Section 12: Good Practice in Assessment of Students

12.1 This section aims to provide some general principles to course leads in designing and revalidating courses. It is not aimed at being exhaustive, further colleague guidance is available from the Centre for Education and Teaching Innovation.

Principles of Assessment

- 12.2 Assessment makes a judgement on the student's learning; the assessment enables students to demonstrate that they have:
 - met all the learning outcomes for each module
 - fulfilled the course outcomes of the course on which they are registered
 - achieved the standard required for the award.
- 12.3 It allows colleagues to:
 - determine the grading which will contribute to final degree classification/certification
 - possibly ensure that the student is "fit to practise" (professional body requirements)
 - indicate to potential employers or other educational institutions/organisations a student's strengths and weaknesses in specific subjects and in generic skills and abilities.
- 12.4 However, there are wider functions of assessment that are very important for students' learning. These are:
 - the opportunity to provide feedback to students on their performance
 - helping students remedy mistakes, and to develop and improve
 - providing further opportunities for learning; these might be opportunities to work independently, to explore aspects of learning only possible outside the "classroom" e.g. archive-based research, work-based learning, "live" projects
 - developing students understanding of processes of enquiry and research relevant to the subject
 - providing students with an opportunity to reflect on their own learning approaches and abilities
 - enabling students to develop a wider range of skills
 - helping students determine their choice of options/subject specialisms.
- 12.5 There are also aspects of assessment that are helpful to the University in developing and enhancing its provision. These include:
 - checking students' learning progression in order to evaluate our provision
 - diagnosing the further support for learning that students might need
 - indicating the academic standards of the learning achieved.
- 12.6 The following should be considered in the design of assessment at both course and module level:

- assessment should be designed as an integral part of the teaching and learning process, in module and course design, ensuring that students can learn through the assessment
- a holistic approach to assessment should be taken, assessment methods across a course should encompass a wide range of methods, fit for measuring the achievement of the learning outcomes and avoiding duplication of learning outcomes where possible.
- Courses are expected to be underpinned with an assessment strategy relevant to the subject area or course
- assessment requirements should be valid; what the students are asked to do should be appropriate to measure the learning outcomes of the module, and the delivery of the module should support the student in being able to complete the assessment (the principle of constructive alignment)
- Assessment tasks should be authentic and unless required by a Professional, Statutory or Regulatory Body, examinations should be avoided
- the purpose of the assessment and how it will help students' learning must be transparent to students
- assessment should be free of bias in both design and marking
- assessment requirements should be designed to ensure that they do not give undue advantage or disadvantage to students from specific backgrounds, or those with particular disabilities
- assessment criteria, determined by the learning outcomes, should be given to students at the time the assessment task is set and should be used by all staff to inform their marking, and in providing feedback to students
- assessment workload should be realistic and comparable between modules at the same academic level and credit weighting
- 12.7 Effective assessment may be achieved by:
 - Explicitly providing advice to students on the assessment criteria and marking schemes
 - The use of specific graded assessment criteria for each piece of assessed work
 - Explaining in the Course and Module Handbooks how the chosen assessment methods support the students' learning and how they link to the learning outcomes
 - Avoidance of over-dependence on standard 2000-3000-word essays and 2-3hour exams in favour of a more authentic and diverse range of assessment formats chosen through a "fitness for purpose" analysis of what students must demonstrate to pass to each particular module, and how the work will encourage students' further learning
 - Creative use of formative assessment, which ties in with the guided independent study, and avoidance of summative only assessments
 - Explicit assessment of a variety of skills, which support learning and employability, including assessment of students' capability in the enquiry and research approaches characteristic of learning in that discipline
 - Use of objective testing where appropriate to measure achievement of the learning outcomes, e.g. multiple-choice questions, numeric tests, matching/correspondence tests. This may be particularly helpful for online formative assessment
 - Pacing assessment throughout the module to test different learning outcomes (some of which need to be demonstrated once only) to spread the marking load
 - Using group work by students for assessment, particularly for formative assessment where peer assessment is used, and for summative assessment where reflection on the student's role in a group, and the development of teamwork expertise, is part of the specified learning outcomes of the module

- Involvement of students in identifying the assessment criteria, with or without attribution of marks to self or peers
- Using feedback sheets which relate to the assessment criteria and using statement banks of tutors' comments for the whole module group, so that students can compare comments
- Timely feedback mechanisms for performance in examinations, with reference to model answers where appropriate
- Good internal moderation processes for coursework, in line with University Academic Regulations and clear advice to students on who marks their work and the involvement of external examiners.

Aims and Learning Outcomes

12.8 Each taught course leading to a named award of the University must have clear and simply stated Course aims and Course learning outcomes, which are informed by the QAA subject benchmarks and Framework for Higher Education Qualifications, and which are determined by the individual modules.

It is also appropriate to define the course aims and course learning outcomes for each academic level for undergraduate courses, where students are expected to progress through the levels sequentially.

- 12.9 Student attainment is described by the module learning outcomes, and these must identify the specific skills, knowledge, and attributes that a student will be able to demonstrate on successful completion of the module.
- 12.10 Modules learning outcomes should be cross referenced to the aims of the overall subject and course scheme/named award.
- 12.11 The student will demonstrate achievement of the module learning outcomes through the assessment process. The learning outcomes hence describe the threshold level of achievement. Students who perform above this threshold level are recognised by the award of higher marks or grades.
- 12.12 The module learning outcomes specified in the Module proformas make what is expected of students on this module at this level visible for the students, all teaching team members (including PT/Visiting Lecturers and guest speakers) and external examiner(s).
- 12.13 Learning Outcomes should be written with active verbs to facilitate the aligned definition of assessment criteria used to judge the students' performance. If the learning outcomes are not clear and specific it makes it much harder to develop appropriate assessments. It is also important that the learning outcomes reflect the level of study.

Examples of active verbs suitable for this purpose are:

State, Describe, List, Summarise, Select, Compare, Apply, Explain, Design, Construct, Plan, Develop, Formulate, Define, Justify, Explore, Analyse, Critically evaluate, Interpret.

Weaker phrases which should be avoided include:

to be familiar with, to have a grasp of, to appreciate to understand, to acquire a knowledge of.

Bench-marked learning outcomes, i.e. those which assume progressive development

relative to (prior) levels of attainment, should be avoided except where the module has pre-requisite requirements or where students are given diagnostic tests before starting the module; alternatively, they could be cross-referenced to the learning outcomes for the earlier level.

Examples include:

to develop further skills in, to improve techniques of to demonstrate a better understanding of.

- 12.14 Learning outcomes should be realistically framed for the level of work and the creditweighting of the module.
- 12.15 It helps students' learning processes if assessment tasks are staggered through the module. Assessments may judge different learning outcomes at different stages of the module; there is no need for each piece of assessment to judge all the learning outcomes, as long as overall the assessment covers all of the learning outcomes.

Staff <u>Guidance is available</u> from the Quality and Standards SharePoint pages.

Assessment and Marking Criteria

- 12.16 The assessment criteria are determined by the learning outcomes for the module and hence will reflect the academic credit level 3, 4, 5, 6 or 7.
- 12.17 General expectations of attainment at specific levels are defined within the QAA Framework of Higher Education Qualifications. This defines the descriptors for qualifications at each level which are included in the Frameworks for Undergraduate and Postgraduate courses in the Handbook of Academic Regulations.
- 12.18 Assessment criteria for assessed coursework should be given to students at the same time as the assessment task is set, and the assessment criteria must be provided to External Examiners.
- 12.19 Whereas learning outcomes identify what students should be able to demonstrate they have achieved at that point or on completion of the module, assessment criteria are statements which convey to the students, other staff and External Examiners the basis on which the work will be assessed. Assessment criteria can be expressed in a variety of ways. The main approaches are:
 - Threshold criteria
 - General criteria
 - Graded criteria.
- 12.20 Threshold criteria are more detailed statements which expand on the learning outcomes to show what the student must do to pass the module. They relate specifically to the learning outcomes and the content of the module. This is the most useful approach at the module level and for the purposes of the Module Proforma.
- 12.21 **General criteria** are more general statements about what is looked for in a student's work such as:
 - Demonstrates good use of literature
 - Presented in the form of a scientific paper
 - Presents a clear and logical argument.

These can be very useful for a course in identifying what is expected from the most common methods of assessment, but do not relate to individual modules and do not help students and markers to determine what will be the benchmark of success in any particular module.

- 12.22 **Graded criteria** provide a statement of the work required for each classification of performance (i.e. 80-100, 70-79, 60-69, 50-59, 40-49, 30-39, 0-29). Such criteria are used for specific items of assessment. Graded criteria should take account of the level of the work for example 70-79 at Credit Level 6 demands a different level of achievement from a 70-79 at Credit level 4.
- 12.23 The University has approved <u>Generic grade descriptors</u> for each level of study (3-7). These aim to:
 - support academic judgement in relation to the standard of students' work across grade bands
 - support the facilitation of feedback to students
 - indicate to students the relative changes in demands as they progress through the levels of their course and onto postgraduate level
 - provide a benchmarking tool to support the use of the full range of marks across the percentage grades from 0-100%
 - support the development of specific grade descriptors using alternative forms which broadly link to the University descriptors
 - provide a framework for each grade band, whilst not being exclusive criteria, the final grade being a matter of academic judgement

Feedback

12.24 All modules are expected to follow the <u>Assessment and Feedback Policy</u>. The policy outlines the expectation that both formative and summative feedback should be included in all modules, timelines, expectations for anonymous marking, examination feedback and other key expectations that help to engage students in a dialogue with colleagues in order to ensure there is a shared understanding of improved performance.

Design of Assessment formats

12.25 good variety of assessment within a course is beneficial; it ensures that a range of skills and abilities can be assessed, it recognises the different learning styles of different students, and it ensures that students do not become bored by the assessment. The following chart indicates a range of possibilities although there are many more methods of assessment which can be used.

TYPES OF ASSESSMENT

Type of assessment	Range of skills, knowledge and abilities assessed
Examinations: Time constrained Unseen paper or pre-prepared answer or subject area Open or closed book Multiple choice answer/test	 Work under pressure as reflected by the subject area graduate skills required (refer to authentic assessment). Recalled knowledge Numeracy/quantitative skills Verbal language skills (oral examinations)
Essays, critical review, journal article	 Research and collation of information Time management Organisation of material Self-editing skills Coherence of argument Critical independent thinking Written presentation Ability to focus Depth of subject knowledge Breadth of perspective Selection and attribution of sources
Reports (including laboratory reports), case studies	 Research and collation of sources Research and collation of information Time management Organisation of material Professionalism of presentation showing familiarity with report format Awareness of end user(s) Analytical and evaluative skills Self-editing and writing skills Quantitative skills IT skills
Seminar presentations, papers and posters Video, audio tape, slide presentation	 Oral presentation skills Developed use of body language Interactive communication skills Transferable skills for interviews Use of audio-visual aids Group work skills Planning and time management Problem solving Planning and organisation Teamwork Editing skills Interactive presentation skills Imaginative breadth Integration of image and text

Type of assessment	Range of skills, knowledge and abilities assessed
Projects (individual)	Research and collation of information
	Problem solving
	Application of knowledge
	Decision-making
	Time management
	Awareness of current professional practice
	Research skills
	Collation and organisation of material
	Ability to focus
	Oral and written communication skills
	Time management
	Self-editing
	Presentation skills
	Depth of subject knowledge
Group work	Teamwork and collaborative responsibility
	Delegation
	Time management
	Decision-making
	Leadership
	Negotiation
	Accountability processes
	Creativity
	Application
Logs, journals, diaries, minutes	Organisation of material
	Time management
	Self-critical awareness
	Succinct, recording technique
	Ability to focus
	Reflective analysis
Creative studio-based projects	Conceptual skills
	Problem solving
	Imaginative breadth
	Knowledge of materials
	Technical skill
	Contextual knowledge
	Visual aesthetics and expressiveness
	Planning and organisation
	 Professional presentation skills
	 Progressive development of ideas and their realisation
	Integration of theory and practice

Type of assessment	Range of skills, knowledge and abilities assessed
Portfolio/collection of diverse material	Progression and level of achievement
	Application of theory
	Self-editing skills
	Presentation skills
	Organisation of material
	Reflective analysis
Dissertation	Research skills
	Selection and attribution of sources
	Written presentation
	Collation and organisation of material
	Coherence of argument
	Development of a hypothesis
	Critical independent thinking
	Breadth of perspective
	Depth of subject knowledge

Authentic Assessment

12.26 The Education Strategy states that assessments should be varied, authentic and inclusive. Authentic assessment may be understood as assessment that requires students to use the same competencies, or combinations of knowledge, skills, and attitudes that they need to apply in the criterion situation in professional life.

Assessment task	What are students required to do?
Abstract	Students are required to write an abstract of a research paper/article within a specified word limit e.g. 300–500 words.
Annotated Bibliographies	Students produce a list of texts, primary sources and internet sites on specified or agreed topics to a particular referencing convention. They annotate these with a commentary, which could include an evaluation of what they have read.
Articles for different audiences	Students are asked to write on a particular topic(s) to an agreed length in a specific style e.g. a journal, newspaper or magazine.
Assessment stations	Developed in medicine, students move around a series of testing stations being assessed on a number of learning outcomes, each for a fixed period of time. Useful to assess a wide range of skills and knowledge.
Blogs	Students are required to keep an individual blog, e.g. to record their progress on a project; could be used as part of a group project exercise.
Book, website, journal article or programme review	Students write an account or present an oral presentation on designated articles or other programmes e.g. TV/radio. These often include an evaluative element to demonstrate depth of reading and level of understanding in concise formats.
Case studies	Students are required to work through a case study to identify the problem(s) and to offer potential solutions; useful for assessing students' understanding and for encouraging students to see links between theory and practice. Case studies could be provided in advance of a time-constrained assessment.
Concept maps	Students map out their understanding of a particular concept. This is a useful (and potentially quick) exercise to provide feedback to staff on students' understanding
Critical incident accounts / Journals / Blogs	Students working on placements keep diaries, journals or blogs in which they record their experiences. They can be asked to write about a critical incident in terms of context, what happened, the outcomes, how theoretical material they have learnt underpins the process and how they would do things differently in future.
Designing learning materials	Students prepare a learning package for a particular audience e.g. members of the public, school children etc. on a specified or agreed topic
Dissertation	Potential for sampling a wide range of practical, analytical and interpretative skills and to assess a broad application of knowledge, understanding and skills to other situations.
Essay	Students are required to write an essay on specified or agreed topics within given parameters e.g. word count, use of different literature sources etc.
Field Report	Students are required to produce a written/oral report relating to a field/site visit.

Assessment task	What are students required to do?
Grant Application	Students are required to submit a report as they leave the lab. Could be used with predesigned pro-forma to speed-up marking and feedback provision to students.
In-tray exercise	Students are provided with an initial dossier of papers to read, prioritise and work on, with a variety of tasks and new information given at intervals throughout the period of assessment. This simulates real practice where unknown elements and irrelevancies are often encountered.
Laboratory books/Reports	Students are required to write a report for all (or a designated sample) of practicals in a single lab book. You could inform students that a sample of lab books will be collected each week to mark any reports of labs done in previous weeks; this encourages students to keep their lab books up to date. Each student should be sampled the same number of times throughout the module with a designated number contributing to the assessment mark.
Learning logs	These are lists of activities and outcomes which students check off during a period of learning. For example, students could be asked to indicate competencies which they have practised to a specific level during a work placement
Make or design something	Students are required to make or design something, e.g. radio broadcast, video clip, web page etc; useful as a group work exercise
Media profile	Students are asked to use pictures or headlines from newspapers and magazines to illustrate the public perception/profile of a particular aspect of your subject area; useful as a group work exercise.
Mini-practical	This involves a series of mini practical sessions conducted under timed conditions which creates potential for assessing a wide range of practical, analytical and interpretative skills.
Multiple Choice Questions	Can be useful for diagnostic, formative assessment, in addition to summative assessment. Well-designed questions can assess more than factual recall of information but do take time to design.
Online discussion boards	Students are assessed on the basis of their contributions to an online discussion for example, with their peers; this could be hosted on a virtual learning environment (VLE).
Oral presentations	Students are asked to give an oral presentation on a particular topic for a specified length of time and could also be asked to prepare associated handout(s). Can usefully be combined with self- and peer-assessment.
Past written practical reports	Lab sheets given to students provide some of the write-up in full but leave sections such as error analysis, theoretical explanation etc. for the students to complete.
Patchwork tests	Students write a number of small pieces of work ('patches'), which they then have to later 'stitch' together in a reflective commentary. The patches and the tasks upon which they are based are discrete and complete entities in their own right, but they can help contribute to a holistic understanding of the module content.
Performance	Students are required to give some form of performance, e.g. concert
Portfolios/ e- Portfolios	Students provide evidence for their achievement of learning outcomes; these commonly incorporate a reflective commentary.

Assessment task	What are students required to do?
Problem sheets	Students complete problem sheets. This can be a useful way of providing students with regular formative feedback on their work and/or involving elements of self- and peer assessment.
Reflective diaries	Students record their learning over a period of time, interspersing narrative with a reflective commentary which could support the development of an action plan.
Research projects/ Group Projects	Potential for sampling wide range of practical, analytical and interpretative skills. Can assess wide application of knowledge, understanding and skills.
Role Play	Students write or give a presentation taking on a particular role, e.g. a journal reviewer/ editor, consultant, art critic etc. This type of assignment could be paired up with a grant application exercise.
Selective reports/ Sampling reports	Students are asked to either write up only particular sections of a report each week, e.g. methods section or results section. Alternatively, students are required to write practical reports in full, but they are told in advance that only a percentage of the reports will be assessed.
Simulations	Text or virtual computer-based simulations are provided for students who are then required to answer questions, resolve problems, perform tasks and take actions etc. according to changing circumstances within the simulation. Useful for assessing a wide range of skills, knowledge and competencies

Adapted from Engage in Assessment University of Reading

Group Work

12.27 Assignments for students working in groups are beneficial at all academic levels but the inclusion of group work must be rigorously justified. The University recognises the value group assessment have in contributing to graduate attributes. However also recognises the need for courses to ensure there is a strategy and oversight at course level. It is therefore included here to help course designers consider some of the issues.

The advantages can include:

- simulation of professional practice/real work situation
- development of a range of skills which would not otherwise be acquired individually
- sharing of student expertise/shared learning
- broadening of perspectives
- variation of learning methods away from lecturers, seminars, essays and examinations
- encouragement for organised use of learning time outside taught classes
- encouragement of social cohesion
- promotion of research/information collection.

Disadvantages can include difficulties such as:

- ensuring quality and equality of contribution, if appropriate
- balancing the range and abilities of each group
- justifying a common mark for all group members
- ensuring a similar level of staff support for different groups working in parallel or consecutively
- limited availability of student time.
- 12.28 The contribution of group work to the students' learning experiences should be included in the module learning outcomes. It is important that as well as undertaking working a group, they also acquire an understanding of the dynamics of group work and that they can reflection on the contribution that they individually make to the process. This must be included in the learning outcomes, assessment methods and assessment criteria.
- 12.29 In using group work as part of the assessment you might consider the following aspects:
 - Group size should be appropriate to the volume of the task, and the nature of the work. If there are too many students working in a group, it is more likely to result in "free-loading" by some individuals.
 - Groups may be formed randomly (to mimic work situations), they may be self-selected, or members may be selected by the teaching team to ensure that each group is balanced to reflect the characteristics and abilities of the semester or year group. Although students may prefer to work in self-selected groups, they often learn more from the challenge of working with people they know less well; this aspect could be included in reflection which forms part of the assessment.
 - Peer assessment within the groups is a highly effective learning device. However, it is better if the students set the assessment criteria from the start, and if they draw up a group contract from the outset, which identifies how the group will function, how any non-engagement by students will be dealt with and states the ground rules for behaviour within the group.
- 12.30 Such assessment by the group work may be used as a means of formative assessment, with self-evaluation by the students but without an allocation of marks, or as summative assessment.
- 12.31 It is essential that the marking system is made clear to the students from the outset.
- 12.32 The marking system may include allocation of a common mark to all group members, allocation of different marks according to individual contributions, or shared marks allocated by the group members following group evaluation of the completed assignment, with adjudication by the teaching team or staff member.
- 12.33 Individual students may submit a written statement on their contribution, or all group members may be asked to submit such statements.
- 12.34 Students may be given a viva/oral examination to verify their contribution to the group assignment if this is a stated part of the assessment strategy.

Graduate Attributes and Higher Education Skills

- 12.35 Students need to develop a range of skills, to inform their current learning, their personal development, their future employment and their lifelong ability to study. These form an integral part of their study in Higher Education, to enhance their flexibility, adaptability and autonomy in learning. As such these skills should be included in the learning outcomes, and hence assessment, of the modules on any course. They are more likely to be effective if delivered as part of a course where students engage in work-related and work-integrated learning activities (such as live projects, work placements, real-life case studies, employer input etc.).
- 12.36 The University Graduate Attributes have been developed to help achieve this through the curriculum. They include:
 - Critical and creative thinkers
 - Literate and effective communicators
 - Entrepreneurial
 - Global in outlook and community engaged
 - Socially, environmentally, and ethically aware
- 12.37 Graduate attributes should be considered at the inception of the curriculum design process. Course teams can contextualise the attributes within their own field, and thereby develop course and module learning outcomes which are not based solely on subject content.

Note: The implementation of Postgraduate Courses is expected through revalidation as part of a longer-term strategy.

Our aim is that graduates from all our courses will	To achieve this our curriculum development processes will promote the design of courses that empower our students to	Transferable Skills Alignment
be critical and creative thinkers	Develop and maintain a deep and expansive understanding of the core concepts of their field, developed through critical inquiry and reflection.	n/a
	Pursue an active, problem-solving approach grounded in the thinking and criticality of their field.	3
	Creatively seek to make connections across their field, framing new lines of inquiry and adapting their understanding in unfamiliar settings.	3
	Make informed decisions based on rigorous research and critical analysis of relevant information.	1
	Reflect on their progress, identify gaps, and focus their ongoing personal and professional development as committed lifelong learners.	8
be literate and effective communicators	Present arguments and explain ideas clearly in various formats as appropriate for a diverse range of intended audiences and respond to feedback received.	5
	Interpret and manipulate numerical data as appropriate to their field.	1
	Locate, evaluate, manage and synthesise information from a variety of sources, and make judgements as to the values that sit behind information sources.	1
	Harness the power of digital technologies for research, creativity, productivity, problem-solving and collaboration.	9
	Use the key technologies associated with their field effectively and with confidence.	9
be entrepreneurial	Show openness to new ideas, embrace divergent thinking, and apply curiosity and imagination within the context of their field.	3
	Demonstrate awareness of how enterprises and organisations relevant to their discipline operate, and the impact of contemporary trends on such organisations.	2
	Recognise the importance of understanding and responding to the expectations of clients, customers and other stakeholders relevant to their field of practice.	4
	Manage time by prioritising activities effectively.	7
	Show initiative, resilience and adaptability in the face of change, and accept personal responsibility for actions.	8

Our aim is that graduates from all our courses will	To achieve this our curriculum development processes will promote the design of courses that empower our students to	Transferable Skills Alignment
be global in outlook and community engaged	Work collaboratively and build positive relationships that help everyone achieve their goals.	6
	Engage with their field as it is conceptualised in the context of other locations and cultures.	n/a
	Respect diverse cultures, customs and values, being mindful of potentially competing needs of different communities.	4
	Embrace opportunities to work in diverse and complex teams both locally and internationally.	6
	Recognize the potential impact of economic, social and cultural differences when working within diverse communities, both locally and internationally.	5
be socially, environmentally and ethically aware	Demonstrate critical awareness of issues of social justice, and how such issues relate to disciplinary and professional practice.	n/a
	Respect the fundamental imperative of ethical practice based on honesty and integrity.	8
	Understand sustainability as a dynamic concept and recognize the potential environmental, economic, social and cultural impact of practices related to their field.	2
	Contextualize problems within an ethical framework and evaluate competing interests.	3
	Recognise the finite nature of resources and systems and consider the needs of future generations in decision-making.	1

TRANSFERABLE SKILLS

1	Analysis and decision making: Researching and analysing relevant information to make informed decisions
2	Commercial Awareness: Awareness of how businesses operate, current trends and
	their impact on organisations
3	Creativity and ability to solve problems: Coming up with a new approach or improving existing processes
4	Customer focus: Demonstrating how you understand customer needs and deliver outstanding service or products
5	Influence and communication: Communicating effectively to suit the audience, both
	verbally and in writing
6	Leadership and team-working: Building positive relationships that help everyone achieve
	their goals
7	Planning and organisation: Structuring and prioritising activities or projects
8	Self-Management: Taking personal responsibility and showing initiative to achieve
	goals
9	Digital Capability: Using a range of digital skills and competencies for learning and
	working