Linking Levels, Learning Outcomes and Assessment Criteria

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1.00 Introduction

In recent years, most UK higher education has shifted to an approach centred on the outcomes of learning. The change has implied the writing of many programmes using outcome-based terminology. This paper is designed to introduce the terminology and to demonstrate how the main descriptive structures should interrelate. The paper uses an integrated approach to the design of programmes and modules as a context for the description of level descriptors, learning outcomes and assessment criteria and their relationships.

In the past two years two new developments have emanated from the Quality Assurance Agency (QAA) that may influence or affect the processes that are described in this paper – subject benchmarks and programme specification. Reference to these are made in the text of the paper, and in the Appendices.

The work on assessment criteria is newer than that on levels and learning outcomes. It is only recently that we have seriously considered the relationship of assessment criteria to the other elements. These issues are under consideration in many institutions at present.

The paper includes the following sections:

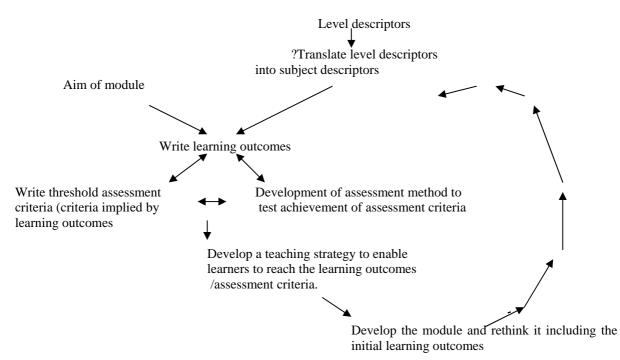
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2.00 A context for levels, learning outcomes and assessment criteria through an overview of curriculum design

A basic model that underpins the sequence of the paper is shown in Fig 1. The model represents an ideal sequence for module development. The model provides a rationale for ensuring the existence of a relationship between level, learning outcomes, assessment criteria, assessment and teaching methodologies. The model (Fig 1) is concerned with establishing student achievement at threshold standard. It does not, at this point, take into account the addition of a grading system above threshold. An elaborated version of model provides a design that incorporates grading. (Fig 4).

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Fig 1 Basic model of module development



The model (Fig 1) depicts the following sequence:

Level descriptors and module aims guide the writing of learning outcomes. A set of level descriptors may act directly as a guide for the writing of learning outcomes or the level descriptors may be translated into descriptors for the discipline or programme. In either case, the level descriptors ensure that the outcome statement is clearly related to a particular level and they provide an indication of agreed achievements. Learning outcomes are derived from consideration of level descriptors and aims. Learners must achieve the learning outcomes to gain credit for the module. Aims provide a rationale or a direction.

Learning outcomes imply the assessment criteria. Assessment criteria may be developed from the learning outcome or from the assessment task – but in either case they should relate

to the learning outcome. There are many reasons for developing assessment tasks – such as to provide feedback and these will affect the manner in which an assessment task is designed. However, the purpose of the task with which we are concerned here is to test that the learning outcomes have been achieved. A teaching strategy, on this model, is seen as being designed in relation to assessment processes, providing the support necessary to enable the students to be successful in attaining the threshold indicated in assessment criteria.

It is important to check the coherence of the cycle. This means going through it several times, ensuring that each part that is linked to another part by lines on the diagram, clearly links in terms of the structure of the programme. Any element in the cycle of development can be changed except the agreed level descriptors that are fixed.

3.00 Generic level descriptors

3.01 Introduction

Level descriptors are generic outcome statements of what a learner is expected to have achieved at the end of a level of learning – in this case in higher education. The descriptors used in this paper originated in a collaboration between two major credit accumulation and transfer projects funded by DfEE in the mid 1990's (Higher Education Credit Initiative Wales - HECIW and the Southern England Consortium for Credit Accumulation and Transfer - SEEC). Over 50 universities were involved in the development and the descriptors are widely used according to recent research in SEEC (Johnson and Walsh, 2000). They have been reformated recently to relate to skills terminology in current usage.

The descriptors were developed as a guide to the writing of learning outcomes for modules. This allows modules to be ascribed to a particular higher education level, a process that is essential for functioning within a credit framework. The reference to level descriptors has become essential, too, for the organisation of a modular system - as now exists in most higher education institutions.

There are other sets of level descriptor in use. Of particular significance are those developed by the Quality Assurance Agency in the context of the Higher Education Qualifications Framework (HEQF). The HEQF descriptors relate to programmes and not to modules. They represent the learning that should have been achieved at the end of qualifications. They are not designed to provide the detail of what is achieved in modules and it is for this reason that the SEEC descriptors are used in this context. At the end point of most awards, most of the modules will be at the same level – however, sometimes modules within a similar stage of a programme, are at differing levels.

A report in which the levels implied by HEQF and SEEC descriptors were compared (Moon, 2001) has indicated some variation in level implied by the two sets of descriptors, but the variation and the different conceptual bases of the descriptors are unlikely to be significant in most practical situations. The amount of detail required for particular purposes might therefore determine the decision as to which set of descriptors might be employed for a given task.

It is of importance to note that HEQF uses a system of five levels in higher education. This means that there is not a separate level for study in four year programmes (eg undergraduate Masters programmes or 'year abroad' students). 'Undergraduate' Masters programmes will either be seen as level 3 or Masters, depending on the actual level of learning achieved by students and described in learning outcomes.

It is also important to note a further implication of NQF with regard to postgraduate provision – and that is the distinction between level by time or by standard. Some programmes that are called 'postgraduate' are postgraduate because they require students to have achieved a first degree but the standard of the expected learning is actually at an undegraduate level.

More detail on the range and use of level descriptors is present in Moon, 2002a)

3.02 Format of the SEEC descriptors

As with the HEQF descriptors the SEEC descriptors describe five levels in higher education – 1, 2, 3 for undergraduate programmes and Masters and Taught Doctorate for postgraduate levels. At each level, achievements (skills and knowledge) are listed under a number of headings:

Development of knowledge and understanding (subject specific); Cognitive / Intellectual skills; Key/ transferable skills; Practical skills.

A number of other skills are identified separately that may be developed in some but not all programmes – and to different levels in those programmes. It is usual to consider that not all skills need to be developed to the level of the programme.

3.03 Using the descriptors

Most descriptors in the level descriptors are relevant to most programmes but there is not a necessity that all should be represented in a programme. For example 'group working' may not be developed in some programmes.

The descriptors can be used directly to guide learning outcomes. However, as we have suggested above, it has been found helpful for groups of staff to 'translate' the generic descriptors into subject or programme descriptors. The descriptors then become 'owned' and can guide more easily the writing of learning outcomes. This process of translation, that might only take an hour for each level, is valuable as staff development, requiring a group to consider in depth the expected outcomes of student work – and their work with students. As we have suggested above, it is appropriate to recognise that some descriptors may not be addressed in the programme. Similarly there may be specific areas that need new descriptors to be added (an example has been graphic design skills in architecture programmes).

When the descriptors are used for writing learning outcomes, it is important not just to look at the descriptors for a particular level, but to look at the same descriptors for the level below and that above the level under consideration.

SEEC Levels Descriptors

Important notes

- Areas of learning differ according to the extent to which the knowledge or skills developed are **generic** or more **subject specific**. The areas of learning are labelled accordingly.
- In general, progression is characterised by two important related factors
 - the **autonomy** of the learner
 - the increasing **responsibility** that is expected of the learner in the guidance given and the tasks set
- Some or all of the following skills will be identified by subject specialists at any level. It may be useful for subject specialists to develop more detailed descriptors of these skills in association with the other level descriptors in order to determine achievement at each level.
 - a) Investigative skills/methods of enquiry;
 - b) Laboratory skills/fieldcraft;
 - c) Data and information processing/IT;
 - d) Content/textual analysis;
 - e) Performance skills;
 - f) Product development;
 - g) Professional skills;
 - h) Spatial awareness;
 - i) Management of resources.

HE Level 1

Development of Knowledge and Understanding_(subject specific)

The Learner:

- **Knowledge base:** has a given factual and/or conceptual knowledge base with emphasis on the nature of the field of study and appropriate terminology;
- **Ethical issues:** can demonstrate awareness of ethical issues in current areas of study and is able to discuss these in relation to personal beliefs and values.

Cognitive/Intellectual skills (generic)

The Learner

- Analysis: can analyse with guidance using given classifications/principles
- Synthesis: can collect and categorise ideas and information in a predictable and standard format
- Evaluation: can evaluate the reliability of data using defined techniques and/or tutor guidance
- **Application**: can apply given tools/methods accurately and carefully to a well defined problem and begin to appreciate the complexity of the issues

Key/transferable skills (generic)

The Learner:

- **Group working**: can work effectively with others as a member of a group and meet obligations to others (for example, tutors, peers, and colleagues)
- Learning resources: can work within an appropriate ethos and can use and access a range of learning resources
- Self evaluation: can evaluate own strengths and weakness within criteria largely set by others
- **Management of information**: can manage information, collect appropriate data from a range of sources and undertake simple research tasks with external guidance
- Autonomy: can take responsibility for own learning with appropriate support
- **Communications**: can communicate effectively in a format appropriate to the discipline(s) and report practical procedures in a clear and concise manner
- **Problem solving**: can apply given tools/methods accurately and carefully to a well defined problem and begins to appreciate the complexity of the issues in the discipline

Practical skills (subject specific)

The Learner:

- **Application:** can operate in predictable, defined contexts that require use of a specified range of standard techniques
- **Autonomy** in skill use: is able to act with limited autonomy, under direction or supervision, within defined guidelines

HE Level 2

Development of Knowledge and Understanding (subject specific)

The Learner:

- **Knowledge** base: has a detailed knowledge of major theories of the discipline(s) and an awareness of a variety of ideas, contexts and frameworks
- **Ethical issues**: is aware of the wider social and environmental implications of area(s) of study and is able to debate issues in relation to more general ethical perspectives

Cognitive/Intellectual skills (generic)

The Learner

- Analysis: can analyse a range of information with minimum guidance using given classifications/principles and can compare alternative methods and techniques for obtaining data
- Synthesis: can reformat a range of ideas and information towards a given purpose
- **Evaluation**: can select appropriate techniques of evaluation and can evaluate the relevance and significance of the data collected
- **Application**: can identify key elements of problems and choose appropriate methods for their resolution in a considered manner

Key/transferable skills (generic)

The Learner:

- **Group working**: can interact effectively within a team / learning group, giving and receiving information and ideas and modifying responses where appropriate
- Learning resources: can manage learning using resources for the discipline. Can develop working relationships of a professional nature within the discipline(s)
- **Self evaluation**: can evaluate own strengths and weakness, challenge received opinion and develop own criteria and judgement
- **Management** of information: can manage information. Can select appropriate data from a range of sources and develop appropriate research strategies
- Autonomy: can take responsibility for own learning with minimum direction
- **Communications**: can communicate effectively in a manner appropriate to the discipline(s) and report practical procedures in a clear and concise manner in a variety of formats
- **Problem-solving**: can identify key areas of problems and choose appropriate tools / methods for their resolution in a considered manner

Practical skills (subject specific)

The Learner:

- **Application of skills**: can operate in situations of varying complexity and predictability requiring application of a wide range of techniques
- Autonomy in skill use: able to act with increasing autonomy, with reduced need for supervision and direction, within defined guidelines

HE Level 3

Development of Knowledge and Understanding (subject specific)

The Learner:

- **Knowledge base:** has a comprehensive/detailed knowledge of a major discipline(s) with areas of specialisation in depth and an awareness of the provisional nature of knowledge
- **Ethical issues**: is aware of personal responsibility and professional codes of conduct and can incorporate a critical ethical dimension into a major piece of work

Cognitive/Intellectual skills (generic)

The Learner

- Analysis: can analyse new and/or abstract data and situations without guidance, using a range of techniques appropriate to the subject
- **Synthesis**: with minimum guidance can transform abstract data and concepts towards a given purpose and can design novel solutions
- **Evaluation**: can critically evaluate evidence to support conclusions/recommendations, reviewing its reliability, validity and significance. Can investigate contradictory information/identify reasons for contradictions
- **Application**: is confident and flexible in identifying and defining complex problems and can apply appropriate knowledge and skills to their solution

Key/transferable skills (generic)

The Learner:

- **Group working**: can interact effectively within a team / learning / professional group, recognise, support or be proactive in leadership, negotiate in a professional context and manage conflict
- Learning resources: with minimum guidance can manage own learning using full range of resources for the discipline(s). Can work professionally within the discipline
- **Self evaluation**: is confident in application of own criteria of judgement and can challenge received opinion and reflect on action. Can seek and make use of feedback
- **Information management**: can select and manage information, competently undertake reasonably straight-forward research tasks with minimum guidance
- Autonomy: can take responsibility for own work and can criticise it
- **Communications**: can engage effectively in debate in a professional manner and produce detailed and coherent project reports
- **Problem solving**: is confident and flexible in identifying and defining complex problems and the application of appropriate knowledge, tools / methods to their solution

Practical skills (subject specific)

The Learner:

- **Application of skills**: can operate in complex and unpredictable contexts, requiring selection and application from a wide range of innovative or standard techniques
- Autonomy in skill use: able to act autonomously, with minimal supervision or direction, within agreed guidelines

Masters Level

Development of Knowledge and Understanding

The learner

- **Knowledge base**: has depth and systematic understanding of knowledge in specialised / applied areas and / across areas and can work with theoretical / research-based knowledge at the forefront of their academic discipline
- **Ethical issues**: has the awareness and ability to manage the implications of ethical dilemmas and work proactively with others to formulate solutions
- **Disciplinary methodologies**: has a comprehensive understanding of techniques / methodologies applicable to their own work (theory or research-based).

Cognitive and Intellectual Skills

The learner:

- Analysis: with critical awareness can undertake analysis of complex, incomplete or contradictory areas of knowledge communicating the outcome effectively
- **Synthesis**: with critical awareness, can synthesise information in a manner that may be innovative, utilising knowledge or processes from the forefront of their discipline / practice
- **Evaluation**: has a level of conceptual understanding that will allow her/him critically to evaluate research, advanced scholarship and methodologies and argue alternative approaches
- **Application**: can demonstrate self direction and originality in problem solving. Can act autonomously in planning and implementing tasks at a professional or equivalent level

Key / Transferable Skills

The learner:

- **Group working**: can work effectively with a group as leader or member. Can clarify task and make appropriate use of the capacities of group members. Is able to negotiate and handle conflict with confidence
- Learning resources: is able to use full range of learning resources
- Self evaluation: is reflective on own and others' functioning in order to improve practice
- Management of information: can competently undertake research tasks with minimum guidance
- Autonomy: is independent and self critical learner, guiding the learning of others
- **Communications**: can engage confidently in academic and professional communication with others, reporting on action clearly, autonomously and competently
- **Problem solving**: has independent learning ability required for continuing professional study, making professional use of others where appropriate

Practical Skills

The learner:

- Application of skills: can operate in complex and unpredictable, possibly specialised contexts, and has an overview of the issues governing good practice
- Autonomy in skill use: is able to exercise initiative and personal responsibility in professional practice
- **Technical expertise**: has technical expertise, performs smoothly with precision and effectiveness; can adapt skills and design or develop new skills or procedures for new situations.

Taught Doctorate

Development of Knowledge and Understanding

The learner

- **Knowledge base**: has great depth and systematic understanding of a substantial body of knowledge. Can work with theoretical / research knowledge at the forefront of the discipline at publication-quality / peer reviewed standards
- **Ethical issues**: can analyse and manage the implications of ethical dilemmas and work pro-actively with others to formulate solutions
- **Disciplinary methodologies**: has a comprehensive understanding of techniques / methodologies applicable to the discipline (theory or research-based).

Cognitive and Intellectual Skills

The learner:

- Analysis: with critical awareness, can undertake analysis, managing complexity, incompleteness of data or contradiction in the areas of knowledge
- **Synthesis**: can undertake synthesis of new approaches, in a manner that can contribute to the development of methodology or understanding in that discipline or practice
- **Evaluation**: has a level of conceptual understanding and critical capacities that will allow independent evaluation of research, advanced scholarship and methodologies. Can argue alternative approaches
- **Application:** can act independently and with originality in problem solving, is able to lead in planning and implementing tasks at a professional or equivalent level

Key / Transferable Skills

The learner:

- **Group working**: can lead /work effectively with group. Can clarify task, managing the capacities of group members, negotiating and handling conflict with confidence
- Learning resources: Is able to use full range of learning resources
- Self evaluation: is reflective on own and others' functioning in order to improve practice
- Management of information: competently and independently can undertake innovative research tasks
- Autonomy is independent and self-critical as learner; supports the learning of others
- **Communication**: can communicate complex or contentious information clearly and effectively to specialists / non-specialists, understands lack of understanding in others. Can act as a recognised and effective consultant
- **Problem solving**: independently can continue own professional study, professionally can make use of others within / outside the discipline.

Practical Skills

The learner:

- **Application of skills**: can operate in complex and unpredictable / specialised contexts that may be at the forefront of knowledge. Has overview of the issues governing good practice
- Autonomy in skill use can act in a professional capacity for self / others, with responsibility and largely autonomously initiative in complex and unpredictable situations
- **Technical expertise**: has technical mastery, performs smoothly with precision and effectiveness; can adapt skills and design or develop new skills / procedures for new situations.

4.00 Guidance for writing and using learning outcomes

4.01 Introduction

The use of learning outcomes and associated threshold assessment criteria provides a mechanism for describing learning either in prospective terms - to be achieved, or in retrospective terms - learning that has been achieved already (eg for accreditation of prior learning purposes). Learning outcomes are relatively general statements, related to level descriptors and to assessment and assessment criteria, that focus on the standards of achievement required in assessment of that learning.

While the principle purpose of learning outcomes concerns standards of student learning, and the relationship of learning to assessment, there are many other ways in which such statements may be used. Appendix 2 lists more of these. Bearing in mind the different uses of learning outcomes, the audience for them may need to be considered. Since communication is usually important, the comprehension of the audience needs to be taken into account and very technical language should be avoided.

It is common now, that learning outcomes are categorised into the apparent characteristics of learning to which they refer. These are usually written in accordance with the headings used in the SEEC generic level descriptors - so some learning outcomes might refer to subject specific knowledge and understanding. Another group might refer to cognitive or core academic skills and another might refer to other skills (key / transferable - or other terminology).

Although the development of such categorisation systems may be justified on the basis of convenience (see below), there is a logical problem in this procedure. We take for an example, a cognitive or core academic skill such as analysis. The existence of categorisations suggests that we should be able to describe the analysis processes undergone by – say a level 2 student – in a statement that is devoid of reference to content or the nature of the material that is being analysed. The statement should simply consider the nature of the analytical processes. In reality, the sophistication of analytical skill is largely determined by the complexity of the material that is being analysed. A child of five can analyse – so long as the material for analysis is sufficiently simple. On the basis of this argument, it is illogical to try to write learning outcomes that are categorised.

However, there are practical values in attempting to introduce some categorisation of learning outcomes. In particular, this relates to key or transferable skills that are developed in modules. The practical skill content of programmes is a current major concern in higher education, and the indication of where skills are developed within modules through learning outcomes provides an easy method of mapping the skill content of modules and ultimately of the whole programme.

A factor that may influence the manner in which learning outcomes are constructed is the development of **subject benchmarks** (Appendix 3). Subject benchmarks are written for honours degree level and hence are likely to be more influential on learning outcomes written for modules at level 3 – but of course, benchmarks should only influence learning outcomes if they influence too the content of the learning.

Generally speaking, the term 'learning outcome' has been applied to the outcomes of relatively small blocks of learning such as modules or short courses. However, the introduction of **programme specification** (Appendix 4) has provided a somewhat similar structure for whole programmes – described at the 'programme outcome'. Appendix 4 describes the characteristics of programme outcomes in relation to learning outcomes.

4.02 Definition and examples of learning outcomes

In terms of definition:

A learning outcome is a statement of what a learner is expected to know, understand and be able to do at the end of a period of learning. Learning outcomes are linked to the relevant level and since they should generally be assessable they should be written in terms of how the learning is represented.

Sometimes the definition of a learning outcome is written in terms of 'the learner will (be able to do something)...'. In these days of litigation, it is safer to use the notion of 'expected to be able...' since a teacher has no real control over a student's learning. An alternative is to use the term 'intended' or 'anticipated' learning outcomes.

Learning outcomes do not usually specify curriculum, but more general areas of learning. There may be exception to this in science and applied science subjects (see 4.04). It is unlikely that there will be more than eight learning outcomes per module. If there are more than ten, they are probably specifying too much curricular detail and will be unmanageable in the process of assessment.

It is important to relate learning outcomes to a level. This means that it is not appropriate to use the same learning outcomes for a module that may be delivered at two different levels. In such situations, while the teaching may be the same, the learning outcomes and assessment should differ, relating to the relevant expected level of learning.

Examples of learning outcomes:

Eg 1 Level 2 B.Ed programme

At the end of the module the learner is expected to be able to -

- explain the more common reasons for difficult behaviour in primary school children in class situations, indicating standard techniques for ameliorating that behaviour.

or - within the context of a class situation, demonstrate and evaluate the use of appropriate examples of positive reinforcement for the purpose of the improvement of behaviour.

Eg. 2 Level 3 English Literature.

At the end of the module, the learner is expected to be able to -

- demonstrate detailed understanding of the influences of the historical and social context within which the chosen text is set, both from the study of the text itself and from the study of other contemporary literature.

(Comment: this learning outcome could mention the text by name, but by focusing on the skills to be acquired, one avoids being tied to the same text in the future).

Eg 3. Level 2 Physics

At the end of the module, the learner is expected to be able to -

- perform correctly calculations on wave functions and in the solution of the Schroedinger equation for a range of one-dimensional problems.

Eg.4 Level 3 Physics

At the end of the module the learner is expected to be able to – - describe and explain the function of the basic devices of optoelectronics; optical fibres; liquid crystal displays; bi-polar and surface field effect transistors and MOS light emitting diodes.

Some forms of module may seem to be problematic for description in advance through statements of learning outcome. An example is negotiated learning or modules that are described as 'independent studies' where, as a part of the module, the learner identifies the subject matter to be studied (and represented in a project, essay etc). In such cases the learning outcomes (quite logically) will relate to the learning of the skills of autonomous learning, project skills and other matters that will usually be the rationale for the design of such a module anyway.

4.03 Learning outcomes, aims and objective

The difference between learning outcomes and aims is that aims are written in terms of teaching intention and indicate what it is that the teacher intends to cover in the block of learning (curriculum coverage). Learning outcomes are descriptions of what the learner is expected to learn in the period of learning defined. They should imply the standard of learning expected. Aims are therefore more about teaching and the management of learning, and learning outcomes are more about learning.

Objectives complicate the situation. They may be written in the terms of teaching intention or expected learning outcome. Objectives that are called 'behavioural' or 'learning objectives' are more likely to be written in learning outcome format. This complication is a good reason for abandoning the use of the term 'objectives' in the description of modules or programmes.

Since learning outcomes and aims have different functions, it can be useful to write an aim for a module in addition to learning outcomes. An aim can be a statement of general teaching intention and coverage as well as indicating the content of the module and its relationship to other learning or the whole programme (etc). In effect, an aim provides direction.

4.04 Issues of control in aims and outcomes

It is worth thinking about the issue of control in aims and learning outcomes and this has implications for the kinds of outcomes that are written. Because statements of aim are teaching intentions, they are very much within the control of those teaching. Teachers decide what material is to be covered and they teach it. Learning outcomes are less within their control because it is not possible to force a learner to learn. Only a learner can control learning and therefore the achievement of learning outcomes. Another point, emerges from the consideration about control. Mostly in higher education, learning outcomes are written for testing at the end of a module. However, in the case of much vocational education, the ability of the learner to demonstrate learning at the end of a block of learning is of little use. S/he will need to demonstrate that that learning has affected her/his practice in the workplace at a later stage and these longer term learning outcomes are even less under the control of those designing or teaching the initial programme. However, in the real world, they are of much greater significance. There is nothing to prevent the writing of both types of learning outcome for a module, so long as both are assessed. Exceptionally, however, it may be useful to anticipate longer-term learning through outcome statements that, in reality, cannot actually be assessed.

4 05 The components and language of learning outcomes

A well-written learning outcome is likely to contain the following components:

- ✤ A verb that indicates what the learner is expected to be able to do at the end of the period of learning.
- Word(s) that indicate on what or with what the learner is acting. If the outcome is about skills then the word(s) may describe the way the skill is performed (eg 'jump up and down competently').
- Word(s) that indicate the nature (in context or in terms of standard) of the performance required as evidence that the learning was achieved.

In the example above (3.02): 'demonstrate detailed understanding of the influences of the historical and social context within which the chosen text is set, both from the study of the text itself and of the study of other contemporary literature'.

the verb is 'be able to demonstrate' (what the learner has to do);

the words that indicate on what or with what the learner is acting - the influences of the historical and social context etc.

the words that describe the nature of the performance are 'demonstrate detailed understanding' and 'the study of the text' and ' the study of other contemporary literature.

The third component of the learning outcome tends frequently to be omitted. Since it is the component that mainly provides the main links to assessment criteria and level descriptors its presence is important to ensure the links in the cycle (Fig 1). However, when there are clear assessment criteria that are obviously linked to the learning outcome in other components, the third component is be less important.

In addition, learning outcomes written for different disciplines may differ in their components because of the structures of knowledge. In science disciplines or in some parts of science disciplines, there is a generally agreed hierarchy of knowledge so that the aspect of optoelectronics mentioned in the example above, is acknowledged to be level 3 material for example. The nature of the subject matter, in such cases, will itself determine level and extra

words that indicate the depth of knowledge may not be necessary. In contrast, in many humanities and arts subjects, a knowledge component may be encountered in modules at any level and issues such as the depth or context of the knowledge will indicate the level of the module.

In terms of sequence, some learning outcome statements may not order the components as above – and a learning outcome statement does not need to be written in one sentence alone. However, many learning outcome statements that run into multiple sentences are actually several learning outcomes – and problems may arise when it comes to assessment.

Another important factor about the language of learning outcomes relates to fundamental factors about learning. We assess the representation of learning – not the learning itself. A learner may 'take in' ideas and may have learnt them, but until we can see the ideas represented (in an essay, report, verbal statement etc), we cannot know that the learning has occurred. There will always be different ways in which the same learning can be represented and learners may be more able at one form of representation than another. A dyslexic student may have learned something but she may be unable to represent it in writing. Learning outcomes need, therefore to be written in terms of the representation of learning (eg not 'be able to understand', but 'be able to demonstrate understanding of...').

Some useful vocabulary for writing learning outcome and assessment criterion statements is included in Appendix 1. Some of the words are about the process of learning and some about the representation of learning. It is appropriate to mention the quality of learning in a learning outcome, so long as this is accompanied by words that indicate how that learning should be represented – thus making the learning outcome assessable.

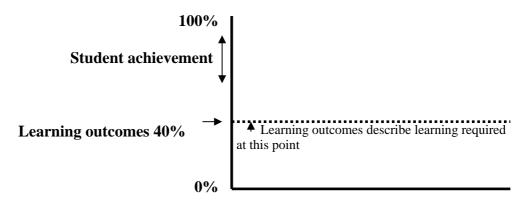
4.06 Learning outcomes and their location at minimum / threshold standard

Learning outcomes are **statements of essential learning**, and as essential learning, they are written at minimum acceptable or threshold (pass / fail) standard. The learning described in learning outcomes is the learning that must be attained in order that the learner can pass. In effect, learning outcomes are written at the pass / fail point.

There are important implications of the paragraph above. That learning outcomes are essential means that a learner attains or fails to attain a learning outcome. If the learner attains some learning outcomes and fails to attain others, s/he should fail the module. In practice many institutions do not operate this system and compensation is allowed – some outcomes passed 'better' compensate others that are not passed. Technically this represents a confusion between a grading system and the use of a threshold learning outcome system.

Grading is a separate operation from passing or failing to pass a learning outcome. The criterion for attaining a learning outcome will match the pass / fail point for the grade assessment criterion (see the material on assessment criteria below). Many people are surprised when they realise that learning outcomes are written at threshold standard, however the use of such a standard is fully justified in terms of creating a clear relationship with assessment and level. There are other important reasons for this too, that concern the essential qualities of higher education learning. They are demonstrated in Fig 2.

Fig 2 Learning outcomes and the qualities of higher education learning



The figure above represents a notional view of student achievement, from 0 to 100%. Learning outcomes drawn at a pass / fail point of 40% can be said to 'tie down' in description, only the lowest 40% of achievement. They tell the student what s/he must do in order to pass the module. In this way they form a sort of contract between the teacher and the student – 'If you achieve these, I will let you pass the module'. It seems completely fair to tell a student what s/he must do to pass.

The important point that is made by this model is that the 60% of learning above the learning outcome does not have to be 'tied down' in description though it may be described in (optional) grading assessment criteria or more generally in 'desirable learning outcomes – see below. It is 'space' in which the essential qualities of higher education learning can be expressed either in the teaching process or in the student's learning – exploration of ideas, reflective thinking, creative expression and so on. Seen in this way, the writing of learning outcomes is fair to students, provides accountability and a form of liberation of learning.

Ironically, it is often the same people who say that learning outcomes should be written for the average (modal) student who also complain that learning outcomes tie down or 'dumb down' learning. It is when learning outcomes are written at modal 'standard' in effect, that they tie down more learning. Another problem that arises with the modal placement of learning outcomes is raised by the question – where is 'modal standard'- is it 55%?, 60%? 65%? In order to relate learning outcomes to assessment we would have to know where they are located on a grading scale.

It may be useful to note on this diagram (Fig 2), that learning outcomes written at 100% act as competency statements – and the only options are then 'pass' or 'not yet ready to pass'.

4.07 Learning outcomes and assessment – some further points

While learning outcomes are meant to have a clear relationship to assessment, in practice this tends to be a somewhat confused area. Certainly, all learning outcomes should be assessable – in other words they should be written in terms that enable testing of whether or not the student has achieved the outcome. We have mentioned above that learning outcomes need to be written in the language of representation of learning.

While we can say that all learning outcomes need to be assessable – capable of being assessed - they may not all need to be actually assessed in practice and a decision on this may be an institutional issue. Clearly there are situations in which all learning outcomes do need to be assessed – such as where license to practice or competence to perform an essential vocational task is concerned. In other situations, however, it may be appropriate to recognise that we often sample learning outcomes for assessment. In an examination paper in which students have a choice as to which questions to answer, they may not be tested on every learning outcome. It may be important, in sampling learning outcomes, to say that all students should at least expect to be tested on each learning outcome – even if the assessment task actually samples.

5.0 An introduction to writing and using assessment criteria

In general terms: an assessment criterion is a statement that prescribes with greater precision than a learning outcome, the quality of performance that will show that the student has reached a particular standard. The standard may be the threshold that is described by the learning outcome or the standard that is required in order to gain a particular grade.

What are assessment criteria in relation to assessment methods and tasks etc? While assessment methods are the tasks undertaken by the student – such as writing an essay that is subject to assessment, assessment criteria are the basis on which a judgement of the adequacy of the work is made. There are many different ways to present assessment criteria,

Example of assessment criteria:

unlike learning outcomes.

Learning outcome – level 1 At the end of this module, the student will be expected to be able to explain and demonstrate the main features of effective academic essay at level 1.

The assessment method is to write an essay and an assessment criterion that is developed might be:

The essay will be word-processed and between 1500 and 2000 words on a given topic. The essay will relate to its title, will be clearly written and structured, will demonstrate the contribution of further reading, and thinking. The student will be able to explain how the essay demonstrates these features and how they contribute to its overall effectiveness.

Example of assessment criteria

Learning outcome - Level 2 B.Ed programme: At the end of the module the learner will be expected, within the context of a class situation, to demonstrate and evaluate the use of appropriate examples of positive reinforcement for the purpose of the improvement of behaviour.

Assessment method – In the context of three teaching sessions, observed by her mentor, the student will demonstrate three examples of positive reinforcement in the

class situation as a means of encouraging improvement of behaviour.

Assessment criteria:

- The learner will demonstrate at least three examples of positive reinforcement in order to improve behaviour.
- The examples will show that the learner understands the principles of positive reinforcement.
- They will be appropriate to the context and situation within the classroom at the time.
- The learner will be able adequately to evaluate the effectiveness of her own actions and the consequences of it, recognising any obvious ways of improving her practice.

The use of assessment criteria implies that a criterion-referenced system for assessment is in place. This is appropriate in an approach to module development that focuses on the outcomes of learning.

- In a criterion-referenced system, the judgement of the learners' work is made on the basis of its quality in relation to pre-defined criteria the assessment criteria.
- A norm-referenced system is based on a pre-arranged distribution of gradings or passes and failures probably in terms of percentages of the whole group.

(It is not infrequent in higher education that a norm-referenced system quietly underlies and influences what is declared to be a criterion-referenced system. For example, concern about the low or high number of first class honours degrees in several cohorts can encourage adjustment of that number in later cohorts, even in a system that is overtly criterion referenced)

6.0 The place of assessment criteria in current higher education

At present the use of effective assessment criteria often seems to be a long way behind the use of learning outcomes and level descriptors.

- In some institutions the developments could be said to have gone too far, with religious describing of mechanistic criteria following every statement of every learning outcome.

- In other situations, however, in a module description form, the slot that requires some detail about the criteria often elicits information about the assessment method.

There tends to be a pervading resistance to assessment criteria. This is summed up in 'I know a good piece of work when I see it', an attitude that indicates a lack of comprehension of many issues in higher education today and of the rights of a student;

There are **more subtle reasons why assessment criteria are not used.** Making learning and the requirements of learning more transparent can expose difficult issues.

Eg in English modules where different approaches, taken by different lecturers are explosed when second marking takes place and there is disagreement.

It is important to **think about assessment criteria in the context of the assessment process**. There are different reasons for assessing. The form that the criteria take may need to reflect this.

7.0 The issue of precision

There is a concern about learning becoming too prescriptive in writing assessment criteria. This is often encouraged by a formalised template with boxes to fill in.. There may be a dictate that each learning outcome should be followed by several assessment criteria. There is a sense that we become ruled by paperwork and administration.

At their most detailed extreme, **assessment criteria will detract from the challenge** of the task for a student as they will tell a student what to do to gain high marks. On the other hand, if the assessment process is meant to help a student to learn (instead of just letting you know their standard of learning), then your use of criteria to help them to learn can be completely justified.

Sometimes precise detail in writing assessment criteria is more appropriate than in others. It may be appropriate in vocational situations where there is an issue of license to practice, but not in a level 3 essay where students should be tested on their ability to write – not told how to do it.

Learning outcomes and assessment criteria **can 'tidy-up' learning** in a manner that may please administrators but detract from the real learning experience (Moon, 2000). On the other hand, there are concerns sometimes that providing too much information about what features of work will be credited will mean that all **learners work to the minimum**.

We seek an informed balance. With levels and learning outcomes, we attempt to reach greater precision but with assessment criteria, sometimes it will be a matter of ensuring that the quality of learning is not destroyed by too much precision in assessment criteria. The balance should take into account, the purpose for assessment. So long as your use of assessment criteria is fair and open and well considered in terms of the purpose of assessment, there are no rights and wrongs.

8.0 Definitions of assessment criteria

There are different types of assessment criteria. Two are distinguished by the different jobs that they do in relation to learning outcomes. The third is 'the rest' – the two are:

Threshold assessment criterion - a standard of performance that a learner must reach in order to demonstrate the achievement of a specified element of learning – ie the threshold standard.

Grade assessment criterion - a specified standard of performance that the learner

must reach in order to be allocated a particular grade within a hierarchy of grades. In this case there is likely to be a series of grade assessment criteria related to the different grades.

For a credit system or for basic use in quality assurance, it is only the threshold criteria that are of importance – they indicate whether or not a student has reached the standard to attain a pass for a module and whether or not she has gained the credit that will build towards the qualification. There are other forms of assessment criteria that we deem 'the rest' – a variety of less precise means of writing criteria.

'The rest': other forms of assessment criteria that tend to be more generalised in terms of the curriculum they cover (eg sometimes across all levels for any discipline for any task! inevitably less precise – and more significantly, they are not directly associated with learning outcomes.

9.0 Writing assessment criteria

Assessment criteria are generally simpler in their format than learning outcomes, and more varied in their format.

In either type of assessment criterion, there needs to be some sort of statement either of what the learner will do or a reference to the quality of the work that will be evident in the task in order to meet the criteria for success in the task. Eg reference to

- something that must be present (presence of correct grammar)
- or absent (absence of spelling mistakes)
- something should be done in a particular way (report needs to match a given format)
 - some role that must be fulfilled (*'the report will accurately describe the processes of preparation for the task, the task itself and the outcomes'*).

They may be presented in a tabular form, or as bullet points.

Assessment criteria should test, assess or relate to the learning that is mentioned in the learning outcome. Eg If you say students must 'write something', you should not test them orally.

In terms of the **standard** implied by a learning outcome being at threshold...

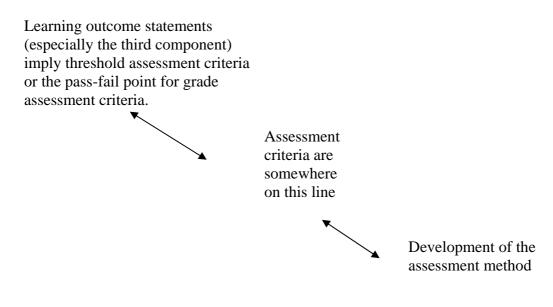
- for threshold assessment criteria, there is a match.
- for grade assessment criteria, the learning outcome will be written at threshold but grades will imply description of quality above threshold

In writing learning outcomes it is important to **introduce tentative language such as 'the student is expected to...**' because it is not possible to make a student learn. In the case of assessment criteria it is appropriate to use 'the student will....', because the student will only pass the threshold line, or gain a particular mark if she has fulfilled the criterion

Although they need to match the learning implied by the learning outcome, assessment

criteria can be developed broadly from the learning outcome statement or from the assessment task

Fig 3 An illustration of the relationship between assessment criteria and learning outcomes



Where the **criteria are closer in wording to the learning outcome**, they are likely to be fairly generalised in reference to what the learner should do – allowing for the development of alternative assessment tasks and they are likely to be fewer. Where the criteria are developed from the task they are likely to be more detailed

In writing assessment criteria, threshold assessment criteria give you more detail of what an assessment task needs to show in order to demonstrate that the learning has been achieved.

An example - the example, is worked from the basis of a sample learning outcome statement (level 1 – from module on skills in academic writing):

Learning outcome At the end of this module, the student will be expected to be able to explain and demonstrate the main features of effective academic essay at level 1.

The assessment task might be to write an essay

A threshold standard assessment criterion that is developed it might be: The essay will be word-processed and between 1500 and 2000 words on a given topic. The essay will relate to its title, will be clearly written and structured, will demonstrate the contribution of further reading, and thinking. The student will be able to explain how the essay demonstrates these features and how they contribute to its overall effectiveness.

More detailed threshold assessment criteria that are developed from the task might be:

The essay will demonstrate an appropriate working knowledge of word processing for production of level 1 written work, including layout and spell-check;

- grammar and spelling will be accurate;

- there will be reference to at least 7 relevant books / papers;

- these will be correctly referenced in the recommended manner;
- there will be some evidence of analysis of ideas;
- there will be some demonstration of synthesis of ideas at least in a summary and conclusion;
- there will be an appropriate structure with evidence of introduction, *development and conclusion;*.

In addition, in an oral session, with reference to his/her essay, the student will discuss the features of an essay that make it effective, and will show how these features work towards the effectiveness of the essay.

The assessment criteria in the example above **say what must be present in the essay** for it to be judged to be acceptable. Since all of the statements are written at threshold, all should be reached in order for the learner to have achieved the learning outcome.

Grade assessment criteria provide a scaling of how well learners achieve above the threshold.

- They provide an incentive for learners to achieve at a higher standard than the minimum.
- We have said that these criteria relate to the standard set in the learning outcome only in so far as the grade assessment criterion that is at the pass-fail point must coincide with the learning outcome

10.0 The use of desirable learning outcome statements

Desirable learning outcome statements can help in the writing of grade assessment criteria. You need to be clear that they are 'desirable' and not mandatory – that they give direction rather than dictate. They can be valuable for marketing purposes of for communication with employers when you do not want to say talk about what the minimum acceptable standard is.

In order to maintain coherence in module development, it is appropriate to **write desirable learning outcomes as a development** from the usual (threshold) learning outcomes. An example is given below – first there is the statement of the learning outcome written at threshold.

Learning outcome Eg 15: Level 1 Introduction to Acting Drama programme At the end of the module, the student will be expected to be able to work with others in small task-orientated groups, participating and interacting in the group in a productive manner for him/herself and for the group as a whole

An **example of a desirable learning outcome** that could guide the writing of grade assessment criteria is:

The high-achieving learner will be able to work with and to lead others in small task-

orientated groups, participating and interacting in the group in a productive manner for him/ herself and for the group as a whole. S/he will be aware of his / her role in the group, and able to describe his/her strategies and actions.

Grade assessment criteria will now be guided by both the learning outcome that provides the pass / fail point information and the desirable learning outcome that indicates the qualities of better performance that will attain a higher grade. The assessment criteria might be:

Fail – *The learner cannot or does not participate or does not work towards helpful co—operation in a group situation.*

Average pass – The learner works with others in a task-oriented group, participates and interacts in a productive manner for her/himself and the group.

High average – The learner works well with others in a task-oriented group, participating and interacting in a very helpful manner that suggests an increasing awareness of his / her role in the group and an increasing orientation towards the taking of leadership roles when appropriate.

Excellent – *The learner is able to lead and to act as a participant in a task-orientated group, is aware of his / her role in the group and is able to describe strategies and actions.*

11.0 Weighting assessment criteria

A system of weighting may be superimposed in many assessment situations. In the case of threshold assessment criteria, it is not the criteria that are weighted, but the **components of the task.** This means that some features of the work are identified as contributing to a greater extent to the achievement of threshold.

eg

Learning outcome At the end of the module, it is intended that the student will be able to write a concise, clear and tidy report of a laboratory practical that must be laid out in the prescribed format. (level 1 Introduction to Chemistry module).

The assessment task in this case is likely to be the writing of one or more reports that are assessed. There is some recognition in the writing of the learning outcome that 'concise-ness', clarity and tidiness are judgements that are seen as less important than the use or lack of use of a prescribed format. A set of threshold assessment criteria based on the assessment of three reports might be:

- The reports are concise;
- They are clearly written so that the procedures could be repeated by another on the basis of the writing.
- They conform sufficiently well to the prescribed format. The attainment of this criterion takes priority over the others.

In other words, the conciseness, clarity and tidiness of the report will not be considered if the format is not correct.

Because **grade assessment criteria are not tied in the same way to a learning outcome**, a system of weighting would be appropriately expressed within the assessment criteria eg

Grade D Fail The report is not in the correct format, is insufficiently concise, clear or tidy.

Grade C Pass The report is in the correct format, is sufficiently concise, clear and tidy

Grade B	The report is in the correct format. It is concisely written in a tidy
manner	with a very clear style.
Grade A	<i>The report is in the correct format, concisely written in a tidy manner.</i>
The	clarity of the style of writing is exceptional and sophisticated. It would
be	worthy of a level 2 student.

Or

To achieve the learning outcome, the report must reach a minimum standard in the use of the correct format, the conciseness and clarity of the writing and the tidiness of the report (40% of the mark)

Above this, up to 10% more can be given for concise writing;

Up to 10% more can be given for clarity of the writing

Up to 5% more can be given for the overall tidiness of the presentation;

Up to 35% more can be given for the skilled and excellent use of the prescribed format.

The way in which the marks have been allocated here is **analytic as opposed to holistic**. In analytic marking, the marks are allocated to individual criteria or individual characteristics of the work. In holistic marking, marks are allocated on the basis of overall judgement of all or several criteria, as in the example above (Gosling and Moon, 2001).

12.0 Writing some other forms of assessment criteria

We suggested that this **third group broadly represents 'the rest'** – other assessment criteria that do not fit the first two groups. However, in more precise terms, these are usually the criteria that are more generalised, and that may not relate to any particular curriculum or to specific learning outcomes.

These forms of criteria represent probably, the **most common form of assessment criteria** in use. Sometimes they are more like 'marking guides' than assessment criteria.

One form of these generalised assessment criteria that is in very wide use in institutions deals with grading. It specifies the qualities of student performance that will merit a particular grade (or grade range) so it will be presented as a sequence of criteria.

To be allocated as a 'first', a piece of work is likely to be described in something like the following kinds of terms:

Outstanding work - extremely and accurate execution, going beyond the set requirements of the task, demonstrating wide reading which is effectively assimilated into the work.

Such a description may also be **used for application** to a laboratory report or an essay or a dissertation at any level. There are, however, some problems associated with this commonly used system.

- the criteria are not associated with learning outcomes.
- the nature of the grading may not even indicate where pass / fail point is. For example, where degree classification terminology is used, where is the pass / fail point?
- another problem specifically relates to the degree classification system but is caused by the confused thinking around the use of generalised assessment criteria. Staff have been known to say that they cannot allocate 'firsts' to level 2 students in that these students 'just don't know enough yet'

Another problem with the generalised form of grade assessment criteria, which are applied for a range of assessment tasks, is imprecision. For example, students might be told that a piece of work should display:

- *critical thinking;*
- originality
- development of argument
- evidence to support conclusions
- the use of reference material
- an adequate conclusion

Such information is vague.

The development of a set of range statements like the following may help but still does not relate to standards. An example of such ranges is:

80 +	exceptional;
70 – 79	excellent;
60 - 69	very good;
50 – 59	satisfactory;
40 - 49	just pass – but weak;
below 40	very weak or poor work.

The student does not know what weights a marker might attribute to the ideas given in the list, and may not fully understand what, for example, 'critical thinking' might look like in a piece of work.

13.0 A final word on writing learning outcomes and assessment

criteria – a tale of dubious interpretation

- words are slippery
- we do not always have a common understanding of words that are used commonly (eg 'assessment criteria', 'critical analysis' and so on.

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(SEEC publications are available from the SEEC Office, 0208-12234978)

Appendix 1 Some Vocabulary for Writing Learning Outcomes and Assessment Criteria

Finding the right words for use in writing learning outcomes / assessment criteria can be difficult, particularly when the statements must mesh with the generic level descriptors. The following list is provided as an aid in this process. The words are organised for convenience

under headings that might be seen to accord with those from Bloom's taxonomy. However, no hierarchy is intended. Some words would fit several headings and a child of 8 years can synthesise a word from a series of letters. The words are simply a vocabulary list gleaned from a variety of sources.

Activities giving evidence of knowing:

Define, describe, identify, label, list, name, outline, reproduce, recall, select, state, present, be aware of, extract, organise, recount, write, recognise, measure, underline, repeat, relate, know, match.

Activities giving evidence of comprehension:

Interpret, translate, estimate, justify, comprehend, convert, clarify, defend, distinguish, explain, extend, generalise, exemplify, give examples of, infer, paraphrase, predict, rewrite, summarise, discuss, perform, report, present, restate, identify, illustrate, indicate, find , select, understand, represent, name, formulate, judge, contrast, translate, classify, express, compare.

Activities giving evidence of knowledge / understanding

Apply, solve, construct, demonstrate, change, compute, discover, manipulate, modify, operate, predict, prepare, produce, relate, show, use, give examples, exemplify, draw (up), select, explain how, find, choose, assess, practice, operate, illustrate, verify.

Activities giving evidence of analysis

Recognise, distinguish between, evaluate, analyse, break down., differentiate, identify, illustrate how, infer, outline, point out, relate, select, separate, divide, subdivide, compare, contrast, justify, resolve, devote, examine, conclude, criticise, question, diagnose, identify, categorise, point out, elucidate.

Activities giving evidence of synthesis

Propose, present, structure, integrate, formulate, teach, develop, combine, compile, compose, create, devise, design, explain, generate, modify, organize, plan, re-arrange, reconstruct, relate, re-organise, revise, write, summarise, tell, account for, restate, report, alter, argue, order, select, manage, generalise, precis, derive, conclude, build up, engender, synthesise, put together, suggest, enlarge.

Activities giving evidence of evaluation

Judge, appraise, assess, conclude, compare, contrast, describe how, criticise, discriminate, justify, defend, evaluate, rate, determine, choose, value, question.

Appendix 2: Why write learning outcomes:

It is good practice to be explicit about what you expect of learner in terms of learning to be attained and the assessment. Learning outcomes link with assessment criteria and assessment practice and indicate teaching strategies. They are written in relation to level descriptors.

Learning outcomes provide an indication of the standards that you or the higher education community expects of learners – a matter of good communication and good practice;

They are a good way of communicating the learning purpose that the module is intended to fulfil. They provide information to other teachers, students and employers (etc).

Learning outcomes can be a useful tool for communication with external examiners.

The use of learning outcomes provides a means of judging and attaining consistency of volumes and standards of learning within and across institutions;

In the context of a credit-based higher education system, learning outcomes are part of the definition of credit – as part of the measure of volume of learning.

Learning outcomes, perhaps written in relation to benchmarks are a manner in which standards are expressed in higher education.

A set of learning outcomes provides information about what the learner has achieved. It is a kind of transcript.

Skills and other components of learning can be identified in learning outcomes and mapped across a programme.

Appendix 3: Subject benchmark statements

Subject benchmark statements have been in the process of development for the past few years by QAA. They are written for subjects studied in higher education and they represent the outcome of discussion in a group of subject specialists on what might be the typical achievements of students when they graduate with an honours degree in that subject area. There are 42 subjects or subject groups. Benchmarking groups were asked to produce a set of benchmarks that indicate the threshold expectation, but most also considered the achievement of a 'typical' student and some, of an 'excellent' student. The groups, however, used different terms and different criteria for decisions about what might constitute threshold and what might constitute 'typical'.

Appendix 4: Programme specifications

Programme specifications are relatively succinct descriptions of programmes in the higher education sector. They broadly conform to a template and they provide basic information about a programme for students, administrators, staff and, most significantly, for the process of QAA subject review. The aspect of a programme specification that has some relevance to this paper is the listing of programme outcomes. A programme outcome is likely to look very similar to a learning outcome in structure but in some ways will be significantly different. Programme outcomes are inevitably more generalised, covering a greater volume of learning as they refer to a whole programme and they refer not specifically to threshold standard, but to a typical student. The QAA document on programme specifications suggests that programme outcomes do not necessarily relate directly to the learning outcomes of constituent modules because the outcomes of a programme may be more than the sum of the parts (the modules). A general assumption is made that programme outcomes are assessable, but standards are not likely to be as clearly ascertained from them as from a module learning outcome. Because programme outcomes are written at the level at which the programme is completed, they will need to relate to the level descriptors for that level and they may bear greater relationship to the learning outcomes for modules at that level than previous levels.

Programme outcomes for honours degree programmes are likely to be influenced by the relevant subject benchmarks, although QAA staff indicate that they do not expect programme outcomes to be slavish copies of the benchmarks. The statements need to indicate the character of the particular programme being described. If this character is greatly at odds with the benchmarks for that subject, then there is a requirement to make some justification of the position that has been taken.

Appendix 5 Exercises for Courses on Learning Outcomes and Assessment Criteria

The set of examples of learning outcomes and assessment criteria (separate handout) is resource material for this exercise and will provide models for your work.

Choose one of the learning outcomes tasks below and then do the following exercise on writing assessment criteria using your newly generated learning outcomes. Since you are writing assessment criteria for the learning outcomes, do not get tempted into writing too much detail in the learning outcomes. For both of the exercises, note difficulties, queries or observations and?! any moments of enlightenment to explore in a larger group.

Learning outcomes tasks

For a level one study skills module, write one or more learning outcomes that relate(s) to student writing skills for any discipline – or for a specified discipline. Indicate an appropriate assessment method for testing the learning outcomes.

For a level three module that is designed to help students prepare to write dissertations, write learning outcomes that concern the writing skills that students will require. Indicate an appropriate assessment method for testing the learning outcomes

For a careers preparation module at level two, write several learning outcomes that relate to the preparation of an appropriate curriculum vitae. Indicate an appropriate assessment method for testing the learning outcomes

The skill of presenting oral material effectively is to be embedded in a module. There will be one or two learning outcomes written into the module learning outcomes. Write these learning outcomes and describe the task in which they are to be tested. You will need to decide at what level these are being written

Write a set of learning outcomes for any module in any discipline – for the whole module or part of a module. You will need to specify the level and design the learning outcomes in accordance with this. Provide an indication of the assessment task that the students will undertake in order to demonstrate that they have reached the learning outcomes. Indicate an appropriate assessment method for testing the learning outcomes.

Assessment criteria tasks - some hints

For the learning outcomes that you have written, write a set of appropriate assessment criteria. You may need to consider in more detail, the assessment task that will appropriately test the learning outcomes.

You will need to make a decision as to:

- whether the criteria are to be threshold assessment criteria,

- or for grading purposes, and for the latter, you may find it helpful to write one or more desirable learning outcomes.

Remember that there are two approaches to writing assessment criteria.

- They may be developed from the learning outcomes (ie providing more detail of what students must do)

- or they are developed from the assessment task. In this case, they will still relate to the learning outcomes. They are somewhere on the 'line' that links learning outcomes and the assessment task.

If you complete the task early, write learning outcomes for another of the modules listed above and work on assessment criteria for those.