme rather than collude with a negative culture by administratively deleting or hiding inappropriate remarks from students.</p> <p>This is a repeat statement, replicated in previous years by other Schools. It was fed to the University via the various policy groups responsible but the policy remains</p>

Good Practice	
<p>What practices are innovative? (Please include a named contact for each piece of innovative practice)</p>	<p>Where, if anywhere, would you disseminate this innovative practice?</p>
<p>All of the practices previously reported in the “What is working well?” section of “Reflection” can be considered innovative.</p>	<p>CoSE, via School QO (for trickle down to other schools).</p>

Closing Loops

What progress has been made on actions identified in last annual monitoring cycle?

Action:	Progress:
Teaching accommodation inadequate for student numbers and facilities (all Schools).	This situation was previously reported on but continues to worsen. As requested in "hot topics", School QOs have provided extremely detailed feedback.
Teaching staff are (and have been) working at absolute capacity for a number of years. Increasing student numbers without new staff appointments has worsened this problem (all Schools).	This situation was previously reported on but continues to worsen.

Please reflect on any themes that you wish to report to the University

College

1. Under-staffing at all levels, academic, administrative and technical. (REPEATED)

University

1. Under-staffing at all levels, academic, administrative and technical. (REPEATED)

2. Academic mismatch for students entering direct to L2 / PGT from all areas and, additionally, Glasgow International College.

3. The anonymous questionnaire systems such as EvaSys can lead to students making derogatory and personal comments against staff. This is contrary to the University's "Full Stop to Bullying" campaign.

Hot Topics

Do you have any comments on the following topics?

1. The University has recently established a working group on teaching space refurbishment. What points, positive and negative, would you like them to be aware of?

Since this is a consultation that will have a major impact on teaching and student satisfaction for many years in the immediate future, I have included ALL additional detailed comments from all Schools below. The reason I have included this level of detail is simply because of the comment from Chemistry (which is replicated in personal discussions with other School QOs), that staff feel "unaware of project goals and few recall opportunities to feed into this process". There is a general feeling among staff that comments such as those below have been provided to the University (and associated architects) in the past but ignored; thus I am replicating them verbatim here.

One comment from Physics and Astronomy is also worth highlighting because it is replicated in the detail within the School remarks: "A "one size fits all" approach will not work and it is important to recall the specificities of some disciplines. E.g. P&A lectures benefit from extensive writing surfaces in addition to screens for projecting visual aids. (MSc)." That is, the University should consult with local staff as to requirements and then build appropriately for the end user.

Chemistry:

- We would like a clear remit and clear updates on the progress and more opportunities to liaise with the process. Most of us are unaware of project goals and plans and few recall opportunities to feed into this process. Perhaps an email with a link to a website that provides these details would help?

Computing Science:

- Students require more study space away from computers .
- The above study space should also include areas for group work.
- Many of the larger lecture venues are not suitable with limited features (e.g. just one projector and no white/back boards).
- Student numbers increased significantly in Level 2 from last year to this (from about 170 students in the L2

spreadsheet vs ~240 this year).

- The above has had consequences in areas like lab provision and has meant that the lectures have ended up in less than ideal rooms due to the space requirements.

Engineering:

- Large lecture rooms are still required, particularly for common curriculum classes in Engineering with 300-400 students. However, all lecture rooms should be able to allow students to hold discussions with other students around them (good examples were provided at the Learning & Teaching conference in March 2018).
- Rooms should be used for activities for which they were designed. (e.g. no lectures in “drawing rooms” and no tutorials in “lecture rooms”). There should be good spaces for “group” teaching and tutorial spaces that allow staff/tutors to get to students and discuss work/activities. Tutorial spaces should not be overfilled with desks to allow access to all students.
- Linking both comments above, spaces required that promote active and collaborative learning – giving the students the chance to discuss work with peers and tutors in the teaching spaces.
- Standard IT setup / control system in all rooms – generally quite good, but there are occasional rooms that have different configuration that can cause confusion. However, IT support for problems in lecture rooms is generally very good and respond to problems promptly and helpfully.
- Some rooms can be hot/stuffy and despite this being raised regularly, situation does not seem to improve (e.g. Rankine building R106 & R107).
- Soundproofing in some rooms not great and classes affected by external noise (no specific examples provided).
- All rooms should have an adequate lectern / table – enough room for laptop, lecturers notes etc.
- Multiple projectors in lecture rooms, with the ability to display *different* information (e.g. PC on one screen and visualiser on another) should be standard in all rooms. i.e. Independently controllable screens. Many staff members wish to show different information on different screens. Additionally, displaying “PowerPoint” and “whiteboard” on separate screens allowing “sketching” on the whiteboard without affecting the other screen should be possible.
- Rooms should always still include provision for “writing” e.g. a whiteboard or blackboard (not just a visualiser). This “board” should NEVER be covered by projector screens (as is often the case in current lecture spaces). Many spaces allow use of projector screen OR whiteboard but NOT both as the screen comes down in front of whiteboard in many rooms.
- Central room booking scheme is good, but often does not allow for travelling time between rooms at opposite ends of campus (e.g. Boyd Orr to James Watt)– significant time lost during semester by either having to start a class late to allow students to arrive, or finishing early to allow students sufficient travelling time.
- Hunter Halls and Bute hall are not good lecture spaces – pillars blocking view and significant echo. Similarly “older” rooms that are highly “raked” rooms are not good for interaction with students.
- Radio microphones are not always consistently available in large rooms where they are absolutely necessary. Should ensure that they are always provided with spare batteries or are fully charged. When microphones are stored with Security staff (e.g. Boyd Orr) sometimes the staff are not present at start of lecture so lecturers cannot access the microphone.
- There should be an easy, cheap way of monitoring student attendance in teaching rooms (swipe card or other)?

Geographical and Earth Sciences:

- Space is quite limited; running two tutorials in one room is not ideal. Every room where tutorials are run should have a projector. The connection computer-microscope does not work well and the software often freezes. The light is poor and the slides are difficult for the students to see and catch the details.
- There tends to be a rather limited perception of the nature of different teaching sessions, i.e. lectures and labs where the latter simply involve sitting at a desk.

Mathematics and Statistics:

- Provision of good blackboards is crucial for effective teaching of mathematics.

Form AM2 – College Annual Monitoring Summary - Review of Session 2017-18

- The new lab in this building and the refurbished labs in the Boyd Orr Building have been a big success with both staff and students. The improved layout has encouraged students to work together, particularly (but not only) for group tasks.
- We need larger lecture halls – scheduling classes of about 200 students becomes challenging.

Physics and Astronomy:

- A “one size fits all” approach will not work and it is important to recall the specificities of some disciplines. E.g. P&A lectures benefit from extensive writing surfaces in addition to screens for projecting visual aids. (MSc).

Psychology:

- Teaching has developed significantly in both our UG and PGT programs and we are working hard to structure our existing space to facilitate these innovations as well as our growing numbers.
- Positive:
 - We are consulting with staff and students on space and equipment needs while investing time and adapting current provision as much as possible to meet the needs of group work, independent learning, community and innovative teaching practices using open access materials and an open science philosophy
 - We have moved our lecture times from 9am and 5pm to 9am and 1pm in response to staff and student feedback and to bring our teaching in line with the University’s Carer’s policy. This was possible through collaboration with Biology, Chemistry and our Business Partners in Estates and Buildings.
 - This is a welcome development and I am looking forward to working with them on how best to use our physical space to support our students skill and knowledge development through our innovative teaching practices while supporting large, diverse classes while creating community and enabling ownership of learning.
- Negative:
 - We are working in space, especially in our practical teaching, that is poorly lit, poorly ventilated, has constant building work being carried out adapting a facility that is out of date and does not reflect the stature of our teaching, research or our staff and students. The University has not kept abreast of teaching developments by consulting the front line staff and their requirements to reflect their support of our future world changers.
 - From an outside view of teaching space refurbishment at the Boyd Orr, progress has been slow and decisions on things are done when convenient for the University and not for Teaching.

2. To what extent do the courses/programmes that you teach on use online marking and what has been your experience of this?

Extensive use of online marking has been made in all Schools as reported in the “Reflection” box. This has generally been an extremely positive experience for both staff and students. However, most Schools also report significant problems using the University mandated format of the 22 point scale in the Moodle Gradebook function. In addition, there is a general feeling that Moodle itself is not ideal for online assignments, the interface is not easy or intuitive (for both staff and students) and there is a latency and error production in terms of file conversion for display of student work. There is a willingness from staff to attempt to use more online assessments, but many have found Moodle the biggest hurdle to implementing these (or it has put them off completely).

3. Are there any other topics you wish to comment on?

As College QO, I would like to note a high turnaround in staff at the School QO level; it is difficult to achieve continuity and loop-closing within the Schools, let alone at a College level, when a person sits in a role often times for only a single year. There is also a disconnect in the hierarchy of the School and College roles for quality assurance. A School QO reports to their Head of School and the College QO reports to their Head of College. If the School QO does not complete the QO tasks assigned to them (the School ACM report, for example) the College QO has no power to intervene, enhance or, indeed, simply “fix”. This is problematic in terms of the University maintaining oversight of quality assurance as a whole institution.