Before completing this report please refer to:

Guidance on Completion and Submission of Annual Monitoring Reports.

Code of Practice on the Annual Monitoring Process.

A College Annual Monitoring Summary (CAMS) should be completed for all provision within a College following receipt of School Annual Monitoring Summaries (SAMS) from School Quality Officers.

Colleges should compile a full CAMS for from the undergraduate SAMS and an addendum detailing any further information that specifically relating to postgraduate provision.

Factual Data

Please describe the methods used to produce this report *(eg School Annual Monitoring Summaries (SAMS), consultations with School Quality Officers (SQOs), sampling of course and programme AMRs, reference to minutes of meetings, College Learning & Teaching Plan and Learning & Teaching Strategy, correlations with internal and external student experience surveys, discussions at relevant committees etc)*

The schools in the College of Science and Engineering (COSE) are Chemistry, Computing Science, Engineering, Geographical and Earth Sciences (GES), Mathematics and Statistics, Physics and Astronomy, and Psychology. This report was compiled mainly from the available SAMS, supplemented by conversations (face to face, phone and email) with the school quality officers, many of whom experienced difficulties caused by the competing demands on their time.

Please provide any contextual factors at the time of reporting *(eg University restructuring, local factors)*

During this academic year new school quality officers took over in Geographical and Earth Sciences, Maths and Statistics, and Physics and Astronomy.

Good Practice

Reflect on good practice identified through Annual Monitoring, including examples that might be disseminated to School, College, wider University. This may include good practice on teaching, learning or assessment, student support, contribution of support staff.

(Bullet points will suffice; please note the name of the School and the name of the staff member who can be contacted to provide further information)

Since two of the SAMs are not yet available and another is a draft document, a complete list of good practice will be compiled later. Below is a representative selection of examples of good practice put forward by the schools.

Computing Science

It was noted that the students really respond to staff enthusiasm about their subject. This seems such a small thing, yet appears to have such a major impact and, as such, should come under the heading of "good practice".

Courses that require students to work in groups deliver intangible yet invaluable benefits.

A number of key processes were automated, such as project allocation and other administrative duties using a bespoke system developed in-house. This has been extremely beneficial.

Use of level 4 students as demonstrators in the labs – they have greater affinity with the students and it is a positive experience for both level 1 student and demonstrator.

Engineering

The introduction of 'mbeds' in the first year microcontroller labs was thought to be the most successful innovation of the last 10 years for the Electronics and Electrical degree programmes. Evidence for this claim was provided by student feedback, SSLC minutes and the impact on other related courses.

Mechanical Engineering piloted the use of online video lectures, with supporting tuition provided during lecture slots. Students responded well to this initiative, and further expansion is being encouraged.

Since the introduction of the new ACM process in session 2010-11 there has been very active staff engagement as a result of streamlining of the administrative overhead and increased focus on the core area of course review through ACM meetings at discipline (subject) level. Staff have reacted positively to the requirement to contribute to this process through attendance at the meetings and providing responses to course related issues raised. Staff have also engaged positively with the Evasys pilot.

Physics and Astronomy

School-sponsored activities ranging from education visits to off-campus facilities, class trips for the astronomers and social lunches in the Kelvin Building improve team-building and enhance social integration within the class. These have had a positive effect on student retention and staff-student relations.

Psychology

Class integration and a strong feeling of identity are promoted strongly in the first days and weeks through a level 3 class social event on Registration Day and a residential event for which the class must prepare in small groups over the first half of Semester 1. Feedback from this is impressively strong.

Reflection

Engaging and Supporting Students in their Learning

Please evaluate the effectiveness of the mechanisms used for obtaining and responding to feedback from students (e.g. questionnaires, Staff-Student Liaison Committees (SSLCs), Moodle quiz)

Staff-Student Liaison Committees, SSLCs, have proved to be the most effective organised method for students to report problems and for staff to bring issues to the attention of students. In particular the number of students in Physics and Astronomy has shown sustained growth and in consequence they have 2 SSLCs – one for years 1 and 2 and another for years 3,4 and 5. The largest school in the college, Engineering, has separate SSLCs for each of its 5 separate teaching disciplines. The key attribute seems to be that the students on the SSLC should be either a cohesive group from a degree programme or from selected years within a degree programme.

Several SAMS mentioned the importance of informal small group interactions, with staff citing them as a valuable alternative channel for feedback.

Equality and Diversity

Please comment on any Equality and Diversity issues identified in Annual Monitoring and how they will be/have been addressed. For example, where there is a policy or other issue that requires attentions.

The only comment in this section was made by Physics and Astronomy. They requested:
- enhanced communication between Student Disability Services and teaching staff as to what is both *reasonable* **and** *practical* in terms of adjustments to be made for individual students and
- further assistance to handle exam adjustments for students with special needs. In particular, large classes often contain multiple students requiring separate rooms from each other as well as the use of a computer and/or a scribe/reader. For class tests and, to a lesser extent, degree exams this task is left to the class head.

Closing Loops

Please comment on progress in addressing key issues from the previous session, including whether staff and students have been informed of the responses to the issues that they raised

Proposed change	Enacted/ Ongoing	Staff & students notified (Y/N)
MyCampus : poor interface, difficulty of extracting data, difficulty in generating general timetables.	Ongoing	
New Advising System : coupled with MyCampus.	Ongoing	
More teaching admin support needed : this would also be a lateral approach which would also help mitigate the effects of MyCampus.	Ongoing	
Lecture room allocation and central room bookings : schools want space of the correct size locally to foster identity.	Ongoing	
Large lecture theatres, small tutorial rooms and lecture theatre maintenance : need diverse teaching space provision.	Ongoing	

Please describe the strategy for communicating responses to issues raised in this year's Annual Monitoring Reports to staff and students

Dissemination via SSLCs. This communication seems to work satisfactorily when done at the level most closely associated with the students' degree programme i.e. at subject or discipline level rather than at school level. More should be done to inform staff of the outcomes of the Annual Monitoring Process.

Commentary on Results

Please comment on the results patterns identified in SAMS and any issues which have been noted by Subjects or External Examiners *(Please identify any deviations from the College norm which may require the attention of the College or the University)*

There were no reports of examination results which deviated markedly from the normal statistical pattern of previous years. The issues raised in relation to exams and exam mark processing were:

1. Computing Science : The examiners were puzzled by the new preponderance rule, and the confusion that seemed to result from its use. They felt that it reduced their role and that it removed the element of discretion from the process, as worded at present.

2. Computing Science : The University's requirement for preponderance to be used in exam boards, coupled with the fact that MyCampus cannot deliver this information, creates a great deal of work for year heads. Grade Book has once again been delayed, creating yet more work for schools in maintaining their own databases. The guidelines for preponderance have removed discretion from exam boards. Academics are no longer being trusted, instead being restricted to formulaic rules. We wonder why there is a need for external examiners or indeed exam boards at all. It also poses the larger question of why there is so little respect for academics' professionalism in this institution. Every year a little flexibility is taken away from us, which is demoralising.

3. Engineering : The use of preponderance in the discretionary zone proved to be controversial. Both staff and externals criticised the use of different criteria inside and outside the discretionary zone.

4. Electronics and Electrical Engineering : The externals criticised the use of the 0 to 22 scale of the code of assessment. They believed that it is mathematically unsound even if it is university policy. One external went so far as to say that he felt that its use could be successfully challenged in court.

5. Physics : The external examiners commented (not for the first time) about the lack of resolution in consolidating final marks using the 22-point scale (required by University policy) for individual assessment components. When marks for different assessment components are assigned on a percentage scale in the first place (as is common in science subjects), the blurring of final combined marks by scaling components to the 22-point scale, combining, then rounding to an integer can affect as much as 25% of the class, particularly at the lower level classes.

6. Psychology noted that examination halls were not always suitable and that there were reports of incidents when invigilators were unhelpful or noisy while carrying out their duties.

Engagement with Strategy

College Learning and Teaching Plan

Please comment on the progress made by Schools this session with the identified aspects of the College Learning & Teaching plan.

(This will require discussion with colleagues)

Topic: The College aims to encourage an international dimension to its undergraduate degree programmes both by growing modestly the number of international students studying at the Glasgow campus and by encouraging our 'local' students to study abroad during their degree programmes. Please comment briefly on both the benefits and problems which arise for your school as a consequence of this aspect of internationalisation.

Sample comments on this topic are quoted below.

Chemistry

Problems associated with students taking project placements abroad are generally staff time (and costs), e.g. academic supervisors have to visit the students on placement to monitor progress, essential if there are any local problems.

Engineering

Engineering put forward as good practice their Overseas Immersion Programme for students on the SIT degree programmes. During June/July the students visit Glasgow and undertake on the main campus an intensive summer course worth 10 credits. This has greatly benefited the students but it has inevitably put a strain on staff time and resources.

Psychology

In line with the international agenda, the School has increased its numbers of international students and strengthened the support available for students wishing to study abroad. Working jointly with the School of Education the School teaches an MSc in Psychological Studies. This is a very popular course and attracts high numbers of postgraduate students, many of whom are international.

In line with the internationalisation agenda, Psychology has an overseas mobility coordinator who maintains current overseas exchange agreements, establishes new ones, and promotes these opportunities to the students. This year we were able to double the number of places available for students to study abroad, both in Europe and further afield. The overseas mobility coordinator also serves as the visiting students' liaison to ensure a good experience for overseas visitors.

University Learning & Teaching Strategy

Summary of College and School initiatives and the progress made in the current academic session in relation to the topics that follow:

Assessment and Feedback

Examples under this category are given below. Although these all come from the one school, there were plenty examples for other schools.

Psychology

On-line weekly homework assignments were set to provide formative feedback to level 1 students. Feedback was extremely positive

In level 1, we have introduced weekly homework assignments linked to the lecture course. These were provided on-line with questions linked to the course text. This meant that students were tested on lecture topics on a regular basis. They were given feedback in exam style questions (MCQ) and directed to the relevant pages of the textbook for additional reading. This proved popular with students and many felt that it helped direct their learning and prepare better for the degree exam.

In level 3, a feedback calendar was implemented in the previous academic year and was continued in this one. This document summarises the various formal aspects of feedback that are provided to undergraduates and provides a clear timeline within which we operate, including hand-in and hand-back dates for submitted work. We have received very good comments about this and it has helped manage expectations.

In level 3, staff provided class examination feedback in class time, running through the general outcomes from the examinations and providing clarity about what they found in students' work and what improvements could be made.

In level 4, we introduced a self assessment forms and supervisor assessment forms. These are optional for students who would like feedback on various aspects of their performance which are not graded formally, but which might be helpful before entering the workplace. The self assessment form asks students to reflect on such things as their time-keeping skills, their efficiency, etc, and they have the option of asking their project supervisor to complete a very similar form. Students who took up this option, seemed to find it useful and we will continue to provide this feedback where it is requested.

Embedding Graduate Attribute development in our provision

Some representative examples, taken from two schools, are listed below.

Engineering

Graduate attributes have always been at the forefront of operations in the School of Engineering because of the requirements associated with providing accredited degrees. Such attributes are developed through, for example, individual and group project work (with associated reporting and presentation requirements), development of discipline specific specialist knowledge, awareness of legal and sustainable practice, and collaboration with industry.

Psychology

Graduate attributes are developed in our course as we encourage critical thinking, as well as developing literacy and numerical skills through the assessment procedure. In addition, this year we have included information skills training which was provided by our subject librarian who delivered workshops in our lab space. In addition we collaborated with IT services to provide workshops on EXCEL and SPSS taught in our lab space. These workshops were tailored to psychology students and attendance was strong. These workshops were open to all students from level 1 to PG.

The development of research skills in UG students has been linked with many valuable abilities, such as critical and creative thinking, and the development of graduate attributes in general. This year, considerable staff time and attention has been directed towards improving our teaching provision and support for statistics and research methods at L2, with the introduction of an extensive lab course and complementary lecture module.

Level 3 delivers a module called Professional Skills. This course continues to provide the most in-depth course on employability within the university and this provides a focus for graduate attribute awareness and development.

Improvement Plans

Managing the Learning Environment

Provide a summary of the suitability of the teaching spaces and equipment used this year, including a bullet point list of unresolved issues requiring the attention of the College or the University* *(Please give specific details of room locations, the precise nature of the problem and the remedy that you seek)*

Issue	For the attention of: (School, College, University)
Computing Science : MyCampus is not fit for purpose, and does not provide effective support for advisers of studies, year heads or administrative staff. It is making the entire institution extremely inefficient, and is frustrating staff.	University
Lack of administrative support for teaching at school level	University
Central room booking not allocating rooms suitable in capacity, location or facilities and then not responding to reasonable request for change	University
Maintenance of rooms – broken seats not fixed and temperatures being too hot or too cold.	University
Refurbishment of rooms – the opinions academics who lecture in the rooms seem to be given less weight than those who fit out the AV systems. Over-elaborate AV equipment is installed whereas one computer, projection system and a roller board would suffice for most lectures. See also the comment from Physics at the end of this list.	University
Chemistry : The expectation now that all course material should be on Moodle (and, in some cases, well before the course is taught) has a negative impact on students and staff alike. The attendance at lectures is decreasing. The level of annotating and active listening seems to be decreasing as well. Anecdotally, students are now relying very heavily on content provided on Moodle. This is to the detriment of engagement with traditional learning and support materials e.g. textbooks.	University
Physics : Developments in technology are made where appropriate to support student learning. However, we observe that many (if not most) students seem to prefer reading books and working through physics/astronomy/maths problems with pen and paper. In student lecture questionnaires last year, there were many favourable comments advocating "chalk and talk" over other methods of instruction; this is particularly true for the more advanced mathematical courses.	University
A working party was set up to consider video recording of lectures. It consisted of equal numbers of admin and academic staff and contained no representatives from COSE or MVLS. Neither of these situations seem appropriate.	University

Computing Science : The lab space for level 1 is unsuitable for innovative learning and teaching techniques. We thought we were getting a new lab in summer 2013 but this did not transpire. We feel that Computing Science should be treated differently from other schools in this respect due to this being our field, and our students need more up to date computing equipment than other fields.	College
Physics and Astronomy : Renovation of the Observatory**.** The astronomy intake has increased dramatically in the last five years and class sizes are likely to remain at this high level for the foreseeable future. The renovation of the observatory is only partially complete and a high priority should be given to renovating the remaining sections of the Observatory. This will alleviate space issues currently experienced by the large astronomy classes. We note that the partially renovated space at the Observatory provides an excellent teaching space for astronomy labs.	College
Refurbishment is given a higher priority than maintenance. Fixing what we already have should have at least the same priority as major refits.	University
Physics and Astronomy : Renovations of teaching space. Oftentimes, it appears that when teaching spaces and lecture rooms in particular are renovated, the renovation is carried out without consultation of teaching staff. Rooms appear to be set up for conference talks rather than as teaching spaces with data projectors installed and whiteboards removed or rendered impractical for use. This greatly restricts the flexibility of teaching that can be carried out in these spaces.	University

*please note: any issues which can be dealt with immediately should be reported to Estates and Buildings, IT Services or College (as appropriate)

Key themes identified in Annual Monitoring

Please highlight the key themes for opportunities for development identified through Annual Monitoring, whether, who identified the issues and any correlations with the findings of internal and external feedback mechanisms.*(Please identify the School(s) in brackets)*

Key Themes	Identified by: (Staff, Students, External Examiners)	Correlation with the findings of other internal or external feedback mechanisms? (e.g. NSS, ISB, FYSLES)
MyCampus	Staff and students	
Lack of extra administrative support for teaching **at school or subject (discipline) level**	Staff	
Devolve more authority for approving changes to courses and degree programmes to schools instead of college.	Admin and academic staff	
Engineering : The School should review the operation of the School-wide exam board, to address staff concerns of lack of involvement in the process.	Staff	
Psychology : There is increasing anxiety at the prospect of turning around marking deadlines within the specified periods. This is especially so as student numbers increase.	Staff	
GES : Having the whole school in one location would be hugely beneficial.	Staff	

External

QAA Enhancement Themes

Please comment on the prevalence of Schools' engagement with the enhancement themes and proposals for promoting wider engagement where relevant *(This will require discussion with SQOs)*

Reorganisation from departments into schools and the concurrent change from Websurf to MyCampus have restricted staff time for taking a broader view by engaging with the QAA Enhancement Themes.

Collaborative Activity (where applicable)

Please comment on any additional arrangements that Schools may have put in place to monitor and support the learning experience of students on established UK or international collaborative programmes such as joint/double (dual) award arrangements or those involving students who have articulated onto a programme or course offered by the College from a partner institution. *(This may require discussion with SQOs)*

Engineering SIT : Separate reports feed into the School of Engineering report. The first students from this degree programme graduated this year and the corresponding Computing Science students will graduate next year. As part of the normal process which occurs in the early stages of a collaborative venture, SIT was reviewed. The panel met in June and was convened by Prof. Fearn, Dean of Learning and Teaching for the College of Science and Engineering. Finalising the report has been delayed because the college admin staff working on it had to be diverted to other duties including copying with MyCampus.

Physics : The School has also seen a small increase in the number of students arriving direct to second year via the Glasgow International College (Kaplan). This has been relatively problematic because it appears that many of these students are not academically able to cope with direct entry into the second year of our degree programs. Indeed, we feel that some of the GIC students would struggle to cope academically with entry into the first year of our degree programs. With the vast majority of students from all other routes (including widening participation and other non-standard entries) managing to cope academically, we are concerned at this apparent imbalance in academic ability shown by GIC students. Similar problems had previously been reported in Engineering.

Reviews by Professional, Statutory and Regulatory Bodies (where applicable)

Please list the Subjects that have undergone professional accreditation/reaccreditation this year, including aspects of good practice and any areas of concern identified in accreditation reports submitted to the College Learning and Teaching Committee and how they will be/have been disseminated/addressed. *(This may require discussion with SQOs)*

Several disciplines within Engineering underwent accreditation this year with all being successful.

QA/QE Processes

Annual Monitoring

Please reflect on the quality of engagement with the Annual Monitoring process by Schools and proposed action, where relevant, to address any concerns

> The school quality officers approach their job with dedication when the process involves the identification of problems and dissemination of good practice. Most would like to have briefer forms which target just the core issues. As an example, Physics and Astronomy has a track record of taking the process very seriously with an excellent record in PSRs and accreditation visits. Its documentation ran to well over 100 pages and seems an unnecessarily large drain on staff time. Simpler forms, more targeted on problems, are needed; see also below.

Please comment on the SQOs' evaluation of the quality of colleagues' engagement with reflection on good practice

> Staff have enthusiasm for their subject and take the AMRs seriously. However, their affinity is with their academic discipline rather than with centrally led initiatives. Most of all, staff become disillusioned and cynical when last year's comments - particularly on MyCampus, local admin support and room bookings - all appear to have been ignored, then.
>
> Chemistry
>
> Quality is generally very good, although some staff are clearly able to spend more time on this than others. In particular, the responses from University Teachers who are also Class Heads, are often much more detailed.
>
> Physics
>
> Reflection on good practice and quality enhancement by staff continues throughout the year and does not rely on the Annual Monitoring process.
>
> Computing Science
>
> It is disheartening to raise the same issues year after year in these reports, only to have the centre not really address them. As a consequence this has turned into a chore rather than the positive experience it could be. This seems to be a one-way conversation – what we would like is some information in response – like the table above – where each of our reported issues is mentioned, together with the action taken or the reasons why it cannot or will not be addressed.

Observations on the effectiveness of the University's Annual Monitoring process and how it might be improved (including process, structure and content of AMRs, role of SQOs) *(please refer to staff comments in AMRs and SAMS)*

> Senate Office are leading a revision of the AMR forms towards a more risk based approach which will target courses or groups of courses in which problems have arisen. The School Quality Officers have a difficult role. It is doubtful if they are given much relief of duties to compensate for the time they need to spend compiling the SAMS. Another difficulty is the timing of the reports. These need to be written either during the summer break (conflicting with research time or holidays) or at the start of the next academic year when advising or responsibilities as class head are competing demands on time.
>
> Computing Science : The report is better since it is shorter than it used to be. However, it could be even shorter – just two sides of a sheet would be sufficient for academics to raise issues and report successes.
>
> Physics : Classheads report that many of the questions in the AMR form appear to be at odds with the reality of day-to-day teaching with some questions being duplicated throughout the form – a shorter, more appropriate form is requested (this request was made last year).

Periodic Subject Review (where applicable)

Please evaluate the effectiveness of arrangements for consulting with students during the preparation of Self Evaluation Reports (SERs) for Subjects undergoing Periodic Subject Review (formerly known as DPTLA) (*This will require discussion with SQOs*)

Engineering underwent a PSR during this session. The time for staff and students to comment on the SER was limited. However, Engineering is the largest school in COSE. It also consists of 4 former departments which have been amalgamated. In these circumstances preparing for this PSR was a mammoth task. Therefore, the almost entirely favourable outcome was a considerable achievement by the administrators and academics (particularly the School's Head of Teaching, Donald Ballance) who prepared the documentation and met the panel.

Quality Officers Forum

Please comment on the effectiveness of the University's Quality Officers Forum.

The meeting of the Quality Officers Forum have been enhanced by the School Quality Officers who can now attend the meetings.

Thank you very much for providing this information