UNIVERSITY OF ABERDEEN
QUALITY ASSURANCE COMMITTEE

INTERNAL TEACHING REVIEW (ITR)
SCHOOL OF ENGINEERING
Panel Visit: Tuesday 8 and Wednesday 9 October 2019

INTRODUCTION

1.1 The Internal Teaching Review (ITR) of the School of Engineering was undertaken under the University's revised ITR Process and Procedures, maintained under review by the University Committee on Teaching and Learning (UCTL). The Process and Procedures are available here: https://www.abdn.ac.uk/staffnet/teaching/internal-teaching-review-6112.php

1.2 The ITR Panel was comprised of:

Professor Kathleen Shennan	Chair, Dean for Quality Enhancement and Assurance
Dr Jason Bohan	School of Psychology Quality Assurance Committee
Dr Archie Graham	School of Education Undergraduate Committee
Dr Nigel Beacham	School of Natural and Computing Sciences Post Graduate Taught Committee
Mr Ondrej Kucerak	Vice-Chair of Education, Aberdeen University Students' Association
Dr Hugh Shercliff	External Subject Specialist, University of Cambridge
Dr Julia Race	External Subject Specialist, University of Strathclyde
Professor Brian Falzon	External Subject Specialist, Queen's University Belfast
Miss Emma Hay	Clerk, Academic Services
Mrs Morag MacRae	Assistant Clerk, Academic Services

1.3 The Panel considered the documentation provided by the School of Engineering, by way of an evidence-based Critical Analysis (CA). In addition, prior to the visits to the School, members of the Panel were provided with access to the School's Quality Assurance (QA) repository, containing the School's annual monitoring materials (Annual Course and Annual Programme Reviews (ACR and APR)), Student Course Evaluation Forms (SCEF), minutes from meetings of Staff-Student Liaison Committees (SSLC), and External Examiner Reports (EERs), as well as the minutes from various School Committees. Consideration of this documentation, along with the School's submitted CA, enabled the Panel to identify key themes for further exploration.

1.4 The Panel conducted a two-day site visit to the School where they met with a range of staff, as well as undergraduate (UG), postgraduate taught (PGT) and postgraduate research (PGR) students. This report is split into four sections:

(i) Part A gives the overall impressions of the teaching provision within the School formed from the whole ITR process;

(ii) Part B covers the quality assurance aspects arising from scrutiny of the material provided prior to the visit and the initial discussion with the Head of School (HoS) and several key members of senior staff;
(iii) Part C covers the outcome of various meetings with staff and students, focusing on a small number of themes identified during Part B. It also details the Pedagogic Partnership Session, which involved more free-form discussion; and
(iv) Part D details the School action plan which will form the basis of the one-year follow-up report.

PART A: OVERALL IMPRESSIONS

2.1 The panel were impressed with the friendly and approachable nature of the staff who participated in the review from across the School. They felt the academic staff were engaged and enthusiastic, and they believed in the teaching they delivered to students. They also valued the assistance of tutors and demonstrators and showed this via a robust training programme for all new teaching staff.

2.2 The School was commended on their proactive approach to supporting students, particularly those from widening access groups. The cross-University effort which involved Registry and support staff, as well as the Careers Service and technical staff, was praised for its effectiveness. In particular, the panel mentioned the preparedness of students for entering the Engineering industry after graduation, and the links provided by the School and the Careers Service which ensured this transition was successful. Additionally, the structure of the School Office, which enabled UG and PG staff to work together to provide a rounded and effective support system for all students, was universally commended.

2.3 The panel were pleased with the usefulness of feedback provided to students, particularly in terms of the informal feedback provided on lab work. In terms of student feedback, it was noted that there was room for further improvement to ensure that all students felt their feedback was being acted upon in an effective way. Discussion boards and Student Course Evaluation Forms were perceived as being ineffective in this effort, and more face-to-face feedback was encouraged to provide a more rounded experience.

2.4 The structure of the programme, particularly in relation to the general engineering background provided in Years 1 and 2, was received well by some students, but others expressed a desire to specialise earlier. It was suggested that this might form part of an overall curriculum review, which would also ensure that an even spread of work and clear progression between each academic year existed.

2.5 The School was highly praised for the variety of teaching provided to students, which enabled them to produce conscientious and confident graduates with great pride in their work.

PART B: QUALITY ASSURANCE

3.1 Themes for Discussion

3.1.1 The themes for focused discussion agreed with the School prior to (items (i)-(iii)) and during (items (iv)-(vi)) the visit were:

(i) **Supporting and Engaging Students,** particularly in terms of ensuring all types of student (on campus, online, articulating etc) were supported appropriately

(ii) **Closing the Feedback Loop,** by exploring the School's methods for gathering and acting upon student feedback and assessing the effectiveness of these practices

(iii) **Assessment and Teaching Practices,** specifically the examination and moderation processes and potential inconsistencies of approach across the School

(iv) **Employability**, including the role of Industry Advisory Boards

(v) **School Identity and Inclusion,** regarding the structure of the School and its course offerings

(vi) **Research,** and the associated opportunities for PGR students

3.2 Discussion Points from Initial QA Session with the Head of School and Senior Members of Staff

3.2.1 The Head of School (HoS) reported that the School had experienced a period of growth since the last ITR had been completed. Ten new strategic posts had been created and four of them had been filled, with another potential three posts to be created in the coming months. The HoS mentioned that the quantity of new staff within the School had presented some challenges, but that overall, he felt the School was at a crossroads of great opportunity.

3.2.2 A decision had been taken to diversify teaching into branches of engineering less associated with fossil fuels, both as a response to student demand and as a strategic move for the School. The HoS recognised that the School will always be rooted in the local community, but that it was important to move away from the assumption that studying engineering in Aberdeen meant a qualification in the oil and gas field.

3.2.3 The School reported an increase in PG international recruitment, with around 70% of their PGT students coming from outside the UK. There is an intention to recruit 100 students from China through a new initiative within the next three years. In terms of UG recruitment, the majority of students are from the UK (90%). The HoS was also happy to report that all programmes offered are making a profit.

3.2.4 The panel queried the support in place for students with a credit shortfall. The HoS confirmed that until recently, these students would not be permitted to progress while undertaking the MEng or BEng programmes. However, in order to align processes with other comparable institutions, students can now progress from Programme Years 1 to 2, and 3 to 4, on the MEng and BEng programmes with a shortfall of 15 credits. The non-honours, BScEng degree permits progression from Programme Years 2 to 3 with a shortfall of 30 credits. The panel members enquired about the support provided to students in such cases, and it was noted that students were able to ask their course coordinator for help should they wish to. However, as these regulations were changed very recently, it was deemed to be too early to determine whether further mechanisms ought to be put in place. The Director of Undergraduate Teaching confirmed that not many students were downgraded to the BScEng programme, but the fail rate would continue to be monitored closely.

3.2.5 The panel queried whether the School encountered any issues in co-teaching Year 5 undergraduates and MSc students. It was reported that this was difficult to determine, as the student satisfaction was surveyed jointly under one singular course code. However, they attend two separate Student Staff Liaison Committees, and no negativity was reported from either cohort towards their peers.

3.2.6 The panel congratulated the School on their recent NSS results. The PTES survey correlated with the School's NSS results in every area other than feedback, where PG students scored significantly lower than UG. The School were looking into the possible reasons behind this variance.

3.2.7 Discussion ensued surrounding courses which are problematic in terms of their assessments and related pass rates. The HoS confirmed that the process for analysing courses in any given programme should be in the related Annual Programme Review. Any course with a failure rate of 15% or higher was investigated by means of a meeting to determine the reasons behind the high fail rate (e.g. the content was too specialist). From this meeting, an action plan would be produced, and progress would be tracked to ensure the pass rate increased.

3.2.8 The panel asked the HoS to explain the strengths of the existing School structure, and to address any potential weaknesses. The HoS highlighted that, as a single subject School, there was the opportunity for increased cross-stream teaching and more opportunities for interdisciplinary postgraduate programmes within the School. It was also suggested that there was an increased sense of collegiality. One limitation noted by the HoS was that he line-managed too many staff, but the introduction of Academic Line Managers alleviated some of this pressure.

3.2.9 The group discussed the ways in which the academic leads disseminated good practice between themselves. Each academic lead is a member of a Teaching Committee and the two Directors of Teaching are members of both the UGTLC and PGTLC.; as such there is significant opportunity for discussion about and sharing of practices. Communication from these leads to other members of staff is mostly done on an informal basis and also via the annual review process. Related to this, the panel asked how workloads were managed. It was noted that flexibility of staff was key, and the fact that most staff can teach on most of the courses offered throughout Years 1 and 2 is of great importance. The School uses a workload formula to ensure an even spread of responsibility and work between staff and reports no significant changes year on year. Early career researchers have a 50% average teaching workload, which increases to a full load after three years. Those with increased workloads during the academic year do not, where possible, teach during the summer, and there is support for time off to attend conferences for those who undertake an increased proportion of class teaching.

PART C: QUALITY ENHANCEMENT; OUTCOMES OF DISCUSSIONS WITH STAFF, STUDENTS AND THE PEDAGOGIC PARTNERSHIP SESSION

4.1 Theme: Supporting and Engaging Students

4.1.1 The composition of the School Office was explained to the panel. The staff located there represented both UG and PG administration and were seated alternately throughout the office in order to share information with each other. Staff each produced a guide to their role which was used for absence cover, and a rota system was employed to man the student facing

counter. The panel were impressed with the set-up and commended the School for its rounded approach.

4.1.2 The group discussed how absence was monitored. The School employs an absence monitoring system, through which the students receive a response to their reported absence. It is useful for tracking regular absence, and any students who are absent frequently are invited for a support meeting with the Assistant School Administrative Officer (ASAO). Students who do not use the system or do not self-certify receive a C6 or C7. Any student receiving more than one C6 or C7 must meet with the School to discuss attendance issues at the end of each half-session. Small group attendance is currently monitored but the School is moving to a policy of attendance monitoring by using a QR code.

4.1.3 The panel heard that the ASAO provided extensive support for students prior to their arrival at the University. A Facebook page had been created to create a community feel between new students, which also included industry links and academic information. A quiz was organised for new Year 1 students, as well as a group photo. This was commended by the panel as an excellent initiative for promoting student support and inclusion from the outset.

4.1.4 It was identified that some student groups required increased support, such as those transferring to the university through articulation routes, summer school or clearing, as well as from widening access areas. Administrative staff explained that these "high risk" students are made visible to the relevant staff at the earliest possibly opportunity. Any potential retention-related risk cases are discussed with the retention officer, and students whose marks highlight them as a student at risk of failing are invited to meet with the ASAO. The School were proud of their open-door policy for all students, and both the SAO and ASAO had undertaken mental health and/or first aid training in order to support students in distress. Out of Hours support, such as the Big White Wall initiative, was proactively advertised to all students.

4.1.5 Staff reported that students were proactive about asking for assistance with laboratory work when required, and the panel were satisfied with safety practices employed in the labs. Each student must undertake a lab induction prior to undertaking any lab work, and a risk assessment and COSHH assessment must also be provided. Students also spoke highly of the support they received from laboratory staff.

4.1.6 It was stated that a high proportion of Engineering students engage with Student Support in comparison to other Schools. It was believed that this has been partly due to the pressure of progression, which should now be resolved with amendments as stated in Section 3.2.4. The option to downgrade to the BEng or BScEng did not seem to be familiar to students, however it was confirmed that Registry do keep in regular contact with the Engineering students, particularly those at risk of credit shortfall or failure. Pre-requisites are also problematic, in that often students are precluded from progressing due to having failed the necessary pre-requisites. Student Support suggested that such pre-requisites, and the importance thereof, should be made clear to students as early in their studies as possible. It was suggested that a note on the MyCurriculum system would be helpful, and that it should also be emphasised in the student handbook in simple, accessible terms so that students are aware from the outset of the minimum requirements for progression. When the students were asked about progression, they stated it was not a concern because they wanted to "aim high", rather than focusing on the minimum achievements required of them to pass the year. The Panel were concerned that the demoting and, often, subsequent upgrading of students between the

three UG degree options was not only confusing for students but also increased the workload for Registry and other related departments. It was queried whether this process could be simplified in order to clarify progression for students and minimise the additional work required from Professional Services staff. The changes to the Supplementary Regulations as mentioned in 3.2.4 go some way to alleviate this.

4.1.7 Students expressed dissatisfaction with the transition to their Junior Honours year. There was a notable jump in workload, and the material included in some of the courses was judged to be at too high a level for Year 3. They reported that it was common to have to miss lectures in order to revise for other parts of the course, and to have to catch up later by listening to lecture recordings, which the group unanimously felt was not sufficient for engagement with the material. The students agreed that a good work-life balance was rare once they had entered their Honours years. They also mentioned that the quantity of coursework was too large for the 10% grade weighting often allocated to it, and that the 90% examination weighting was not well received. A more even spread of grade weighting was sought to ensure a more manageable workload, while also requesting that coursework deadlines and examination dates were more evenly spaced.

4.1.8 It was generally agreed that two full years of general engineering courses before specialising, regardless of degree programme, was too long. Students expressed a desire to have the option to specialise sooner if they wished to do so, and stated that motivation to attend lectures was low for the courses which ultimately would not be useful for their specialisation at Honours level.

4.1.9 Students were generally pleased with the format of tutorials, and of the assistance and guidance given by demonstrators. It was reported that some tutorials were too big and therefore were not as effective, and hence students would like to see smaller class sizes in order to encourage participation. Some tutorial work seemed to be structured illogically, with students being set a list of questions and then being told to only do a small number of them as they had not been taught enough material to complete the work in full. Students informed the panel that Blackboard and University email were not effective means through which to communicate with classmates, and that Facebook or WhatsApp were more widely used.

4.1.10 Members of the group who were student demonstrators expressed satisfaction with the role and with the training provided. Adequate advice was given on providing feedback and pastoral care to students. However, the selection process was criticised as the positions seemed to be filled on a first-come-first-served basis, rather than on individual merit.

4.2 Theme: Closing the Feedback Loop

4.2.1 Overall, the panel felt that the School were successful in providing timeous feedback to students. Many initiatives were praised, but it seemed that students accepted there would always be great variety in the quality of provision. The panel wanted to emphasise that this should not be the case, and that the School should always be striving to improve its position by listening to students and making appropriate changes.

4.2.2 Feedback on lab work submission was very positive, particularly communications received via Blackboard. Further feedback was offered in person during office hours, which students appreciated. Communication of this kind was commended by the students, with the group

confirming that they always got detailed and helpful feedback when it was sought from academics. It was queried whether receiving a mark for weekly lab reports was necessary, or whether students would rather receive a "completion grade" with individual feedback attached. However, the student group agreed that they preferred receiving a mark because it felt like "time well spent" undertaking the work.

4.2.3 In terms of exam feedback, it was confirmed that course coordinators often provided solutions immediately after exams had finished, and that worked solutions were available from tutors if required. Course coordinators were also strongly recommended to provide overall feedback to each class about how they performed in the exam as a group. Students appreciated this information and reported it to be helpful.

4.2.4 Staff reported that all course coordinators were required to post a response to SCEFs on MyAberdeen, and that this was monitored by the School Office. The panel queried the effectiveness of SSLCs, and it seemed that students were indifferent as to whether they felt SSLCs were useful. It was generally voiced that issues should be fixed during the course itself, rather than for the next cohort as a result of an issue brought up at an SSLC meeting. There was a similar perception of a lack of action on SCEF and mini SCEF forms, which the Chairperson suggested might be resolved after the institution-wide introduction of the Course Feedback Form process for 2019/20. Additionally, students expressed a desire to complete SCEFs during class time, as this would ensure a higher participation rate and would allow for collaborative completion where appropriate.

4.2.5 It was suggested by the panel that the School should communicate changes made to each new cohort at the start of the semester, in order to effectively close the feedback loop. Students seemed to be unaware of how, or if, changes were made as a result of their input. Administrative staff confirm with academics at present that feedback has been given within the stated University timescales, and the staff were pleased to report that they were often providing feedback on lab work in much shorter times. The panel commended the fact that the School's NSS scores on assessment and feedback have improved in recent years. Face to face feedback was very positively received, and all members of the group reported that the bi-annual feedback lunch meeting with students was an effective way to address issues and provide feedback instantaneously.

4.2.6 The panel asked how staff shared good practice with each other, and it was reported that the main avenues for this were informal. A themed teaching away day was scheduled once every six months, which involved a presentation followed by breakout groups to discuss potential enhancements. A voluntary buddying system exists, and additionally some staff request to attend lectures taken by colleagues to enhance their own teaching. CAD courses were also cited as a good way to develop teaching skills. New staff were supported throughout a three-year probation period, including being assigned a mentor with whom to meet informally prior to any formal review milestones. It was confirmed that there was no requirement to complete a certificate of academic practice in order to pass probation, but the panel recommended that this be made mandatory in future.

4.3 Theme: Assessment and Teaching Practices

4.3.1 The panel queried the practice of "grade pivoting" mentioned in the critical analysis. Staff confirmed this involved the pass rate of a course or assessment being altered in instances

where a cohort of students had performed significantly better or worse than expected. It was uncommon but was sometimes used in response to situations where new teaching staff had not covered all aspects of the curriculum. In the case of borderline students, it was reported that extra marks were exceptionally awarded at examiner's meetings in cases where a worthy student would otherwise miss out on a higher classification by a small margin. Again, this was not common practice but was employed to ensure that the degree classification awarded was appropriate in all cases. The Panel felt that this was inappropriate practice, as the marks in question should have been checked and moderated prior to examiner's meetings. The Chair expressed a desire to discuss this further with the School following the conclusion of the ITR.

4.3.2 The panel heard that it was the responsibility of each individual course coordinator to set the assessments for their course, with assistance from other staff involved in delivering the material where required. A scrutineer then checked for fairness and appropriateness of the assessment, and subsequently the programme leader would act as a second scrutineer if necessary. It was recommended that this system be modified, and that the scrutineer should undertake the assessment "blind" rather than simply reading through the worked solution. It was also suggested that someone other than the main lecturer on the course should set the exam questions to ensure objectivity. Students reported an instance of an exam paper being incorrect, with a multiple-choice question which had three incorrect answers attached. This troubled the panel, who wanted assurances to be put in place to avoid any reoccurrences of such an incident.

4.3.3 The subject of exam pressure was raised by students, and it was stated that often students will select their elective courses on the basis of finding a course which has no exam component in order to alleviate pressure during the exam diet. This concerned the panel, and it was recommended that the emphasis put on examinations was revised throughout the School.

4.3.4 Final year project supervision was discussed, particularly the fact that the project supervisor was also a marker which, it was argued, could unconsciously lead to bias when grading the student. Staff reported that the projects were blind marked by an additional marker, and in instances where these two marks were outwith a 10% margin of each other, a third blind marker was found to determine a final grade. The panel suggested that the School might consider using two blind markers and having the supervisor solely award a conduct mark.

4.3.5 Postgraduate students reported some issues in selecting topics for their dissertation, particularly in the case of January start students who are limited due to undertaking the dissertation in the middle of their programme. Some students had no option but to undertake projects which did not match their interests, as they had not yet undertaken the relevant teaching when choosing their topic. The panel suggested that the provision of relevant online courses could potentially solve this problem.

4.3.6 Some students reported that there was too long an introductory period at Masters level, which encompassed at least two weeks of revision of material learned previously during undergraduate study. They expressed a desire for more specific and relevant material from the start of each course and welcomed the prospect of assignments and self-study exercises to be completed from the outset.

4.3.7 The panel were content to hear that students appreciated the recording of lectures as a tool to use after attending the teaching in person. Students also reported a notable difference in

the attendance of lectures which were recorded, while recognising that it was important to attend lectures in person in order to fully immerse oneself in the curriculum.

4.4 Theme: Employability

4.4.1 The Careers Service reported that interaction with Engineering students has been significantly enhanced in recent years. The induction sessions for Years 1, 4 and 5 are attended by the Careers Service, and they also attend a session scheduled specifically for articulating students. Specialist one-to-one CV appointments are available to Engineering students, and the career mentoring programme offers an engineering stream which saw around 60 students participating in it last year. It was reported that Engineering students were particularly keen to complete their employment profile in comparison to their peers in other Schools.

4.4.2 The University's co-curricular courses were commended, in particular the existence of the compulsory PD1001 course (Professional Skills Part 1). The fact that other courses offered project management experience, site visits and workshops with the Scottish Institute for Enterprise was universally praised, and students felt that all co-curricular courses had learning outcomes which tied to the Aberdeen Graduate Attributes. Some students reported finding employment through placement opportunities, and globally they stated that the courses they undertook at the University prepared them well for industry.

4.4.3 The group discussed the existence of Industry Advisory Boards, all of which meet once or twice each year. It was reported that there were individual Boards for each MSc programme, one overall Board for the majority of undergraduate study and a Board specific to the discipline of Petroleum Engineering. The Boards are in place to regulate the relevance of each programme and its link to industry and were reported to be effective by the staff involved. The panel suggested a reassessment of their usefulness, and whether the number of the Boards could be scaled down to avoid unnecessary duplication of work.

4.5 Theme: School Identity and Inclusion

4.5.1 The Year 1 introductory lectures were commended by students as helpful overall, particularly in terms of promoting a sense of cohesion within the School, but some students were unsure why they were compulsory as the content could be based on a branch of engineering which was irrelevant to their intended studies. They suggested that an overall checklist could be compiled for the first induction event to ascertain whether they had all the required knowledge for the start of their prescribed courses, and if so, they would not be required to attend the introductory classes.

4.5.2 The panel asked staff about online programme design and the related challenge of online student inclusion. It was reported that CAD gave seminars on the creation of online courses, which was used in conjunction with University-wide guidance on the recommended delivery model. Tutors record separate short clips through Panopto, in order to monitor student interaction with the content. Webinars are also used, as well as posting full lectures which online students can query via discussion boards. Online students reported that staff were very willing to help and were conscious of requirements specific to online study.

4.5.3 It was stated that project groups were usually created by staff, in order to ensure a balance of students in terms of capability, gender and background. This was believed to further enhance inclusion of all students.

4.6 Theme: Research

4.6.1 Postgraduate research students were very positive about their experiences. They found supervisors very supportive, and a number of them reported individual achievements such as paper co-publishing and a thesis competition victory. They also found non-academic staff to be very helpful and knowledgeable.

4.6.2 The panel queried the mentoring scheme created for research students, and it seemed to vary within the School. Some students had a mentor as well as a supervisor, but some had two supervisors and therefore felt their mentor was surplus to requirements. It was generally agreed that the role of a mentor was to assist with non-academic issues and could act as a backstop in cases where students did not mix well with their supervisor(s).

4.6.3 The monitoring process was reported to be robust, but students felt the in-School system was more effective than the University-wide procedure, from which little feedback was received. Engineering students are required to submit their work on a given date during the first year of their research, which will be reviewed and then followed up with a viva. The feedback from this process was felt to be more rounded and useful.

4.7 Pedagogic Partnership Discussion

4.7.1 The pedagogic partnership discussion backed up many of the points mentioned during the focused meetings. In addition, the group highlighted several additional points for consideration, which can be found in Appendix A. The School are invited to consider this appendix to help inform future practice.

PART D: SCHOOL ACTION PLAN

5.1 A School-wide review of the curriculum to ensure an even spread of work and clear progression between years of study. Particular attention should be given to:

a. the jump between Years 2 and 3, both in terms of content and of required skills

b. the existence of ten credit courses, which are deemed to be too demanding in terms of student workload and don't fit with wider programme structures

c. the extent of general engineering in Years 1 and 2, which is well received by some but should be optional for those who wish to specialise from the outset

5.2 A move to address the overassessment of students by:

a. decreasing the weighting given to examinations and recognising the effort put into coursework, particularly in Year 3

b. considering the project allocation timeline with a view to providing students with sufficient information to make an informed choice about their project, and to enable them to undertake preparatory work should they wish to in advance of starting their final year

c. providing online courses to January start Masters students, who begin their project work before the completion of all taught courses, to ensure they are able to undertake a project in their desired specialism

5.3 Increased quality control for the production of exams, specifically:

a. a review and strengthening of the scrutinising process to enhance its effectiveness, in part via the employment of a scrutineer who undertakes the exam blind

b. less reproduction of past exam questions

c. the creation of mock past papers for all new courses and courses for which the assessment and/or examination weighting/format has been changed

5.4 More effective recruitment of demonstrators

5.5 Improved mechanisms for providing and acting upon feedback, particularly:

a. by using face-to-face feedback practices with students, rather than using forms and discussion boards with which they do not engage

b. by highlighting changes made as a result of previous feedback (You Said, We Did)

c. by providing formal settings in which staff can share good practice effectively

5.6 Clarification of regulations and related requirements of students in order to minimise stress felt by those who have failed to achieve all the necessary credits in any given year

5.7 A requirement for all new teaching staff to have completed the PG Certificate in Higher Education Learning and Teaching by the end of their probation

Appendix A – Pedagogic Partnership Session feedback

STAFF	What are we doing well?	Responses from students	
QA issues			
Supporting (and engaging) students	Supporting student engineering societies	Involve societies in exam reviews through older students who have already completed the courses in question	Come and get involved, suggest projects to us
	Checking that students can follow the course well and if any aspects should be explained		
	We try to listen to our students	More office hours available would give you a chance to get subjective opinions on material	
Closing the Feedback Loop	Feedback (individual reports, class tests etc)	General feedback ok, however more specific individual feedback needed	
	Feedback review at staff meetings	But how effectively is this feedback reaching students afterwards?	
	Midterm lunches with discipline students		
Assessment and Teaching Practices	Rigorous exam/assessment process		
	Teaching practically	Not enough across the board	
	Multiple choice question exams in UG Levels 1 and 2		
	Effort in preparing materials and methods	Good effort from some, very varied across courses. Not a lot of revised teaching material	
	Two-hour exams	Prefer longer exams with more difficult questions, as speed of work/writing does not equal understanding of subject	
Employability	Erasmus/study abroad, very healthy for Chemical Eng.	More promotion needed	
	Lots of experience provided		
	Industry lectures and interaction	Agreed, however industry lectures sound like sales pitches	
School Identity and Inclusion	Streamlining staff support - academics have very good support from support staff		
Research	Robust assessment process for PhD		

STAFF	What can we improve?	Responses from students	
QA issues	Teaching allocation more in accordance with academic expertise		
	Consider level 1 and 2 grades in degree classification	20%?	
	Transparency of grade/degree calculations	Auto-calculated estimated GPA on StudentHub please!	
	Need clear process in classification of PGT degrees		
Supporting (and engaging) students	Recording lectures		
	The PGT online student experience/engagement	What about streaming lectures live for students that don't attend?	
	More depth in core subjects underpinning science		
	Student engagement	Engagement can also be digital. Have you checked how many students watch recorded lectures? Maybe live streaming would work?	
	More support and resources for PGR students (equipment, general facilities etc)	Agreed	
	Bridge the gap between 2nd and 3rd year	Agreed, the jump can be very tough at times!	
Closing the Feedback Loop	Adhere to exam paper/mark submission deadlines		
	Student access to feedback and grades	Much appreciated and happy to see you also think this is necessary	Nice to have generalised exam/coursework feedback (done by some lecturers)
Assessment and Teaching Practices	Increase teaching period to 12 weeks (old system)	Agreed - takes some pressure off students	
	Regular programme level review (all staff, not just teaching committee)		
	Demonstrator support for marking large courses (exams, lab reports)		
	Demonstrator training	Especially in terms of teaching the material	
	Number of demonstrators	Poor in certain courses eg Fluids. Could have more tutorial sessions instead	
	More practical work in workshops		
	More challenging questions in the high grading bands of PGT		
	Exams can be designed better by not releasing past exam papers	If this is done, you need to create more practice questions like Dr Bannerman	
	Give students a list of example exam problems	Agreed, especially if wanting to supply more challenging questions	
Employability			
School Identity and Inclusion	Presence of staff members at graduations	Agreed, students would appreciate this	
Research	Need consistent admission testing system for PGR eg interviews		
	Timely feedback on PGR research assessment	Agreed	
	More group seminars with mandatory attendance of PGR	Staff should also attend	More staff to present seminars
Other	General store where you can buy small consumables (glassware, tubing, fittings etc)		

STAFF	What should we stop doing?	Responses from students	
QA issues	Classifying degrees on Levels 3,4 and 5 only	Agreed, would increase interest and motivation, and ease the pressure of Level 3	
	Remove discretion in degree calculation		
	Taking too long to implement the workload model		
Supporting (and engaging) students			
Closing the Feedback Loop			
Assessment and Teaching Practices	Standardised system precludes creativity on setting new problems		
	Conduct marks	C6/C7 not cover this	
	Avoid/minimise releasing past exams or solutions	Preferably include exam solutions and exam hints as two different documents	Minimum of final answer should be given - how do we know if we were wrong/right?
	Reusing exam questions	Using the same question but changing which information is given would be ok	
	Teaching to the test	Then change the tests to test what you teach :)	
	Stop reducing teaching weeks	Registry need to realise that Engineering does not compare to a lot of the other Schools in the uni for difficulty levels	
	Supervisors marking theses (should only be second markers)		
	Stop the marking out of 22. Make it simpler - out of 100?	Would be more accurate and leaves more space for detail or increased grades	
	Over-assessing students	Graded assessments are beneficial although should have a higher weight for the dedicated time	
	Grade inflation		
Employability			
School Identity and Inclusion			
Research	Stop inconsistent admissions approach	?	
Other	Paper based attendance	Totally! Paper is a waste product that should be reduced in usage to the minimum	

STUDENTS	What are we doing well?	Responses from staff
QA issues		
Supporting (and engaging) students	Lecturers are approachable	Thank you! Really happy to see so many post-its
	Staff are very approachable	
	Majority of staff make themselves available for private conversations	
	Support from lab technicians and non-academic staff is very good	
	Support from staff on non-class related issues is good	
	Understanding when it comes to personal reasons for absence/late submission	
	Understanding with personal circumstances for exams/report deadlines	
	Regular meetings with supervisors regardless of whether you have made progress or not	
	Help is always given if asked for	
	Individual staff-student interaction - staff availability to student queries	
	Asking for students' opinions	
	Online courses for different things eg report writing, presentation skills	
	Lots of help available on MyAberdeen	
	Easy access to information, lecture recordings are very helpful	
	Helping engineering societies	
Closing the Feedback Loop	Feedback from staff is good	
	Address student complaints regarding teaching style and resources	
	Good opportunities for feedback on courses	
	Feedback for assessments is timely on the whole	
Assessment and Teaching Practices	Content of courses is relevant	
	Lecturers are on the whole very open to class interaction	We are here to discuss Engineering - the discussion is the best part of teaching!
	First year maths course is good to bring everyone to same level (ie those who have and haven't done Advanced Higher Maths at school)	
	Majority of lecturers are using Panopto! Really useful :)	
	Written lecture notes with gaps mean being able to write own notes in margins and keep actively involved in material	
	Recorded Matlab examples for EG3007 were helpful	
	Geomechanics (4th year Petroleum) had a great revision guide. Huge help!	
	Materials available online, such as past exam papers, exercises and bibliographies	
Employability	Global Subsea Engineering has opportunities in Australia	
	Excellent opportunities for Study Abroad (MSc Global SubSea Engineering in particular)	
	Some classes have started to go over relevance of learning material in industry	
	More email interaction (more info on events, careers etc), improvement seen over last couple of years	Will pass this to Careers :)
School Identity and Inclusion	The celebrations for graduation make you feel very good about your achievements	
	Diversity of students	
Research	Structure of reviews/assessments for PhD works well - 1st and 2nd year report plus viva	
Other	Staplers by the office are great :)	

STUDENTS	What can we improve?	Responses from staff
QA issues	A lot of variety between percentage weightings on similar continuous assessments across courses - imbalanced	Agree
	Summative assessment weighting between courses	
	Far too little weighting on continuous assessment for, at times, far too much work	
	Credit weightings of courses do not correlate with workload, especially at Level 3 and 4 (EM40JN, EM40JJ and EM40JM)	
	I feel like a 10-credit course at 4th year could easily be considered as 15 credits	Agree in some subjects - will try to revise
	Lecture worked examples are ridiculously basic compared to tutorials/exams	
	EM40JN - online tests often ask questions which aren't really in the notes, even though they should be	
	I think the first two years of general engineering should be reduced to a year or three semesters	We will bring this up to the teaching committee!
	EE1501 uses mathematical methods which are introduced in Year 2 Maths - this is poor timing for content delivery	
	Tutorial solutions not always correct	We are human :)
Supporting (and engaging) students	Not everyone knows how to access the help available on MyAberdeen	
	More assistance required when travelling abroad - visa information, application process for universities abroad	
	More promotion of opportunities such as summer projects and Erasmus	
	Workload in 3rd year could be more balanced between 2nd year and 1st year - too big a change	
	Personal tutors aren't really used	Agree - students don't come for personal tutor meetings!
	Personal tutors' interaction in student development	
	More support for computer programs such as Matlab and Latex as we are expected to work at high levels with little experience	Agree
	Matlab - Preparation for the extreme ramp up in difficulty from 2nd year to 3rd year	
	Matlab preparation in 1st and 2nd year	
	Not enough computational background knowledge in comparison to what is expected in class for Matlab, Solidworks	
	Have a reading week or catch up week. Allow students to catch up on vast workload like other Schools do	
	Office hours being regular weekly slots for each course	
Closing the Feedback Loop	Assessment process in PGR is not useful for the student, more feedback would be better	Students can approach assessors for additional feedback - roughly half the students I assess do this
	Stronger opportunities for feedback for students at course level	
	Feedback from PhD supervisors needs to be more timely	
	Feedback could be more detailed for continuous assessments - comments added for the individual rather than general feedback	Students could ask about feedback on their work in addition to the given feedback
	Not getting feedback on work from supervisors on time	
	Need more formal process for PhD students to feed back comments/assessment of their supervisors	
	Exam season - release of results is very often much later than other Schools and in general after the release deadline	We follow the University calendar
	Responding to SCEF complaints	We respond to general or often raised comments. Some individual comments contradict each other
	SCEF form distribution methods	
	Get more opinions through SCEFs by making them compulsory when logging into MyAberdeen	
	Consider having a process where 3rd/4th year PhD students could feed back their experiences to new starts	

STUDENTS	What can we improve?	Responses from staff
Assessment and Teaching Practices	Potential for more communication between courses (eg coursework deadlines)	Agree
	Communication between course coordinators as to amount expected at any given time - find assessments due on same dates which are all very large, especially in 3rd year	We are doing this, there's a lot of constraints to satisfy
	Continuous assessment weighting overall grade could be increased to motivate student involvement	
	Better use of lecture aids, such as interactive boards, input on PCs (e-pens) and visualisers	
	Some subject lecturers do not release past-paper solutions	Exam papers are to show the structure/format of the test
	Sample papers to be provided if structure/lecture changes ie environmental engineering	
	December exam diet revision time is inadequate	Agree
	4th year thesis timing - winter report over holidays, and turnover between hand in deadline and exams in April	
	Level 4 - would be very nice if dissertation was concentrated in one term and not on top of four other courses	We generally agree, some projects have long lead-in times but if allocation is done in September this can be planned for
	More practical work	Agree
	More practical exposure (site visits, lab work etc)	
	It is good that the courses are continually improving but they sometimes swing too far the other way	
	Full lecture materials that are very detailed should be provided, slides of shortened notes are not enough unless very specific	
	EG2004 Fluid Mechanics and thermodynamics are two VERY different subjects and teaching both together in a single semester makes content too tight	A new Level 2 (on the way) does split this but it takes years to deploy it
	Tutorial consistent linear format - progressing with topic/course	
	Tutorial interaction to complement lecture	
	Demonstrator-student ratio for whole class tutorials needs addressed	
	Tutorial sessions need to be split for bigger classes	
Employability	More guidance as to finding jobs after graduation - feel a bit in the dark as to best approach	
	More practical experiences, such as the college trips in 2nd year	
	Industry speakers in more lectures	
School Identity and Inclusion	More staff should attend seminars, and also present them	
Research	PhD supervisors perhaps need more guidance/support, particularly if they have just started here	Agree, it is now mandatory for new staff to attend PhD supervision training
Other	Would not know what online courses are available unless you go online and look	
	Systems communication not great	
	Staff turnover - knowledge passed on insufficiently	
	Mechanical workshop takes a long time to machine parts. Having to follow up with them a lot	Agree
	More Masters/PG options for Electrical/Electronic, Mechanical and Civil engineering	MSc in Electrical/Electronic and Civil are needed yes

STUDENTS	What should we stop doing?	Responses from staff	
QA issues			
Supporting (and engaging) students	Telling a year that they are the worst or have the highest fail rate does not help student motivation or attendance!	We should try to be more constructive in our feedback	
Closing the Feedback Loop			
Assessment and Teaching Practices	Oblige attendance at all lectures, these being available on MyAberdeen	Agree	If you are not at lectures, you are not contributing to discussions, asking questions (which help lecturers adapt the delivery), interacting with classmates…
Employability			
School Identity and Inclusion			
Research			
Other	Lectures of the same course being split the same day, instead of over the course of the week	Depends on the availability of the lecture theatre	Agree - but we have very little control over timetabling
	Too much paper waste! Use more electronic resources, think of the planet		

STUDENTS	What should we start doing?	Responses from staff
QA issues		
Supporting (and engaging) students	Get more software licenses (ANSYS, ABAQUS)	This may have occurred due to one user using all licences - we could restrict the number of licences per user
Closing the Feedback Loop		
Assessment and Teaching Practices		
Employability	More industry exposure	Agree
School Identity and Inclusion		
Research		
Other	Room timetables made available online, so we don't get kicked out	We agree, it's terrible!