Author's biography

John Cowan is a structural engineer who practised as a designer before entering academia. There, amidst his engineering teaching and research, he sought ways to improve the effectiveness of engineering education through what were then radical and evidence-based moves to student-centred learning. He was soon appointed as the first Professor of Engineering Education in the UK, with a particular interest in the “hidden curriculum” of assessment and in developments in the process of assessing, on both of which topics he has noteworthy publications. He moved in the later years of his career to the Open University, in which he was to be Professor of Learning Development. He served for many years as specialist adviser on assessment to the Institution of Structural Engineers. He is now, technically, retired, although active as a teacher, assessor and external examiner. His commitment to engineering education remains. He still acts as an external examiner for engineering degrees, was the first moderator of the JISC mailbase for external examiners and is much in demand to contribute to induction events for external examiners.

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Overview
Academic external examiners are experienced teachers and scholars who take part in a contracted peer review process. They independently and objectively judge the assessment of student learning and the attendant academic standards in an awarding institution. This handbook addresses an important and demanding area of activity, involving careful consideration of practice, procedures and principles.

External examiners have to meet demanding expectations which are set out in various key documents at national and international level. The external examiner nowadays will also be expected to work in conditions of extreme time pressure, with growing class sizes containing students of increasingly diverse abilities and with a large range of subjects to be covered. They may face the complications of multiple-tier examination boards, increasingly mechanistic decision-making and reduced discretionary powers; and their views, methods and judgements can be at variance with those of fellow external examiners. Within the sector, moreover, detailed practices can vary markedly between institutions and between individual practitioners. Changes in the nature of the role, and the workload, have made it more difficult to find suitable candidates willing to undertake this onerous task.
This handbook seeks to address this challenging, varied and rapidly changing field of academic activity. It has been written for readers who are or may become external examiners in engineering, who may work with such external examiners in the context of their institutional duties or who may wish for other reasons to inform themselves of the current practices of external examining in engineering subject areas. It supplements the clear outlines contained in the Quality Assurance Agency’s Code of Practice for External Examining. It concentrates on the work of academic external examiners, rather than those drawn from the profession, who have a special, but different, contribution to offer.

The remit which is expected of an external examiner has escalated in recent years. Fortunately most appointments are for a period of at least three years, which allows attention to core demands to be spread, at least to some extent, over that period. It is also likely that any one external examiner will be part of a group of appointments, sharing responsibility within a multi-tiered system of assessment.

An experienced academic, based in their own programme team or school (the guide uses “school” to cover school or department), may be accustomed to rely upon colleagues who have specialised in such matters as disability legislation or current European developments. An external examiner, however, should at least be aware of the main features of all such demands and will seek advice in order to cope adequately with them in the course of examining duties.

The external examiner is indeed an examiner – but not an examiner of students. The external examiner should examine the content, processes and standards
of the awards which are being made by the awarding institution and should report upon them in due course. Their examination must be undertaken with due and careful awareness of the fact that these assessment policies, practices and procedures may be markedly different from those of the external examiner’s home institution which, in a sense, they have to “unlearn”. Nevertheless they can, and should, bring to their task their own general experience of teaching, programme design and assessment and the values which they have formulated in consequence.

The topics covered in this handbook include: the role of external examiners, their appointment and briefing and their formal contract; academic infrastructures in the UK, current developments in Europe and considerations for students with disabilities; practicalities such as the use of predecessor’s reports, of relevant minutes and the scrutiny of assessed student work; meetings with students and collegial contacts with staff. Attention is given to assessment board meetings, formal and informal reporting, and the raising and resolution of concerns, together with a summary of issues worthy of particular attention. Brief mention is made of external examining of other forms of certificated learning. Finally the benefits for the external examiner when taking on these duties are discussed.

**The role of the external examiner**

The awarding institution appoints external examiners to assist it in making and declaring informed and objective judgements. These should cover the performance and integrity of the awarding institution regarding:

- the appropriateness and standard of the institution's academic awards and of their components
external examining

- the rigour, equity and fairness of its assessment processes
- the extent to which its regulations and procedures have been followed
- the standard of student performance
- the comparability of student achievements and awards with those in other higher education institutions
- good practices identified by the external examiner while carrying out their duties.

An external examiner’s activities should be founded upon:

a. the so-called “academic infrastructure”. This comprises the documents setting out the UK sector’s expectations of higher education and of assessment within it (see notes at the end of this publication)
b. European expectations of higher education and of assessment and standards within it
c. the awarding institution’s letter and conditions of appointment
d. the awarding institution’s formal documentation
e. the reports submitted by the previous external examiner, and minutes of the corresponding assessment board meetings
f. the level and coverage of assignment tasks and examination questions in relation to the specified curriculum
g. assessed student work which provides evidence both of the standards of their work and the rigour and objectivity of the assessment of it
h. informal and collegial contacts with relevant colleagues in the awarding institution
i. (possibly) meetings with students
j. personal experience of assessment board meetings.
Prior to appointment, a newly appointed external examiner will already have been familiar with some of these sources; others may have been studied early in the period of appointment; yet others (such as the students’ assessed work) will almost certainly have to be sampled and judged within a limited time scale.

Significantly, some sources will assist the external examiner in scrutinising the coverage and standard of the intended learning outcomes in the programme; others will make it possible to form a judgement regarding the standard of students’ achievements; yet others will inform judgements of the objectivity of the accompanying assessment process. In all of this, an external examiner should find ways to determine the level of demand of the assessment in accordance with the way the subject matter has been taught and learnt. This should entail prior consideration and sometimes discussion of the draft assignment tasks and examination questions while time remains for these to be adjusted in response to the external examiner’s comments. External examiners will also wish to be reassured that students have understood the nature of the assessment demands and the criteria against which they were to be assessed.

The appointment of suitable examiners
Most awarding institutions have, and carefully follow, framed requirements and procedures for appointing external examiners. These ensure consideration of the adequacy of the nominee’s past and current experience (as evidenced in a detailed CV). An awarding institution will hope to appoint someone who has sufficient experience in teaching and assessing student learning in the subject concerned and an awareness of norms and expectations for assessment and learning.
external examining

outcomes in that disciplinary field. Experience of external examining will be an advantage.

The selection committee will look for freedom from an undue number of other concurrent examining commitments. In so doing, the staggering of succession of external examiners is also worthy of their consideration. Additionally, institutions should try to balance specialisms on a given programme and to mix experienced and less experienced examiners. Naturally the absence of unduly close commitments with the programme and school concerned is also important in order to promote independence and objectivity. The selection committee should similarly beware such confounding factors as the nomination of someone recently employed by, or jointly researching with, the awarding institution, or coming from an institution to which the awarding institution already provides or has recently provided an external examiner in a closely associated discipline. In the case of specialist programmes or modules, which may be offered at only a few institutions in the UK, this last condition in particular is difficult to satisfy. In such situations the process can lead to the nomination of personalities already well known to the senior members of the school.

It is consequently far from simple to identify and appoint ideal nominees, especially where expertise in specialist subject areas is called for. When account is also taken of the desirability of appointing someone with experience of external examining, and with the time available and the motivation to undertake a modestly reimbursed commitment for a top-level academic, the challenge is even greater.
It is usually left to the school to identify suitable names, to confirm their availability and willingness to serve and to assemble the cases for their nomination. It is common for a nomination which meets the requirements to be accepted. Schools may be assisted in searching for a suitable candidate by the register of external examiners in engineering, set up and maintained by the Engineering Subject Centre of the Higher Education Academy. It enables schools to find and match possible external examiners to posts and vacancies and contains the names and the profiles of already-practising examiners, as well as a record of staff who are qualified and available to be examiners. The head of school can have password-protected read-write access to the register. Those who are registered as examiners are given similar regulated access in order to update their own particulars.

Where an external examiner is to be appointed to cover developments in e-learning, blended learning, problem-based learning, work-based learning or other somewhat innovative approaches, there may be advantage in selecting an appropriately experienced nominee who is without specialised engineering experience but who can contribute usefully in collegial contacts and specialist discussions. This option may be an attractive addition to a team of external examiners with subject matter expertise.

**The formal contract between the examiner and the awarding institution**

The arrangements for external examining should be appropriately formalised at the outset. The appointment of the external examiner should be recorded in terms which leave the new appointee in no doubt regarding any matters raised or advice offered by this handbook.
It is difficult for an examiner to engage subsequently with issues in the absence of such prior definition. Consequently any queries should be identified at the outset and raised and answered satisfactorily in the drafted formal agreement before it is accepted.

The external examiner’s contract should state, to the satisfaction of both parties, the expectations of the awarding institution and the responsibilities of the external examiner. It should include details of the fee arrangement, levels of which can vary markedly within the sector. Reimbursement should (but may not) take some account of cohort size and the number of modules and assignments which the external examiner is expected to consider but may not do so. Payment arrangements should also be clarified. Some awarding institutions, having had difficulty extracting formal reports from external examiners, stipulate that no fee will be paid until the report is submitted. It should be clear whether this condition applies to the payment of expenses as well as of fees and also if the requirement applies to the submission of the report or to the (possibly protracted) acceptance of the report as satisfactory.

The contract or accompanying documentation should thus cover:

- commitment to notify conflicts of interest
- a summary of role and duties
- location of duties within the two-tiered system (if this exists)
- coverage of modules and programmes
- data protection and confidentiality arrangements
- expected attendance at examination boards and at other times, such as project presentations
expenses and fee claim arrangements
induction arrangements
expected volume, scale and timing of examining activity
arrangements for the external examiner to have the opportunity to offer comment upon proposed draft assignments and examination questions
arrangements for bringing matters of a serious nature to the attention of senior management within the institution
arrangements for providing model answers and marking schedules
arrangements for timely viewing of students’ work report dates
arrangements for premature termination of the contract by either party.

Attention should be given, less formally, to such practical details as:

a named school contact person and their availability
identification of key institutional staff with whom contact should be made should difficulties arise
intended advance negotiation of dates for assessment boards
arrangements and timing for the external examiner to have sight of draft assignment tasks and examination questions with ample opportunity to comment and suggest changes
marking procedures, criteria and general guidance for internal assessors
assessment systems and the sampling range for work passed on to the external examiner
opportunities to visit the institution to meet with internal colleagues and with students.
Briefing and induction

The briefing of a new external examiner is a process of contextualisation rather than of developing new abilities. Nevertheless, an experienced academic who has not hitherto been an external examiner may welcome advice, or even shadowing or mentoring, on:

- sampling
- assembling evidence to justify judgements
- using the institution’s statistical data
- complexities of the institution’s credit system and internal procedures such as compensation and condonement (however named)
- developing an ingrained awareness of local procedures, values and criteria
- changes in hand when course renewal is rapid and many modules have a limited shelf life.

Briefing and induction arrangements may currently take the form of:

- an event at which institutional expectations and procedures are outlined for newly appointed (and possibly already appointed) external examiners and/or a separate informal event at school level covering presentation and discussion of programme related information
- ongoing face-to-face and other contacts with a school contact person
- variants of the above.

By whatever means, the external examiner should have time to digest and seek clarification regarding:

- previous external examiners’ reports
- minutes of recent assessment boards
the students’ programme handbook or an equivalent source of programme and module specifications

the formal position regarding the relationship between module assessments and progress across programmes as a whole

the formal position with regard to moderation, blind marking, second marking and the involvement of externality where anonymity is difficult, if not impossible, for internal markers

formal policies regarding the handling of concerns and complaints

programme documents including approval, validation and annual quality returns and reviews.

With an appropriate period for consideration before assessment board meetings, the external examiner should have access to:

- samples of work across the range, with markers’ comments, judgements and feedback to students
- corresponding assignment or examination tasks and marking criteria (if not model answers)
- cohort results, module by module and over the programme
- accounts of moderation
- intimation of decisions already made with regard to special circumstances.

At any stage, the external examiner should feel free to ask for:

- the terms of reference of any groups whose decisions impinge on the decisions of the assessment board to which the external examiner reports
- general information about the programme.
Most universities and staff will welcome engagement with institutional discussions of a generic nature affecting the programme and its assessment. This might, for example, include offering an opinion with regard to the possible introduction of reading time, or open-book examination conditions. Many external examiners will also be glad to be consulted at an early stage in relation to the demand, style, standard and quality of assignment tasks. In this way, potential differences in the judgement of their adequacy may be aired, discussed and (it is to be hoped) resolved. This precludes the need for such matters to be raised within the deliberations of an assessment board.

However, it is increasingly the view that an external examiner should not be drawn into discussions which entail moderation of individual case decisions or decisions which impinge on their objectivity as externals. In some institutions there is still an expectation from at least some staff on assessment boards that the external examiner has, and will use, the ‘casting vote’ where internal resolution seems impossible. Given the external examiner’s duty to advise the awarding institution of the rigour and standards of decision-making, it seems wise to urge caution here regarding acceptance of any arrangements in which they will determine board decisions in controversial circumstances.

The academic infrastructure in the UK: academic standards and quality
The QAA's academic infrastructure (frameworks for higher education; code of practice; subject benchmark statements; programme specifications), albeit with some amendments, has been in place for some time in the UK (see list of further resources). It has featured in the QAA’s academic audit, in developmental
engagements and in institutional reviews – and correspondingly in internal processes. The external examiner should monitor adherence to the infrastructure but should expect institutional records to confirm, as in their own institution, the rigour of internal institutional review and the adequacy of responses to audit and external review. However, it can still be useful to check that the listed learning outcomes for the programme and modules are in fact assessed adequately in the specified scheme of assessment.

The external examiner should also consider the coverage and standard of the provision being examined. In England, Wales and Northern Ireland, the Framework for Higher Education Qualifications (FHEQ) sets out the generic level of demand to be expected in each year of an undergraduate or master’s level programme, being subsumed by the Welsh Credit and Qualifications Framework (CQFW). The equivalent in Scotland is the Scottish Credit and Qualifications Framework (SCQF). The published programme aims and module learning outcomes can readily be set against these expectations and alignment and standards confirmed or questioned, preferably collegially in the first instance.

The external examiner will similarly wish to ensure that the programme’s outcomes are in accordance with the QAA Benchmark for Engineering (revised 2006). In this document the academic engineering community has set out its expectations of the nature and characteristics of programmes in the engineering subject area and of the standards for the award of qualifications at a given level. The benchmark describes the attributes and capabilities that those who receive such qualifications should have demonstrated. While this statement provides general guidance for articulating
the learning outcomes associated with undergraduate engineering programmes, it is not a specification of a detailed curriculum in any engineering subject. External examiners should similarly check the match between benchmark and programme and advise the awarding institution accordingly.

For ECUK accredited engineering degrees, the external examiner should also check that the examined provision accords with the requirements of UK-SPEC, governing the recognition and registration of professional engineers and technicians in the UK. Engineering external examiners should already be familiar with the demands of UK-SPEC.

European requirements
In June 1999 the Bologna Declaration set out what higher education ministers from 29 European countries (including the UK) had agreed should be done to enhance the mobility and employability of European citizens and to increase the competitiveness of European higher education. Their aim was to create, by 2010, a single European Higher Education Area. To this end, they set in motion a number of reforms designed to make it easier to read, understand, compare and align national qualifications. Some at least will feel that, at the time of writing, the range of progress across Europe towards the Bologna ideal is still considerable.¹

¹ The QAA have now obtained approval that degrees from England Wales and Northern Ireland are Bologna-compatible, with the report Verification of the compatibility of the framework for higher education qualifications in England, Wales and Northern Ireland (FHEQ) with the framework for qualifications of the European higher education area (FQ-EHEA) www.qaa.ac.uk/academicinfrastructure/FHEQ/selfcertification09/FHEQSelfCert.pdf
Ministers have consistently encouraged member states to elaborate a framework of comparable and compatible qualifications for their higher education systems. These should describe qualifications in terms of workload, level, learning outcomes, competencies and profile. They should also seek to establish an overarching framework of qualifications for the European Higher Education Area. Within this process, the existence of the one-year master’s degree in Britain is still creating problems. Additionally, the aim of achieving equivalence is raising difficult questions about the length of study for other degrees and about the contact and study hours needed to complete a programme.

The Joint Quality Initiative (JQI) Dublin descriptors for bachelor’s and master’s awards were first proposed in March 2002 (see www.jointquality.org ). These descriptors set out in generic terms the expectations of the Bologna Process for recognised achievement in awards on exit from the three main “cycles” of study, being bachelor, master’s and doctorate levels. Subsequently the JQI proposed revised exit expectations in respect of the third cycle and descriptors for the higher education short cycle (within the first cycle).

External examiners will wish to be aware of, and take into consideration, all of these demands and their current impact on the programmes to which the examiners have been appointed. This means that they must engage with and operate within a fluid international situation.

**Students with disabilities**
The Special Educational Needs and Disability Act (2001) requires higher education institutions to make
“reasonable adjustments” to their provision in order to ensure that disabled students can follow their chosen course of study and demonstrate their competence through appropriate assessed work. This legislation specifically obliges awarding institutions to ensure that external examiners, as employees, are aware of and understand the institution’s policies, procedures and practices relating to the reasonable adjustments which may be made to examinations and assignments for disabled students. Awarding institutions should seek the advice of the external examiner on any such arrangements before they are put in place or continue in use.

An awarding institution should also ensure that external examiners, like internal staff, are fully informed of the procedures in place for sharing information about disabled students and their assessment. In particular, the external examiner should be aware of how the institution ensures fair practice in moderation when a student has confidentially disclosed a disability. It should be confirmed and recorded that due account has been taken of disability, with parity and fairness in sampling. The specific issues presented by a disabled student may call for consideration of mitigating circumstances. An external examiner should only be a judge and not an active participant in the decision-making process.

**Predecessor’s reports and relevant board minutes**
The reports of the previous external examiners and minutes of assessment boards will show which aspects of the provision have recently received careful scrutiny, together perhaps with an indication of some ongoing issues which are still worthy of attention. The
documentation should also demonstrate how the institution has communicated its responses to the recommendations made in the previous external examiner’s report.

**Assessed student work**
Traditionally the sampling and reviewing of assessed student work is a core activity for the external examiner. The provision of adequate opportunity, as well as time, to do so is essential but is not always made available. Scripts, project reports and records of observations may be laid out in a base room, student by student or module by module, for selective scrutiny during the period of a visit of restricted duration. The arrangements will generally be decided by the parent schools and hallowed by custom and may be such that access is open to a number of external examiners, on a number of programmes sharing some common modules, within a busy workspace in which several distracting conversations may be occurring simultaneously. Alternatively it may be the practice in the awarding institution to send samples of student work to the external examiner some time before the assessment board meeting. This is an option which can be subject to various postal problems.

Whatever the arrangement, the external examiner should give thought to the size and nature of the sample necessary for a sound judgement to be reached and the extent to which they wish to retain the authority to exercise flexibility with regard to the sample, as sampling progresses. The process of judgement should be soundly evidence-led. It should centre on the evidence provided to, and sought by, the external examiner who should eventually respond in terms of solicited and perhaps unsolicited issues. The selection
and use of such evidence should be governed by context, the examiner’s purpose, the questions on which judgement is being sought and the time constraints in what is usually a busy time in the academic year. It should also enable the examiner to have adequate access to details of internal moderation and the reasons for consequent decisions.

One promising development in recent years arises from contexts where most or all of the assessed work, other than design projects and presentations, is submitted digitally. In these circumstances it is possible for the external examiner to receive all of the digitised work on a CD, helpfully indexed and readily retrievable. The examiner then has a completely free choice of sample, ample time for scrutiny and the ability to select and scrutinise individual items with ease, something which it is difficult to achieve within a restricted timescale, sifting through piles of paperwork which have often lost their initial order through the activities of other external examiners. It also facilitates the longitudinal sampling of the work of one or two students.

Whatever method of providing access is chosen, it is important that the external examiner can concentrate on forming an informed judgement of the overall standards of student achievement and the rigour and consistency of marking. Involvement in individual cases, in effect as another examiner or an adjudicator, should be avoided for reasons suggested earlier. However, should there be an internal impasse, it may be that the external examiner has to facilitate an impartial decision. The external examiner should of course attend board meetings, but nowadays should normally abstain from participating in the decision-making before or during these meetings. For, as already suggested, if external examiners are
so involved, it would be difficult for them to offer the awarding institution a detached view. However, it does not preclude the examiner reporting to the board, and even to the awarding institution, the cases where their (unspecified) marks or grades differ markedly from those of the assessors and consequently requesting the re-marking of an entire sample. The reverse process, in which a school requests full grading of a sample about whose standards it is dubious, is not unknown. It may arise because students claim a module has been harshly or unjustly assessed or because high grades in a module or programme have given rise to suspicions that the assessing has been unduly soft. In either case, the external examiner should be prepared to concur with the request and formulate an *ad hoc* account of full scrutiny of the marking, which may often exonerate the school or lecturer concerned from criticism.

**Meetings with students**

The possibility of meetings between the external examiner and students is a contentious issue which can identify inconsistencies in both practice and underlying principles. For example, in the absence of evidence of rigorous and objective checks on students’ understanding of assessment demands and criteria, an external examiner may feel the need to check this important matter directly with students. This implies a meeting setting where the students are anonymous and know that their meeting with the external cannot influence the individual assessment decisions made by the board. It is not impossible to satisfy these conditions but achieving this may provoke emotive reactions.

Another valid reason for meeting students concerns project work. In such discussions (and possibly only in that way), it is possible for the external examiner,
through conversation with anonymous students, to form an impression of the class’s grasp of the subtleties of the design process and the rigour of their constructive self-evaluations. Similarly, and again anonymously, it is possible for an external to assemble an informed impression of the way a module has been taught, and whether or not this has been teacher or learner-directed, a matter which has a bearing on the interpretation of assessment demands and consequent rating of student performance.

Meetings with students should involve a random selection of students who are well informed as to the purpose of the meeting, and working to an invitation and agenda based on carefully chosen open questions which preclude the possibility that they provide an opportunity to moan.

**Collegial contacts**

Outwith their formal role as external custodians of academic standards, external examiners can and should feel free to make contributions within collegial discussions with internal colleagues in what may well prove a developing role as a critical friend. They can share their knowledge of practice, provide advice and guidance, make specific suggestions drawn from their own and other institutions and, especially, offer advice on controversial issues from a detached standpoint and on the basis of considerable experience. In so doing, however, they should try to avoid being drawn into direct involvement in the processes of decision-making. In discussion of a difficult situation, for example, they may set out the options (including some which have not been identified or considered by their colleagues in the awarding institution). They may outline the pros and cons of each. But they should, if possible, then leave
it to the internal staff to reach their own decision. In so doing they thus distinguish between acting as a critical friend rather than taking some responsibility for the final decision.

External examiners’ suggestions need in no way imply criticisms or direction, but are rather a sharing of forward thinking. The spirit in which they are offered will involve concentrating upon ideas and suggestions which the colleagues on the programme team may find helpful to consider, rather than changes which the external examiner believes should be made. It is perfectly proper for the external examiner, as a colleague, to offer views and advice on such matters, provided it is clear that the final decision rests with the staff of the awarding institution.

Most external examiners are glad to be asked for advice or suggestions. Someone with considerable experience of peer-assessment will happily share that experience and even offer suggestions as to how it might feature in a programme with which they are becoming familiar. But, in so doing, they should not make recommendations, they should simply offer experienced collegial advice. Similarly an external examiner may be willing to volunteer and even expand upon their own position with regard to an issue on which members of the programme team are divided. This might cover such issues as the use of open-book examinations, the advantages and disadvantages of offering students choice of questions in examinations or the right to take dictionaries into examinations or to have access to a dictionary provided by the invigilator. Again, however definite their advice, and even when it may be expanded subsequently in writing as suggestions for the programme team, it would be inappropriate for this to feature in a formal report.
The team should feel under no obligation to take up these suggestions or to explain their reasons for not following the offered advice.

Interactions with the external examiner as a critical and experienced friend may thus extend beyond the period around assessment board meetings, their preludes and their aftermaths. Programme teams will often seek and welcome advice from external examiners as experienced fellow academics who can comment and advise upon such matters as programme development, innovative plans for assessment, incorporation of new arrangements for learning and teaching and the development of higher level and interpersonal abilities. Further, within institutional regulations there is sometimes a clause that requires external examiners to review and possibly approve new programmes as part of the validation process. Such a constructive and influential relationship will probably develop with time, rather than operating from the outset. Its growth will also depend upon the willingness of the examiner and the programme team to interact in such ways. It is to be encouraged where all concerned are willing. Engagement in such discussions will enrich the external examiner’s grasp of the issues, so the consultation is far from a one-sided one.

Assessment board meetings
An assessment board may have to cope with the separation of decisions at different levels (module or programme) and hence with more compartmentalisation and less holistic and iterative decision-making, where judgements at one level constrain decisions at another. Its chair may be a head of school or, increasingly, an internal appointment from outwith the school concerned.
The external examiner has no executive function in these meetings. Their legitimate contributions may be limited to:

- intimations of observations formulated prior to the meeting which should be considered during the conduct of the business
- providing advice in general terms on the (rare) occasion when an issue calls for discussion in principle
- a concluding report on the conduct of the business (which it is to be hoped is an endorsement)
- intimation of any items which the external examiner will wish to carry forward to the awarding institution through formal reporting.

Most institutions nowadays preclude moderation by the external examiner. There remain some few, however, which permit or even encourage this involvement. Some institutions even permit or encourage external examiners to suggest or endorse changes in individual marks – which should not of course be done in any case, by any examiner, without considering all similarly placed students.

**Informal communication and formal reporting**

External examiners can report in many ways, according to their own preferences and style (to some extent) and the institutional context. It is common, for example, for the same external examiner, in the same context, to first of all report tentative conclusions, findings or suggestions informally to individual lecturers, then to carry some of these forward informally to a programme leader or head of school, next rather more formally to an assessment board and finally to the awarding
institution. Some of that reporting may thus be oral and informal, some may be written or e-mailed and formal. The principles of natural justice, let alone of collegial professional relationships, call for no critical comments or recommendations to be advanced formally to the institution without first having been aired and discussed with those directly concerned. Much filtering may thus occur between these stages as the examiner asks, listens, reflects and tests out and modifies tentative conclusions. This progression is useful. It develops and builds upon a growing relationship as a critical friend to the programme team and to the school. It also arms the external examiner to defend their outstanding conclusions in due course.

Discussions in assessment board meetings, while sometimes collegial, also entail formal contributions by external examiners. It is customary for them to be given the opportunity to report formally towards the close of the meetings of the board. When the external examiner’s attendance has been precluded, for some valid reason, such reports may be in writing. At this stage in the meeting it is desirable for the external examiner to identify noteworthy patterns or mismatches in the data before the board; to comment upon the objectivity and rigour of the manner in which decisions have been reached; and to intimate any matters which they propose to carry forward to an appropriate office-bearer in the awarding institution. They may also wish to identify and commend examples of good practice which they have encountered in their most recent period of duty. In a sense this verbal report anticipates the formal report to the awarding institution.

In some cases, however, external examiners are invited or may request permission to offer comments before the decision-making in the board meeting. This may have
procedural advantages. If, for example, the external examiner has identified a module with gradings which are inconsistent with otherwise general patterns, or a module wherein the gradings appear in need of re-visiting, and has not been able to prompt that action before the board meeting, then such observations are probably better aired before rather than after the board's decision-making. This is especially so with issues which are likely to lead to re-marking, as this needs to take place before the formal board in order to avoid a cohort of students not being able to have their grades and awards at the time specified by the institution.

The formal reporting which occurs after the board meeting is a special matter. It should cover the headings which were listed previously. Nevertheless, many awarding institutions have templates within which such reports are to be assembled. While some of these are barely adequate, calling only for terse or tick-box responses, others encourage full reporting by the examiner, perhaps in a volunteered addendum. In this increasingly litigious age, the formal report should be carefully framed and in any case encompass:

- a summary of the objective data upon which the report is based. It is important to state the types of contact and data on which judgements have been based, and the sampled nature of the evidence which informs their reports
- the relationship between the declared educational aims and the tasks set for assessment of achievement
- the standard of student achievement in relation to the sectoral norm
- the rigour and objectivity of the assessment process and of the reaching of decisions regarding awards.
As already mentioned, the well-established principles of natural justice apply in this context. External examiners who propose to formally submit adverse or critical remarks regarding a programme or module to the awarding institution, or to criticise the work of the programme team or module leader, should first ensure that they have raised their concerns with the team or leader concerned, have given them ample opportunity to respond and have carefully considered that response in formulating their formal report and (possibly critical) recommendations. The same principle can usefully be adopted when there are features which the external examiner wishes to commend.

Raising possibilities and concerns
The relationship between an external examiner and internal colleagues should be fundamentally collegial. The external examiners should not come as inspectors to verify standards and requirements and report deficiencies. Rather, they should act as colleagues who can contribute a helpful external perspective through making comparisons and seeking consistency. For example, a programme team may be constrained within their own situation and their discussions therein but can readily benefit from detached observations, suggestions for options worthy of exploration and endorsement of imaginative and innovative practice. Like their students, they will welcome positive as well as negative feedback on their efforts and feedforward for the future, provided it is given in ways likely to be accepted and to prove constructive. In this the external examiner is limited by the restricted body of evidence from which they form judgements, what is observable by them and which can be evidenced, the timescale of the assessment process and the sampling required. Within such a developing relationship the capacity to form informed opinions,
make decisions and reach objective judgements develops variously as the particular relationship develops.

It can be constructive, as well as reassuring for the lecturer concerned, for an external examiner to commend, for example, the use of imaginatively open-ended tasks. The lecturer who carefully devised such a scheme will welcome such semi-public feedback from an experienced academic whose views and accompanying reasoning they respect and others in the team may consequently be encouraged to undertake similar refreshing of their methods of assessment.

Often a volunteered suggestion for enhancement of the assessment process will be taken up with interest by an internal examiner who is aware of the scope for improvement in their assessing. An external examiner may suggest, for example, that it is not easy to objectively identify the individual contributions to group project work and may describe a scheme of which they have had experience. They will be able to answer the questions which colleagues may raise and proceed into a constructive discussion of this possibility and its potential benefits.

It is also possible, however, that such a suggestion may be volunteered because the external examiner has some concerns about the separate assessments being made of students’ work in project groups. The examiner may see little informed objectivity in the existing process and no basis for the different grades awarded. It may even have been clear from minutes of staff/student committees that students allege partiality in the marking. The internal examiner may counter these concerns by maintaining confidently that the project tutors are in
close contact weekly with the students and well-enough informed to distinguish between the various levels of contribution.

The external examiner will presumably not wish to drop such a matter. At least three options are then open. They can suggest a strengthening of the process, perhaps along the lines of a specific suggestion (although, as a recommendation, that would be an improper intrusion on the autonomy of the programme team). They can declare and explain an intention to report formally that they have not seen data to justify the distinctions between grades being presented to the assessment board. Alternatively they can investigate, assemble data and present justification for having reservations about the proposed grades.

There is much to be said for following the principles of illuminative evaluation, in which worrying data (or worrying absence of data) are selected and presented, leaving the reader or listener to make their own judgement and decide what action to take. Carefully marshalled and succinctly summarised facts can convey a firm message about the need for review and probably change. It can usually then be left to the head of school to perceive and decide that changes must be made in future and even anticipated for the current cohort. In the case where an aspect of assessment troubles an external examiner, this approach is certainly appropriate, for it will be the programme team of the awarding institution which will make the eventual decision, even if it is a decision for “no action.”

Even in issues involving apparently inaccurate assessment, the external examiner must always remember that their role is to advise the internal
examiners, the programme team and the awarding institution of what they have encountered and their judgement of it. It remains the responsibility of the awarding institution and its staff to decide if any action is called for. In the event that the external examiner judges standards are at risk, they should carefully report at various stages the facts which have led them to that judgement and (if ultimately necessary) the steps they have taken to bring their concerns to the attention of internal colleagues who are directly responsible. They should then point out the mismatches between the evidence they have encountered and checked and the expectations of the awarding institution, leaving it to the recipients of their report to act, or not, as they so decide.

Occasions may arise when internal departments may expect or even ask the external examiner to advocate on their behalf, for example by pointing out in their reports deficiencies in resourcing or staffing. The external examiner needs to be wary of this use of their reporting and be convinced that, in advocating such matters for institutional consideration, they are primarily concerned with the maintenance of standards.

**Issues meriting attention: a summary**

Authority for what external examiners will judge and feature in their reports originates from the QAA Code of Practice and in particular from section 4, *external examining*, and section 6, *assessment of students*. There is much to be said for reminding oneself of the precepts of these two sections before an examining visit to the awarding institution. Thereafter, questions to which an external examiner will wish to give attention should at some time include:
are the assessed learning outcomes at exit aligned in accordance with subject benchmarks and FHEQ/SCQF/CQFW/Dublin descriptors?
are the methods of assessment valid, reliable and suitably varied?
is there appropriate balance between the assessments of process and product outcomes and of knowledge and skills?
are the marking criteria and grade descriptors available to, and understood by, the students, prior to their being assessed?
is the assessment timely and well-paced throughout the programme?
are grades and feedback available to students in a timely, consistent and helpful way?
is adequate provision made for informative and effective feedforward?
are measures in place to detect and to deal with plagiarism, including the sub-contracting of assignment work, and how confident can the awarding institution be of their effectiveness?
is the system for resubmission of referred work adequate, fair and in accordance with the assurance of consistent standards?
is there a scheme to compensate for failure grades when other grades are sufficiently strong? How serious might it be professionally if weakness in some core areas is then condoned?
is student work double marked and anonymised where possible? What secure procedure to preclude bias is followed when anonymity is not possible?
are oral examiners trained in interview and interpersonal skills, with awareness of common factors leading to biased judgements in these situations?
how are borderlines specified and are they consistently applied? Is the external examiner sufficiently well-informed to judge this process, rather than merely its outcomes?

how are the marks or grades moderated?

are the procedures for dealing with mitigating circumstances applied fairly and consistently?

are appeals and complaints handled in accordance with the procedures of the awarding institution?

if peer or self-assessment is used, is there adequate training of students for this and are standards thoroughly assured?

is the specification of intended learning outcomes located sufficiently far away from the poles of over and under-specification to enhance the validity of assessment?

Nowadays the awarding institution should be particularly interested in the level of student achievements with regard to transferable generic abilities which are so relevant to higher level learning cognitive and interpersonal outcomes. Assessment of these cannot always be allocated to one specific assessment item or even contained within one module. So the external examiner’s overall report on standards and achievements under such headings will be especially valuable to the awarding institution and the programme team. This may call for consultation with other external examiners.

A similar reporting area concerns the overall quality of the provision. One consequence of modular course structures has been that programme teams, and external examiners by nature of the remit in their appointment, may concentrate more on individual modules than on the overall programme. Yet as
a preparation for professional life, it is the overall educational experience for the student which is important. External examiners should do all they can to relate their particular enquiries and experiences with individual modules to the complete programme, its coverage and its standards and again may well wish to consult with other external examiners in so doing.

Non-traditional forms of certificated learning
It is a feature of the rapidly changing field of higher education that programmes may follow approaches which are non-traditional, especially in dealing with increasing student diversity and part-time study of various types. Studies in engineering may be offered in a programme which features problem-based learning, work-based learning, blended learning, collaborative learning or lifelong learning. Institutions may be linked collaboratively or in partnership or under franchising arrangements. Some programmes may be offered overseas, perhaps partly in a language other than English. Many of these new developments entail particular assessment demands, raise particular pedagogical issues and call for careful monitoring of the effectiveness and rigour of the chosen decisions. External examiners who are confronted with such demands may find that it is only to parts of these developments that they are adequately prepared to bring expertise.

An awarding institution may well find itself unable to identify a independent candidate with the required engineering expertise as well as the competence and experience to judge assessment in the pedagogical context of a non-traditional programme. In these circumstances, the awarding institution may well be wise to defer scrutiny of the pedagogical aspects of
the provision to a specialist in that field, working in conjunction with engineering academics from a more traditional background. Both parties may be attracted to the opportunity which this arrangement might offer, to learn more about the innovative approach through an externality beyond the discipline of engineering.

**The benefits of being an external examiner**

A diligent external examiner will undertake an intense and demanding workload within a relatively restricted period. This will usually be reimbursed at a somewhat lowly rate for the workload and calibre of examiner. That workload is generally not recognised in the home institution and may not even be welcomed there. The rewards are therefore not financial and external examining is unlikely to figure significantly on a CV or promotion case. Nevertheless, many external examiners welcome the appointment, and regard the accompanying commitments and benefits as worthwhile.

First, of course, there is the attraction of professional recognition. The role is a responsible one and even in a first appointment calls for someone with considerable experience, a searching mind, a rigorous approach and a capacity to be open to change and diversity. To be invited to undertake such an appointment is a compliment which most who are so approached will regard positively, as recognition of their professional status. It is also one in which the consequent honing of evaluative and analytical skills is apparent, as the examiner is obliged to crystallise what matters, and why, in the situations they encounter, and to creatively form and express judgements.

Once in post, an external examiner can gain many benefits from their involvement. Few will return home
after a visit to the institution which has appointed them without fresh ideas which have stimulated their thinking, such as new ideas for assessment practice. They may have encountered approaches with potential for their own programme; they may have engaged in rich debates about issues regarding engineering curricula; they may have found cause to question practice, both that of the visited institution and of their own; they may even have seen need for enhancement of their own situation. Their circle of contacts will have been enriched, crossing subject boundaries to good effect. They will have formed or strengthened valuable and valued working relationships with academics and administrators upon whose thinking and experience they have drawn, and will draw in future, even after the completion of their period of appointment.

Further resources
The author suggests here initial items for further reading whose citations should provide further resource for those who wish to delve more deeply. All online references were accessed on 22 September 2009.

**Essential reading for UK external examiners**
Quality Assurance Agency for Higher Education (www.qaa.ac.uk)
Code of Practice for the assurance of academic quality and standards in higher education
Section 3: Students with Disabilities
Section 4: External Examining
Section 6: Assessment of Students

**Academic infrastructure: useful URLs**
QAA: Subject Benchmark Statements: Engineering 2006: QAA114 06/06
www.qaa.ac.uk/academicinfrastructure/benchmark/statements/engineering06.asp
external examining

QAA policy on programme specifications - October 1999
www.qaa.ac.uk/academicinfrastructure/programspec/progspec.asp

QAA: The frameworks for higher education qualifications and credit: how they relate to academic standards
www.qaa.ac.uk/academicinfrastructure/fheq/fheqcreditstatement.asp

Further information about the Credit Qualifications Framework Wales can be found at www.elwa.ac.uk/elwaweb/elwa.aspx?pageid=1612

The Bologna Declaration and its explanation

The Dublin Descriptors (2004)

UK-SPEC
www.engc.org.uk/ukspec/

Useful Higher Education Academy reading for UK external examiners
www.heacademy.ac.uk/904.htm
Working papers, covering (1-3): support for external examiners, developing and supporting external examiners, scoping the HEA support and enhancement function; and then in 4-7: the process of academic external examining, institutional systems for inducting and supporting external examiners, a system for voluntary accreditation for institutions’ systems and professional standards for external examining.
Background reading on external examining

Basic texts on assessment in higher education

Texts offering innovative suggestions for assessment

Seminal text on assessment in higher education

Recent review text on engineering education (with an emphasis on practice in the USA)
Author's biography
John Cowan is a structural engineer who practised as a designer before entering academia. There, amidst his engineering teaching and research, he sought ways to improve the effectiveness of engineering education through what were then radical and evidence-based moves to student-centred learning. He was soon appointed as the first Professor of Engineering Education in the UK, with a particular interest in the “hidden curriculum” of assessment and in developments in the process of assessing, on both of which topics he has noteworthy publications. He moved in the later years of his career to the Open University, in which he was to be Professor of Learning Development. He served for many years as specialist adviser on assessment to the Institution of Structural Engineers. He is now, technically, retired, although active as a teacher, assessor and external examiner. His commitment to engineering education remains. He still acts as an external examiner for engineering degrees, was the first moderator of the JISC mailbase for external examiners and is much in demand to contribute to induction events for external examiners.

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