

**Report of the
Northern Ireland
Credit Accumulation and Transfer
System (NICATS) Project**

April 1996 - March 1999

Contents

6.

Project Outcomes

6.1. Specifications and guidelines for NICATS

The specifications and guidelines below form the basic components of a common framework within which systems for the use of credit (e.g. accumulation and transfer; credit based resourcing) can be developed.

6.1.1. Credit

Credit can be defined as:

An award made to a learner in recognition of the verified achievement of designated learning outcomes at a specified level

The award of credit is a means of formally recognising learning achievement. This credit is expressed in a quantified form so that learning achievement in different contexts can be broadly compared in terms of intellectual depth (level) and relative magnitude (number of credits).

Principles of credit (Based on the principles of credit taken from the InCCA report - “*A common Framework for Learning*” September 1998).

- *Credit provides a means of quantifying learning outcomes achievable in notional learning hours at a given level.*
- *One credit is awarded for 10 notional hours of successful learning activity.*
- *Notwithstanding the link between credit and notional learning time, the emphasis of assessment should be upon learning achieved and not time served.*
- *Credit is awarded for the achievement of specified learning outcomes. No additional credit can be awarded for achievement above the threshold level (although such achievement can be recognised through the award of marks or grades).*

6.1.2. General and specific credit

General credit is defined as:

The total amount of credit attributed to specified learning outcomes at validation or accreditation

Specific credit is defined as:

The number of credits at specified levels which a receiving institution is prepared to accept for recognition of prior learning on a specific programme

For the purpose of credit accumulation and transfer it is important to recognise that, whilst all learning may be accredited, not all credit can or will be accumulated towards any specified overall programme or qualification.

In the case of learner transfer it is the responsibility of the receiving institution to establish that portion of the general credit presented by any one learner which it will consider relevant to be counted as specific credit within the context of the programme of study for which that individual wishes to register. It will be necessary to scrutinise the learning outcomes for which this credit was awarded in order to facilitate such decisions.

It is the right of the receiving/awarding institution to determine whether the credit claimed by the learner has currency.

6.1.3. Learning Outcomes

Learning outcomes can be defined as:

Statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of a process of learning

The inclusion of learning outcomes in unit specifications promotes the development of coherent learning programmes and, by making the required student learning explicit, assists learner guidance. Credit accumulation and transfer is facilitated if clear learning outcomes are available to indicate with precision the achievements to which the award of credit is related. When used in association with their related assessment criteria they indicate the level at which the learning has occurred.

Principles of learning outcomes

- *Learning outcomes must be accompanied by assessment criteria.*
- *Learning outcomes, together with assessment criteria, specify the minimum requirements for the award of credit. Grading is based on degrees of attainment above the minimum requirements for the award of credit. Decisions about grading systems, schemes and criteria are a matter for individual institutional policy. The credit framework does not encompass a grading scheme.*
- *Statements of competence may be used as, and equate to, learning outcomes. Learning outcomes do not, however, always define competencies.*

6.1.4. Assessment Criteria

Assessment criteria:

A description of what the learner is expected to do, in order to demonstrate that a learning outcome has been achieved

Assessment criteria have a direct relationship with learning outcomes. The purpose of assessment criteria is to establish clear and unambiguous standards of achievement in respect of each learning outcome.

6.1.5. Notional Learning Time

Notional learning time is defined as:

The number of hours which it is expected a learner will spend, on average, in order to accomplish the specified learning outcomes at a particular level

“It is important that there is some concept of the volume of learning related to the achievement of specified learning outcomes. Time provides the customary measure. However, the actual learning time will vary, perhaps considerably, from one student to another and any reference to the notional learning time can only be an estimate. The amount of credit allocated to any particular achievement must also be independent of the mode of the learning. The concept of notional time has been developed by educational practitioners and is currently the only volume measure which adequately addresses the need.”

(The Welsh Higher Education Credit Framework Handbook, 1996)

Principles of notional learning time:

- *Taught or contact time will vary according to the mode of delivery, but notional learning time will not. All learning relevant to the learning outcomes should be considered when notional learning time is being estimated. Consideration should also be given to the level at which the learning is being offered.*
- *Notional learning time is not equivalent to the actual time that any particular learner needs to spend in order to achieve the learning outcomes. The real time will vary according to the individual's capability, degree of prior experiential or other learning and the mode of learning, for example, in the case of work based learning the actual time spent in the workplace may greatly exceed the notional time required to achieve the specified learning outcomes.*
- *Any prior skill or knowledge required of the learner should not be included in an estimate of notional learning time.*

6.1.6. Credit levels and level descriptors

Level is defined as:

An indicator of the relative demand, complexity and depth of learning and of learner autonomy

Level descriptors are defined as:

Statements which describe the types of learning demand which the learner will encounter at each level

The level identifies the relative depth of learning which will be required of a learner undertaking a unit of assessment. NICATS recognises NINE levels which are described as entry level to level 3 (FE); and levels 4-8 (HE). The levels are distinguished from one another by level descriptors (*For articulation with existing systems please see figure 7, section 6.2.1.*).

Level descriptors should be seen as a developmental continuum in which preceding levels are necessarily subsumed within those which follow. The level descriptors are therefore a guide to the curriculum designer as to the kinds of demands it is appropriate to make of learners at each of the designated levels.

Principles of levels (based on the principles of levels taken from the InCCA report - “*A common Framework for Learning*” September 1998).

- *The NICATS levels span the full spectrum of post-compulsory learning.*
- *The levels encompass all forms of assessed learning offered across all awards hierarchies, delivered by whatever means and in whatever context.*
- *As defined above, levels are indicative of relative demand, complexity, depth of learning and learner autonomy. They are thus different from the specific learning outcomes and associated assessment criteria which indicate the threshold standards required for the award of credit for any specific unit of assessment (please see section 6.1.7. on the role of credit in defining standards).*
- *Levels are not intrinsically related to years of full-time study or to the previous learning achieved and/or experience of the learner: Thus:*

i) Units of assessment undertaken following the award of a first degree are not necessarily postgraduate in level. For example, an introductory unit to a different discipline may be at a lower level than other units within a given programme.

ii) Units undertaken following work experience may be at any level.

- *Credit levels relate to units of assessment rather than whole awards.*
- *Only one level can be attributed to any given unit of assessment.*
- *An award or qualification may be composed of units at different levels.*
- *Units should be located at the correct level (through relation of the learning outcomes and assessment criteria to level descriptors) irrespective of the programme of which they may form a part.*

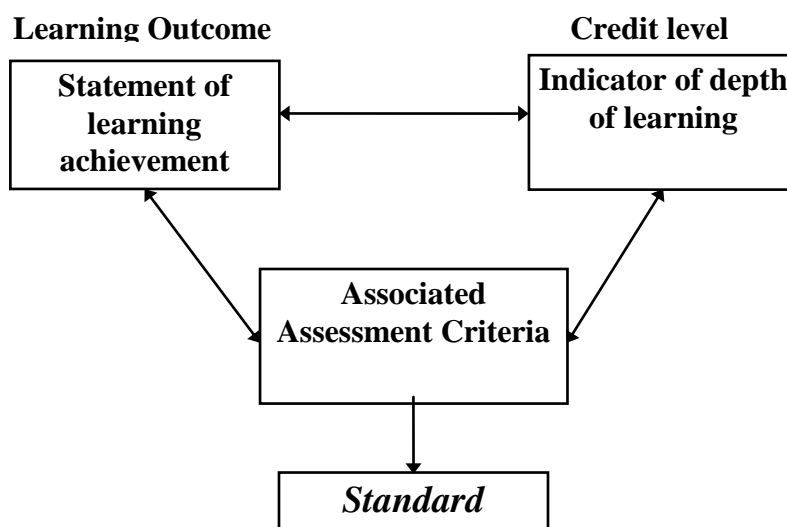
6.1.7. The role of credit in defining standards

Bridges and Sand (1998) define standard as:

An established criterion, or set of criteria, against which the quality of student performance is measured: as a consequence of the measurement, the standard is satisfied or it is not

In the context of the credit system, standards help to ensure consistency in process and outcome. As described in section 6.1.6., levels have level descriptors which are advisory in status, designed to help and inform those who are designing curricula. The level descriptors are not formal criteria and therefore levels alone cannot be regarded as standards. The standard is defined by bringing the level into a curricular context and identifying a series of formal learning outcomes and associated assessment criteria. The learning outcomes and associated assessment criteria therefore become the criteria which define the standard; the standard itself being met when all the relevant assessment criteria have been satisfied. This explains why it is a fundamental principle of NICATS that **all** the learning outcomes should be satisfied for the credit to be awarded. In diagrammatic form the standard can be represented as follows:

Figure 2: The role of credit in defining standards



Since all the learning outcomes must be achieved at the level described by the assessment criteria, there is a clear statement of the standard required for the award of credit.

Credit also has a role in defining standards of programmes leading to formal qualifications. Programme designers are expected to identify the principal learning outcomes for their programme and to ensure that the outcomes are addressed by the component units of assessment. The threshold standard for the award can be expressed in terms of the minimum total credit requirements.

6.1.8. Credit value

The amount of credit attached to a particular unit is quantified as its credit value and should always be expressed in terms of a number of credits at a specified level. The credit value is meaningless if the level of the credits is not specified. Ascribing and approving the credit value to be attached to a unit of assessment must be part of the validation process. The credit value is an indication of the relative magnitude of the learning effort expressed as notional learning hours. The level is an indicator of the relative demand, complexity and depth of learning and of learner autonomy.

6.1.9. Unitisation

Unitisation can be defined as:

The process of describing the potential achievement of learners in terms of units of assessment. The units describe what the learner will be expected to know, do and understand and the value of that learning expressed in credits and levels

The building blocks of a CAT system are credits which are awarded for the achievement of learning outcomes. This requires that the curriculum be divided into units of assessment which prescribe the information necessary to make judgements about the level and volume of learning. NICATS proposes that all learning is specified in terms of units of assessment, the component parts of which include a title, level, credit value, specified learning outcomes and their associated assessment criteria.

It is important to note that the unit of assessment can be of any size. Determination of the size of the unit of assessment lies with the delivering body or institution and will depend on the nature, coherence and complexity of the learning.

The benefits of unitisation for further education have been outlined in FEDA's 2020 vision leaflet and are as follows:

- Learning will be more adaptable because changes can be made more easily through units.
- It provides greater flexibility and choice to learners because they can tailor their learning on a unit basis, rather than a qualification basis.
- The opportunity to learn in more manageable amounts, and be rewarded for it, provides greater motivation to learners.
- It provides a language for describing all achievement - through a unit's learning outcomes - and numerical measure of achievement through credit values and levels.
- It provides a very practical architecture for developing new learning opportunities.

Similar advantages are being achieved in Higher Education through the use of a modular system, where the modules are constructed in accordance with the component parts described above.

There will obviously be some types of learning for which the learning outcomes can only be demonstrated after successful achievement of a number of modules or units.

6.1.10. Units of assessment

A unit of assessment is defined as:

A coherent and explicit set of learning outcomes with their associated assessment criteria, having a title, credit value and level

Units of assessment (often abbreviated to units) can be assembled in a variety of ways to meet the requirements of a particular learning programme. To ensure absolute coherence and avoid fragmentation within subjects, the unit of assessment can be of any size.

A unit of assessment* consists of the following:

Title	a well-defined and specific name
Learning outcome statements	what a learner is expected to know, understand and do
Assessment criteria	standards for achieving outcomes
Level	level of demand (NICATS stipulate nine levels from basic education to doctoral level)
Credit value	a numerical value indicating unit size

While modules are related to the delivery of programmes, units of assessment relate to the assessable parts of programmes i.e. learning outcomes and their associated assessment criteria. The unit of assessment prescribes only that information necessary to make judgements about its level and size.

“A unit of assessment does not include the syllabus or the modes of learning or assessment methodologies or any other aspect of the delivery. This concept of a unit of assessment allows the same unit to be taught at two different institutions even though the tutors may use different syllabi and different modes of assessment.”

(Bridges and Sand, 1998)

Within a credit framework there exists a conceptual separation of delivery from assessment. While they are conceptually separate it is recognised that in practice, delivery and assessment are often related. Therefore the terms used in a credit framework are units of assessment (units) and modules of delivery (modules). Thus the learning outcomes of a unit of assessment can be achieved via college-based programmes, work-based learning, APEL, resource-based learning and other routes.

**It should be noted that, although NVQs and GNVQs are made up of units, these should not be confused with units of assessment as they do not necessarily contain the same component parts.*

6.1.11. Module

A module is defined as:

A potentially interchangeable element of the delivered curriculum which may incorporate one or more units of assessment

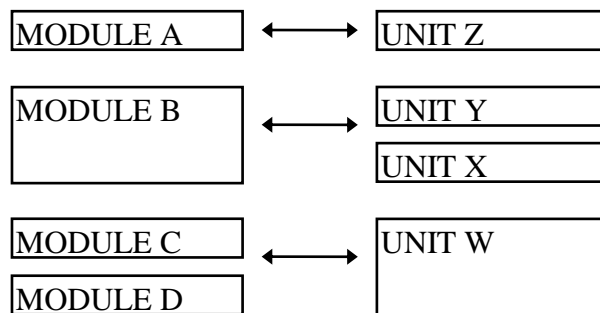
A module differs from a unit in that it refers to the *delivered curriculum* experienced by the learner. In addition to title, learning outcomes, level, credit value and assessment criteria, the module includes the syllabus, the modes of learning, the assessment strategy and the modes of assessment. The module size is defined by the delivering institution.

For a properly functioning CAT system, the modules must fully satisfy the principles underlying the recognition of units of assessment.

6.1.12. Relationship between units of assessment and modules

Those using a module-based method of delivery will have considerable freedom as to how to incorporate units of assessment. The relationship between units of assessment and modules is flexible. For example, the outcomes of a single unit could be achieved via one module, or through two or more modules. Alternatively, a single module could deliver outcomes which contribute to a number of different units of assessment. For example, a work experience module could contribute to a vocational assessment unit and units of assessment in communications or mathematics. Many permutations become possible.

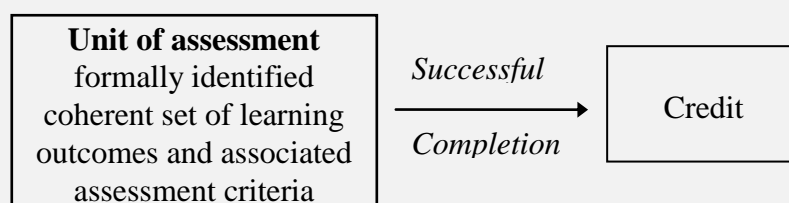
Figure 3: Relationship between units of assessment and modules



6.1.13. Summary: The basis for the award of credit

Credit is awarded for achieving learning outcomes. Each unit of assessment has a number of formally identified learning outcomes. In order to earn credit for the unit of assessment, the learner must satisfy all of the designated learning outcomes in the set. The principles are set out in figures 4, 5 and 6 below which are adapted from material produced by Bridges and Sand in the DRN guide (1998).

Figure 4

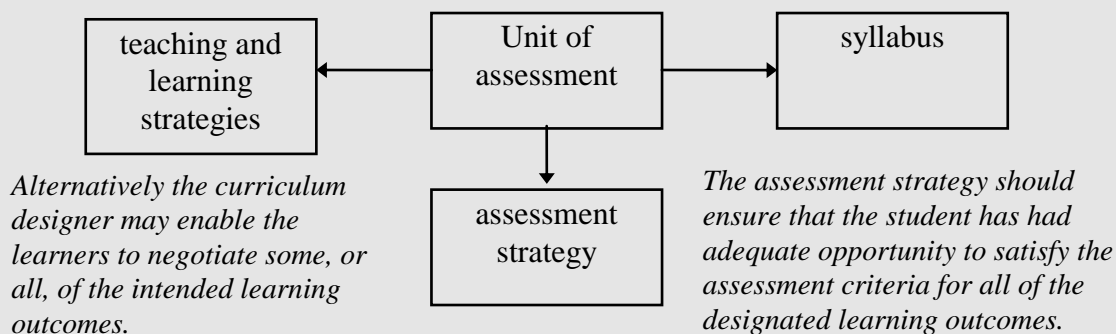


The learning outcomes for a unit of assessment are the achievements which are considered fundamental to its purpose.

Figure 5 : Curriculum design

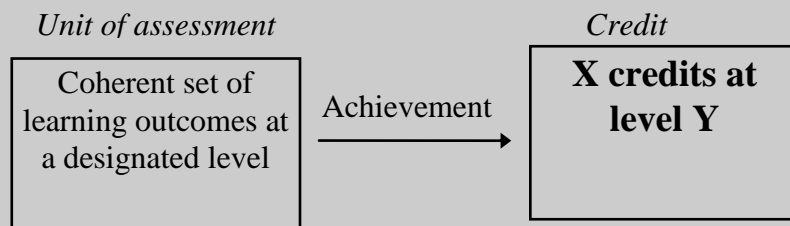
A learning outcome is expressed as a statement describing an important area of knowledge, or a skill or other attribute which the student is expected to gain.

The curriculum designer builds the unit of assessment and the assessment strategy around a set of intended learning outcomes at a designated level.



Credit is only awarded for a unit of assessment if the entire set of learning outcomes has been satisfied at the designated level.

Figure 6



The learning outcomes, together with the criteria to be used in assessment and the proposed credit value, should be approved at validation.

6.1.14. Credit and Qualifications

Credit is an award in its own right. Although a credit is not in itself a qualification, a number of credits can be accumulated, through prescribed rules of combination, to make up a particular qualification. Should the awarding bodies adopt the NICATS credit framework specifications, criteria for credit accumulation towards any qualification (i.e. the number of credits and the level at which they are awarded) will be specified by the appropriate awarding body.

The national qualifications regulatory bodies (i.e. the Qualifications and Curriculum Authority (QCA) in England; ACCAC in Wales and the Council for Curriculum, Examinations and Assessment (NICCEA) in Northern Ireland) have responsibility for the development of the 16-19 qualifications framework (i.e. the pre-HE qualifications). NICATS will work in close co-operation with CCEA, QCA (Northern Ireland) and the local Northern Ireland awarding bodies to promote the vision of a system whereby national qualifications are underpinned by credit framework principles.

Northern Ireland is ideally placed to act as a testing ground to achieve an operational single framework for credit and qualifications and it is hoped that the local Northern Ireland regulatory and awarding bodies will agree to be involved in pilot activities, adopting the principles of NICATS. If this vision is achieved the learner will be able to claim credit awards for increments of learning which are quality assured by approved awarding bodies. The learners' achievements will be recognised by all participating bodies because a common protocol will exist.

The Quality Assurance Agency for Higher Education (QAAHE) is responsible for the development of the Higher Education qualifications framework. The proposed qualifications framework will be underpinned by the credit framework principles of credits and levels. QAAHE will prescribe the credit requirements for higher education qualifications at each level, ensuring consistency for credit requirements for HE qualifications.

6.2. The Articulation Between Academic, Professional and NVQ Awards

6.2.1. Introduction

NICATS recognises NINE levels which are described as entry level to level 3 (FE); and levels 4-8 (HE). Figure 7 below illustrates how the NICATS levels may articulate across the qualifications system. The schematic representation includes suggested higher NVQ level equivalencies. It is hoped that QCA will endorse the NICATS guidelines and specifications so that, with further developmental activity, there will be a move towards the levels equivalencies suggested.

Figure 7: How the proposed NICATS levels may articulate across the qualifications system

NICATS FRAMEWORK	NVQ*	GNVQ	General Qualifications	NOCN	HE CATS
Entry			Entry	Entry	

1	1	Foundation	GCSE (Grades D-G)	1	
2	2	Intermediate	GCSE (Grades A-C)	2	
3	3	Advanced	A/AS LEVEL	3	0/A
4	4				1/B
5	4				2/C
6	5				3/D
7	5				M
8					

**It is recognised that this schematic representation of suggested higher NVQ level equivalencies is not currently the situation*

NVQ: National Vocational Qualification; GNVQ: General National Vocational Qualification; NOCN: National Open College Network; HE CATS: Higher Education Credit Accumulation and Transfer System (0/A: higher education foundation level; 1/B: higher education certificate level; 2/C: higher education diploma level; 3/D: honours degree level; M: masters level).

6.2.2. NICATS recommendations for articulation

NICATS recommends working towards aligning NVQ level 4 with either NICATS level 4 (HE certificate level/HNC level) or 5 (HE diploma level/HND level). NVQ level 5 would then articulate with either NICATS level 6 (Honours degree level) or 7 (Masters level). This can be schematically represented as follows.

Figure 8: The proposed articulation between NICATS levels and NVQ levels

NICATS FRAMEWORK	NVQ FRAMEWORK
Entry	
1	1
2	2
3	3
4	4
5	4
6	5

7	5
8	

This recommendation differs slightly from that in the InCCA report which recommends equating NVQ level 4 with one or more of the proposed levels 4, 5 and 6 and NVQ level 5 with the proposed level 7. NICATS has considered the reasoning which underpins the InCCA recommendation and has made its modifications for the following reasons:

- The NCVQ was expected to align GNVQ 4 with either levels 4 and 5, or levels 4, 5 and 6, of the undergraduate programme.
- Existing HND and HNC programmes widely offered in further and higher education institutions broadly equate to the first two years of an honours degree. Current NVQ programmes at level 4 equate with these qualifications.
- The “Dearing Report” makes recommendations for the development of the 2+1 and 2+2 models for achieving a degree level qualification. Such models are based on the assumption that learners may exit with recognised awards at sub-degree level. It would thus be possible for the learner to exit at a NICATS level 5 with a full NVQ level 4 qualification.
- Consultation with colleagues offering such qualifications as the Masters in Business Administration (MBA) would indicate that much of this “Masters” level programme is at NICATS level 6 (the “honours” degree level). Such qualifications, particularly where tied to the Management Charter Initiative Standards, have often been designed to reflect the NCVQ’s proposed level 5 standards.
- The differentiation of level at NICATS level 6 over that of its predecessors is a clear preparation for the skills of independent research required at “Masters” level (NICATS level 7). It is for this reason that NICATS is also proposing that ordinary “pass” degrees be designated at level 5 and that level 6 provides the generic descriptors which differentiate achievement at honours level.

6.2.3. Further developmental activity to move towards levels equivalencies

While it is helpful to establish broad equivalencies between NVQ award levels and the NICATS levels as an interim measure, all stakeholders must eventually work to the same nationally agreed levels. The correct equivalencies between NVQ awards/units and NICATS levels can only be established if QCA agrees to be involved in pilot activities (of programme design), adopting the NICATS specifications. It should also be recognised that NVQ awards, which are currently designated at a single level, will incorporate outcomes/units at a number of NICATS levels. Analysis of the content of NVQ awards/units will be necessary to establish and ensure a match between the NVQ award/unit level and the NICATS level. The size of the NVQ awards/units in credits (i.e. the credit value) will vary because NVQs themselves vary in size.

The first step towards making this vision a reality is to reach agreement with QCA on broad equivalencies between NVQ award levels and the NICATS levels. This development could influence the relationship between academic, NVQ and professional awards by:

- Helping institutions to allocate specific credit to NVQ awards/units against their own academic modules/units.
- Clarifying NVQ-academic award articulations.
- Facilitating the allocation of academic credit towards NVQs.
- Helping to ensure greater consistency across the sector.

6.2.4. Factors which will influence agreement on broad equivalencies

InCCA believes that it may now be possible to achieve agreement on broad equivalencies between HE academic levels and higher NVQ levels because of the following factors:

- QCA acceptance of the importance of underpinning knowledge and understanding (all new NVQs and revised NVQs must explicitly include this dimension);
- QCA's criteria now allowing an array of assessment modes and methods at the higher levels (e.g. in engineering, psychology and para-legal studies);
- the involvement of the QCA in Quality Assurance issues;
- the growth in the number of work-based learning degrees which provide a model of the way in which work-based competence, underpinned by relevant 'academic' learning (primarily knowledge and understanding), can lead to both a National Vocational Qualification and a degree;
- significant developments in the agreement of abbreviated and detailed generic level descriptors which encompass academic, professional and competence-based learning outcomes; and
- movement by a majority of higher institutions towards an approach to the curriculum based on "learning outcomes" which articulates well with the QCA competence approach.

NICATS would agree with the importance of these factors and suggest that its proposed articulation model best describes the real equivalencies between level of demand in work-based and traditional academic sectors. The NICATS recommendations have the added benefit of clearly describing the entire continuum of levels which equate across the awards spectrum, thus leading to a clear model for levels differentiation.

6.3. The development of a single continuum of levels across further and higher education

6.3.1. Introduction to the development of a single continuum of levels

Where they have been defined, levels in higher education have been described in terms of awards or qualifications (e.g. undergraduate diploma, honours degree) or the separate years of a 3/4 year degree. With the pattern of change towards a more flexible education system, it is necessary that levels are no longer tied to awards or qualifications and years of a degree.

It should be acknowledged that the higher education curriculum functions as a part of the wider learning continuum. Thus students enter the higher education sector with a previous history of achievement and may wish to exit at any particular stage. The portability of modules or units achieved to date therefore becomes an issue and it is crucial that sense can be made of the nature and level of modules or units which students may bring with them when entering higher education at all undergraduate and postgraduate levels. This necessitates agreement on a continuous set of level descriptors which can relate to all levels of the learning continuum from the extremely basic to Doctoral level. For these reasons, rather than being regarded as a problem to be confronted at a later date, articulation between the further and higher education sectors is at the heart of the NICATS project. To enable a unified system to operate, NICATS has developed a single continuous set of level descriptors from basic entry level to postgraduate level. Currently, articulation between FE and HE is hindered as HE levels are related to year of study rather than intellectual demand. Thus much of year 1 undergraduate learning is often only at FE level 3. This has implications both for standards at the various prescribed higher education levels and for learners who should be offered opportunities either to claim credit for their prior achievement or to be given exemptions and the opportunity to 'fast-track' to their chosen qualification. If we are serious about articulation it is necessary to adopt a single continuous set of level descriptors.

Currently in the UK there is no single continuous hierarchy of level descriptors which describes achievement and progression. Because the Derbyshire Regional Network is the sole functioning example of an integrated credit system across the FE/HE divide existing in the UK at present, the NICATS Project team examined their level descriptors carefully. The Derbyshire levels which built on the FEU levels (FE levels Entry, 1, 2, and 3) were considered to be so broad as to risk ambiguity of interpretation. Also, the Derbyshire model does not display progressive learning in a continuum of levels; the lower FEDA levels are generic whereas the HE levels are subject related. The link between FE level 3 and HE level 1 requires clearer articulation. The development of a single set of levels, and their level descriptors was therefore seen as a crucial aspect of a unified credit framework for Northern Ireland.

NICATS recognises NINE levels which are described as entry level to level 3 (FE); and levels 4-8 (HE). Figure 7 in section 6.2.1. illustrates how the NICATS levels may articulate across the qualifications system.

The development of the NICATS generic level descriptors has been informed by existing models of level descriptors including levels proposed by: the Further Education Unit (FEU, 1995), currently in use by the FE sector and the National Open College Network (NOCN); the National Council for Vocational Qualifications (NCVQ); the Derbyshire regional network (University of Derby regulations); the New Zealand Qualifications Authority (NZQA; 1996) and the Southern England (SEEC)/Wales consortia (1996). The NICATS level descriptors have also drawn upon theoretical models of learning development (e.g. Bloom's Taxonomy of Learning (1971) and Steiner and Bell's Model of Experiential Learning (1979)), the national award levels, along with the academic and professional experience of the Task group members.

The categories of descriptor which the NICATS Project team agreed were appropriate for the Northern Ireland framework included '*Intellectual Skills and Attributes*', '*Processes*' and '*Accountability*'. It was agreed that these broad concepts could sufficiently embrace those descriptors outlined by the SEEC/Wales model.

The NICATS Project team considered the content of the level descriptors. It was agreed that, while the content should take cognisance of all the descriptors as outlined in the SEEC/Wales model, they should be incorporated with much more brevity. It was felt that many descriptors in the SEEC/Wales framework overlapped and did not require a category of their own: for example ethical understanding was considered to be an integral part of personal responsibility and both concepts were included in the category 'accountability' in the NICATS model. In designing the table of level descriptors it was recognised that the format adopted within the NZQA framework (1996) could provide an extremely useful template and much of the further development work relied heavily on the NZQA model. The Project team agreed that the level descriptors should reflect the following:

6.3.1.1. *Intellectual skills and attributes*

This category is entitled "intellectual skills and attributes". It reflects knowledge and understanding, application, analysis, synthesis/creativity and evaluation. This category also encapsulates psychomotor skills, self-appraisal/reflection of practice, planning and management of learning, problem solving, communication and presentation, interactive and

group skills. Transferable skills overlap with the NCVQ Key Skills and therefore the Northern Ireland descriptors reflect their development.

6.3.1.2. Processes

Processes refer to the operational contexts within which the learner performs and include the tasks and procedures required.

6.3.1.3. Accountability

The term accountability is understood as a broad concept embracing the underpinning attributes of autonomy, responsibility and ethical understanding. While accepting that increasing autonomy is an essential feature of a learners' progression through the levels continuum it is constrained by ethical considerations.

6.3.2. Format of the NICATS generic level descriptors

The NICATS generic level descriptors are presented in the following format:

6.3.2.1. A summary of the generic level descriptors (see section 6.3.3.)

This attempts to condense the categorised level descriptors into short sharp descriptions of the context of learning and the expectations of the learner at each level.

6.3.2.2. A table of generic level descriptors (see section 6.3.4.)

The table of level descriptors gives a more detailed description of the levels; each level has three descriptor categories: intellectual skills and attributes; processes; and accountability.

6.3.2.3. Guidance notes for the table of generic level descriptors (see section 6.5.)

The guidance notes have been written to:

- assist users in interpreting the table of generic level descriptors so that they are used appropriately;
- enable the consistent interpretation and application of the level descriptors.

6.3.3. Summary of the generic level descriptors

The level descriptors should be seen as a developmental continuum in which preceding levels are necessarily subsumed within those which follow.

Learning accredited at this level will reflect the ability to:

ENTRY LEVEL - employ recall and demonstrate elementary comprehension in a narrow range of areas, exercise basic skills within highly structured contexts, and carry out directed activity under close supervision.

LEVEL 1 - employ a narrow range of applied knowledge, skills and basic comprehension within a limited range of predictable and structured contexts, including working with others under direct supervision, but with a very limited degree of discretion and judgement about possible action.

LEVEL 2 - apply knowledge with underpinning comprehension in a number of areas and employ a range of skills within a number of contexts, some of which may be non-routine; and undertake directed activities, with a degree of autonomy, within time constraints.

LEVEL 3 - apply knowledge and skills in a range of complex activities demonstrating comprehension of relevant theories; access and analyse information independently and make reasoned judgements, selecting from a considerable choice of procedures, in familiar and unfamiliar contexts; and direct own activities, with some responsibility for the output of others.

LEVEL 4 - Develop a rigorous approach to the acquisition of a broad knowledge base; employ a range of specialised skills; evaluate information using it to plan and develop investigative strategies and to determine solutions to a variety of unpredictable problems; and operate in a range of varied and specific contexts, taking responsibility for the nature and quality of outputs.

LEVEL 5 - generate ideas through the analysis of concepts at an abstract level, with a command of specialised skills and the formulation of responses to well defined and abstract problems; analyse and evaluate information; exercise significant judgement across a broad range of functions; and accept responsibility for determining and achieving personal and/or group outcomes.

LEVEL 6 - critically review, consolidate and extend a systematic and coherent body of knowledge, utilizing specialised skills across an area of study; critically evaluate new concepts and evidence from a range of sources; transfer and apply diagnostic and creative skills and exercise significant judgement in a range of situations; and accept accountability for determining and achieving personal and/or group outcomes.

LEVEL 7 - display mastery of a complex and specialised area of knowledge and skills, employing advanced skills to conduct research, or advanced technical or professional activity, accepting accountability for related decision making including use of supervision.

LEVEL 8 - Make a significant and original contribution to a specialised field of inquiry demonstrating a command of methodological issues and engaging in critical dialogue with peers; accepting full accountability for outcomes.

6.3.4. Table of generic level descriptors

	Intellectual skills & attributes	Processes	Accountability
Entry	<ul style="list-style-type: none"> • Employ recall and demonstrate elementary comprehension in a narrow range of areas with dependency on ideas of others. • Exercise basic skills. • Receive and pass on information. 	<ul style="list-style-type: none"> • Operate mainly in closely defined and highly structured contexts. • Carry out processes that are repetitive and predictable. • Undertake the performance of clearly defined tasks. • Assume a limited range of roles. 	<ul style="list-style-type: none"> • Carry out directed activity under close supervision. • Rely entirely on external monitoring of output and quality.
1	<ul style="list-style-type: none"> • Employ a narrow range of applied knowledge and basic comprehension. • Demonstrate a narrow range of skills. • Apply known solutions to familiar problems. • Present and record information from readily available sources. 	<ul style="list-style-type: none"> • Show basic competence in a limited range of predictable and structured contexts. • Utilise a clear choice of routine responses. • Co-operate with others. 	<ul style="list-style-type: none"> • Exercise a very limited degree of discretion and judgement about possible actions. • Carry restricted responsibility for quantity and quality of output. • Operate under direct supervision and quality control.
2	<ul style="list-style-type: none"> • Apply knowledge with underpinning comprehension in a number of areas. • Make comparisons. • Interpret available information. • Demonstrate a range of skills. 	<ul style="list-style-type: none"> • Choose from a range of procedures performed in a number of contexts, some of which may be non-routine. • Co-ordinate with others. 	<ul style="list-style-type: none"> • Undertake directed activity with a degree of autonomy. • Achieve outcomes within time constraints. • Accept increased responsibility for quantity and quality of output subject to external quality checking.
3	<ul style="list-style-type: none"> • Apply knowledge and skills in a range of complex activities, demonstrating comprehension of relevant theories. • Access and evaluate information independently. • Analyse information and make reasoned judgements. • Employ a range of responses to well defined but often unfamiliar or unpredictable problems. 	<ul style="list-style-type: none"> • Operate in a variety of familiar and unfamiliar contexts using a range of technical or learning skills. • Select from a considerable choice of procedures. • Give presentations to an audience. 	<ul style="list-style-type: none"> • Engage in self-directed activity with guidance/ evaluation. • Accept responsibility for quantity and quality of output. • Accept limited responsibility for the quantity and quality of the output of others.

Level	Intellectual skills & attributes	Processes	Accountability
4	<ul style="list-style-type: none"> • Develop a rigorous approach to the acquisition of a broad knowledge base. • Employ a range of specialised skills. • Determine solutions to a variety of unpredictable problems. • Generate a range of responses, a limited number of which are innovative, to well defined but often unfamiliar problems. • Evaluate information, using it to plan and develop investigative strategies. 	<ul style="list-style-type: none"> • Operate in a range of varied and specific contexts involving creative and non-routine activities. • Exercise appropriate judgement in planning, selecting or presenting information, methods or resources. 	<ul style="list-style-type: none"> • Undertake self-directed and a limited amount of directive activity. • Operate within broad general guidelines or functions. • Take responsibility for the nature and quantity of outputs. • Meet specified quality standards.
5	<ul style="list-style-type: none"> • Generate ideas through the analysis of information and concepts at an abstract level. • Command wide ranging, specialised technical, creative and/or conceptual skills. • Formulate appropriate responses to resolve well defined and abstract problems. • Analyse, reformat and evaluate a wide range of information. 	<ul style="list-style-type: none"> • Utilise diagnostic and creative skills in a range of technical, professional or management functions. • Exercise appropriate judgement in planning, design, technical and/or supervisory functions related to products, services, operations or processes 	<ul style="list-style-type: none"> • Accept responsibility and accountability within broad parameters for determining and achieving personal and/or group outcomes.
6	<ul style="list-style-type: none"> • Critically review, consolidate, and extend a systematic and coherent body of knowledge. • Utilise highly specialised technical or scholastic skills across an area of study. • Utilise research skills. • Critically evaluate new information, concepts and evidence from a range of sources. 	<ul style="list-style-type: none"> • Transfer and apply diagnostic and creative skills in a range of situations. • Exercise appropriate judgement in a number of complex planning, design, technical and/or management functions related to products, services, operations or processes, including resourcing. 	<ul style="list-style-type: none"> • Accept accountability for determining and achieving personal and/or group outcomes.
7	<ul style="list-style-type: none"> • Display mastery of a complex and specialised area of knowledge and skills. • Demonstrate expertise in highly specialised and advanced technical, professional and/or research skills. 	<ul style="list-style-type: none"> • Conduct research, or advanced technical or professional activity. • Design and apply appropriate research methodologies. • Communicate results of research to peers. 	<ul style="list-style-type: none"> • Accept accountability in related decision making including use of supervision.
8	<ul style="list-style-type: none"> • Make a significant and original contribution to a specialised field of 	<ul style="list-style-type: none"> • Demonstrate command of methodological issues. 	<ul style="list-style-type: none"> • Accept accountability in related decision making

	inquiry.	<ul style="list-style-type: none"> Communicate results of research to peers and engage in critical dialogue. 	including use of supervision.
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6.4. Guidelines for the use of the generic level descriptors

6.4.1. The proposed generic level descriptors are not definitive. Modifications will be needed as a consequence of experience in specific curricular areas.

6.4.2. The InCCA report (September 1998) has recommended that the “*descriptors developed by NICATS should be adopted as the basis upon which to build a common approach to the determination of levels across the Further and Higher Education sectors*”.

6.4.3. The level descriptors should be seen as a developmental continuum. Each level subsumes the characteristics of lower levels.

6.4.4. Levels are not intrinsically related to years of study.

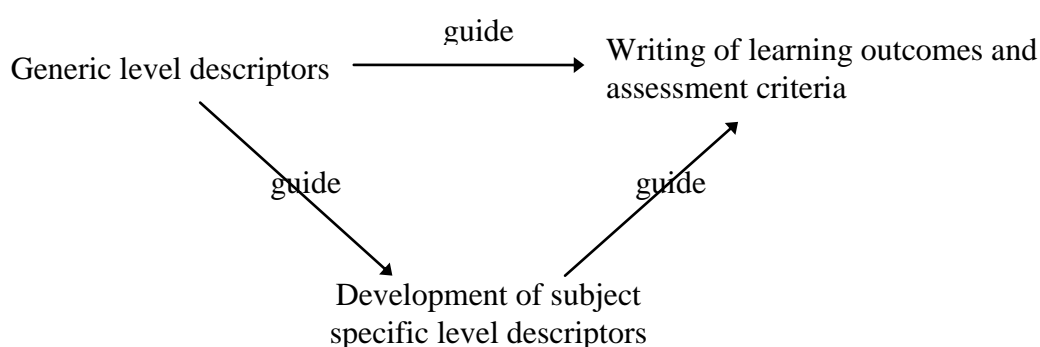
6.4.5. The level descriptors are designed to be generic in nature. As the use of the word ‘generic’ implies, the descriptors are intended to integrate vocational, academic and professional aspects of learning and apply to all learning contexts - classwork, practical work, work-based learning and so on. They are not intended to be prescriptive but are designed to provide a guideline to practitioners involved in the design and delivery of the curriculum. They have been developed with the intention that the curriculum specialist will use his/her professional expertise to translate them into his/her own subject area.

6.4.6. The level descriptors are designed to:

- I) Act as a guide to the writing of learning outcomes and associated assessment criteria for units.

Generic level descriptors can either be used directly to guide the writing of learning outcomes and assessment criteria or to develop subject specific level descriptors, which in turn guide the writing of learning outcomes (see diagram below).

Figure 9: The use of generic level descriptors to guide curriculum design



(Taken from the Welsh Higher Education Credit Framework Handbook, March 1996)

- ii) Guide the allocation of a unit to a level (via its learning outcomes and associated assessment criteria).

The level to which the unit of assessment is ascribed will be indicated primarily in the assessment criteria and their relationship to level descriptors; to a lesser extent in the learning outcomes. It may be possible for learning outcomes to be similar in adjacent levels as long as the assessment criteria are distinct and relate to level descriptors appropriately (see guidelines on ascribing level section 6.7.2).

The HEQC Working Paper: *“Towards a Better Understanding of the Meaning and Use of Level in Setting Explicit Academic Standards”* (1997) explains that the allocation of a level occurs via a process of ‘triangulation’. The parameters of this process are:

- contextualisation which relates to how, where and when the concept is being applied;
- socialisation which relates to the development of a shared understanding of how the concept is applied within a particular context i.e. the use of a common language, conceptual vocabulary and standards;
- cross-referencing to the levels above and below.

The paper explains that:

“traditionally, much of this process of ‘triangulation’ has been implicit within the working practices of professional communities. The demand for greater explicitness is resulting in more formalised and consistent approaches to explaining the basis for triangulation through greater specification (e.g. levels descriptors, learning outcomes, marking and grading criteria, degree descriptors). Such specifications describe the qualities, attributes and behaviours which programmes are expected to develop and assess as learning progresses”.

6.4.7. The generic level descriptors can also be used to aid the assessment of claims of credit for prior learning and assist the process of validation.

6.4.8. Some descriptors are more relevant than others depending on the area of study. For example, certain descriptors will be important to physiotherapy, art and design and science courses but will play little or no part in history or English literature. The level descriptors are not prescriptive and the extent of coverage necessary will be determined by the requirements of the particular subject area.

6.4.9. Learning undertaken following the achievement of an award at a given level (e.g. a degree) will not necessarily be at the same or higher level. The credit assigned to a module/unit should be at the level appropriate to its learning outcomes and assessment criteria, irrespective of the programme of which it forms a part.

***For example,** there are many certificates and diplomas aimed at graduates in non-related disciplines. They should be placed at the appropriate NICATS level, despite being “postgraduate in time”.*

6.4.10. ‘Post experience’ learning can be at any level and there is no necessary relationship between post experience programmes and NICATS level 7, which equates with the current ‘Masters’ level. Programmes designed for learners with experience may be at any level.

6.4.11. Many institutions admit learners with experience giving credit for their prior learning (AP(E)L) at an appropriate level.

6.4.12. *Institutions offering four year undergraduate programmes (often referred to as “undergraduate masters degrees” (UGM)), such as M.Eng. awards should clearly identify the correct level at which learners will achieve the learning outcomes.

This is supported by the Dearing proposals (The National Committee of Inquiry into Higher Education, 1997) which suggest the renaming of the UGM degree.

“There is a need to clarify the current confusion over the designation of Masters degrees. We believe that the award of a Masters degree should be reserved for postgraduate research and for taught programmes whose requirements are appropriately more demanding than for a first degree in the subject. We propose the name ‘Higher Honours’ for advanced undergraduate programmes (such as the present MEng and MPharm)”.

6.4.13. Institutions may wish to develop regulations permitting students to take modules or units at levels lower than that of the award as a whole, where this is appropriate to the programme concerned.

For example, introductory Japanese might be taken as part of a Masters degree. The level of achievement should be clearly identified. This will enable the level of the learning outcome to be identified on the transcript whatever the stage of learning development.

6.4.14. Whenever learning outcomes are assessed as having been achieved (including those awarded through APEL) the level should be identified, so that this can be indicated on the transcript.

6.4.15. A unit can be assigned only one level because it is defined by its learning outcome and assessment criteria.

6.4.16. Learners at different levels may undertake parts of a programme of learning together, but can register for different units. They will, therefore, be aiming for different outcomes and will be subject to different assessment criteria.

**Certain four year undergraduate programmes are designated as “Masters” Degrees (e.g. M.Eng.), often referred to as “undergraduate masters degrees” (UGM). Higher Education Credit Initiative Wales (HECIW) examined such degrees to establish if year four was a distinct level i.e. somewhere above NICATS level 6 but below NICATS level 7. HECIW came to the conclusion that year four is not a distinct level. However, due to the extra time and practice-based activity undertaken, the students who complete this four year undergraduate programme gain a broader achievement across the level descriptors at NICATS level 6.*

6.5. Guidance notes for the table of level descriptors

ENTRY LEVEL

Summary of level descriptor

Learning accredited at this level will reflect the ability to:

employ recall and demonstrate elementary comprehension in a narrow range of areas, exercise basic practical skills within highly structured contexts, and carry out directed activity under close supervision

Complete table of level descriptors

Level	Intellectual skills & attributes	Processes	Accountability
Entry	<ul style="list-style-type: none">• Employ recall and demonstrate elementary comprehension in a narrow range of areas with unquestioning acceptance of ideas.• Exercise basic skills.• Receive and pass on information.	<ul style="list-style-type: none">• Operate mainly in closely defined and highly structured contexts.• Carry out processes that are repetitive and predictable.• Undertake the performance of clearly defined tasks.• Assume a limited range of roles.	<ul style="list-style-type: none">• Carry out directed activity under close supervision.• Rely entirely on external monitoring of output and quality.

ENTRY LEVEL: Guidelines for Interpretation

Intellectual skills and attributes

Knowledge	Recall and demonstrate elementary comprehension in a narrow range of areas.
Skills	Exercise basic skills.
Problem solving	Dependency on ideas of others.
Information management	Receive and pass on information.

Elementary comprehension: Learning through multiple repetition of simple responses to simple information stimuli, no generation of new ideas. Recall is dependent upon regular practice of skills.

Processes

Context	Operate mainly in closely defined and highly structured contexts.
Process	Carry out processes that are repetitive and predictable.
Role & function	Assume a limited range of roles.

Routine tasks undertaken in familiar context with no variation in the criteria for performance of the tasks. Roles will be very specific and not normally demand transferable skills. Because a very wide range of potential is represented at this level, it is important to note that progression is measured from each learner's actual start point (self referencing).

Accountability

Autonomy	Carry out directed activity under close supervision.
Output	Externally monitored.
Quality	Externally monitored.

A very high degree of support is provided for the learning process under close supervision. No self assessment i.e. total reliance on external monitoring of output and quality.

LEVEL 1

Summary of level descriptor

Learning accredited at this level will reflect the ability to:

employ a narrow range of applied knowledge, skills and basic comprehension within a limited range of predictable and structured contexts, including working with others under direct supervision, but with a very limited degree of discretion and judgement about possible action

Complete table of level descriptors

Level	Intellectual skills & attributes	Processes	Accountability
1	<ul style="list-style-type: none">• Employ a narrow range of applied knowledge and basic comprehension.• Demonstrate a narrow range of skills.• Apply known solutions to familiar problems.• Present and record information from readily available sources.	<ul style="list-style-type: none">• Show basic competence in a limited range of predictable and structured contexts.• Utilise a clear choice of routine responses.• Co-operate with others.	<ul style="list-style-type: none">• Exercise a very limited degree of discretion and judgement about possible actions.• Carry restricted responsibility for quantity and quality of output.• Operate under direct supervision and quality control.

LEVEL 1: Guidelines for Interpretation

Intellectual skills and attributes

Knowledge	Employ a narrow range of applied knowledge and basic comprehension.
Skills	Demonstrate a narrow range of skills.
Problem solving	Apply known solutions to familiar problems.
Information management	Present and record information from readily available sources.

“The implication is that the level requires a knowledge base without which the tasks and procedures cannot be undertaken, but that it consists of a discrete and limited set of data and known responses - a table of right answers, as it were”.(NZQA, 1996). Limited generation of ideas from information supplied.

Processes

Context	Show basic competence in a limited range of predictable and structured contexts.
Process	Utilise a clear choice of routine responses.
Role & function	Co-operate with others.

The essential differences between entry level and level 1 lie in the introduction of a limited range of choice and the increased range and complexity of the tasks. The ability to operate in a clearly defined (structured) role within a cooperative working environment may be required.

Accountability

Autonomy	Exercise a very limited degree of discretion and judgement about possible actions.
Output	Carry restricted responsibility for quantity and quality of output.
Quality	Operate under direct supervision and quality control.

Able to operate independently in familiar contexts taking some responsibility for the tasks and procedures. Requires guidance and support with regular checking from external sources.

LEVEL 2

Summary of level descriptor

Learning accredited at this level will reflect the ability to:

apply knowledge with underpinning comprehension in a number of areas and employ a range of skills within a number of contexts, some of which may be non-routine; and undertake directed activities, with a degree of autonomy, within time constraints

Complete table of level descriptors

Level	Intellectual skills & attributes	Processes	Accountability
2	<ul style="list-style-type: none">• Apply knowledge with underpinning comprehension in a number of areas.• Make comparisons.• Interpret available information.• Demonstrate a range of skills.	<ul style="list-style-type: none">• Choose from a range of procedures performed in a number of contexts, some of which may be non-routine.• Co-ordinate with others.	<ul style="list-style-type: none">• Undertake directed activity with a degree of autonomy.• Achieve outcomes within time constraints.• Accept increased responsibility for quantity and quality of output subject to external quality checking.

LEVEL 2: Guidelines for Interpretation

Intellectual skills and attributes

Knowledge	Apply knowledge with underpinning comprehension in a number of areas.
Skills	Demonstrate a range of skills.
Problem solving	Interpret available information and make comparisons.
Information management	Present and record information from readily available sources.

There is evidence of progression from known and routine responses to familiar situations, to thinking about and responding appropriately to less familiar information i.e. information is supplied but interpretation is required. At this level comprehension and comparison of different idea/constructs are introduced. Concepts and ideas remain well defined.

Processes

Context	Choose from a range of procedures performed in a number of contexts.
Process	Some may be non-routine.
Role & function	Co-ordinate with others.

This level implies greater knowledge and the ability to apply what is known across a greater range of activities. As a result there is some transferability of the knowledge and skills acquired. Working with others as an active member of a team may be required.

Accountability

Autonomy	Undertake directed activity with a degree of autonomy.
Output	Achieve outcomes within set parameters.
Quality	Accept increased responsibility for quantity and quality of output subject to external quality checking.

There is significant increased responsibility and the need to interact with others. There is an emphasis on the individual taking responsibility for outputs within a managed environment.

LEVEL 3

Summary of level descriptor

Learning accredited at this level will reflect the ability to:

apply knowledge and skills in a range of complex activities demonstrating comprehension of relevant theories; access and analyse information independently and make reasoned judgements, selecting from a considerable choice of procedures, in familiar and unfamiliar contexts; and direct own activities, with some responsibility for the output of others

Complete table of level descriptors

Level	Intellectual skills & attributes	Processes	Accountability
3	<ul style="list-style-type: none">• Apply knowledge and skills in a range of complex activities, demonstrating comprehension of relevant theories.• Access and evaluate information independently.• Analyse information and make reasoned judgements.• Employ a range of responses to well defined but often unfamiliar or unpredictable problems.	<ul style="list-style-type: none">• Operate in a variety of familiar and unfamiliar contexts using a range of technical or learning skills.• Select from a considerable choice of procedures.• Give presentations to an audience.	<ul style="list-style-type: none">• Engage in self-directed activity with guidance/evaluation.• Accept responsibility for quantity and quality of output.• Accept limited responsibility for the quantity and quality of the output of others.

LEVEL 3: Guidelines for Interpretation

Intellectual skills and attributes

Knowledge	Apply knowledge in a range of complex activities demonstrating comprehension of relevant theories.
Skills	Apply skills in a range of complex activities.
Problem solving	Analyse information and make reasoned judgements. Employ a range of responses, to well defined but often unfamiliar or unpredictable problems.
Information management	Independently access and evaluate information.

Some understanding of theory and the ability to analyse information at a relatively low level is required. Relevant underlying principles must be understood and applied in mainly familiar but some unfamiliar situations. Performance at this level moves towards the generation of responses as opposed to the selection of routine responses.

Processes

Context	Operate in a variety of familiar and unfamiliar contexts using a range of technical or learning skills.
Process	Select from a considerable choice of procedures.
Role & function	Present information to an audience.

The increased complexity at this level is defined in terms of the range of skills, the choice of actions, and the ability to present information to others. The organisation of such information should reflect the intellectual demands required at level 3. Presentations should be examples of work products and as such can be visual, oral, aural etc.

Accountability

Autonomy	Engage in self-directed activity with guidance/evaluation.
Output	Accept responsibility for quantity and quality of output.
Quality	Accept limited responsibility for the quantity and quality of the output of others.

At this level, there is a requirement for learners to become self-directed and, in some circumstances, undertake a leadership role. Supervision and support may be required. As stated in the NZQA document (1996) there are logical levels of accountability for, for example, an entry level tertiary student, a qualified craftworker or a supervisor in an industrial setting.

LEVEL 4

Summary of level descriptor

Learning accredited at this level will reflect the ability to:

Develop a rigorous approach to the acquisition of a broad knowledge base; employ a range of specialised skills; evaluate information using it to plan and develop investigative strategies and to determine solutions to a variety of unpredictable problems; and operate in a range of varied and specific contexts, taking responsibility for the nature and quality of outputs

Complete table of level descriptors

Level	Intellectual skills & attributes	Processes	Accountability
4	<ul style="list-style-type: none">• Develop a rigorous approach to the acquisition of a broad knowledge base.• Employ a range of specialised skills.• Determine solutions to a variety of unpredictable problems.• Generate a range of responses, a limited number of which are innovative, to well defined but often unfamiliar problems.• Evaluate information, using it to plan and develop investigative strategies.	<ul style="list-style-type: none">• Operate in a range of varied and specific contexts involving creative and non-routine activities.• Exercise appropriate judgement in planning, selecting or presenting information, methods or resources.	<ul style="list-style-type: none">• Undertake self-directed and a limited amount of directive activity.• Operate within broad general guidelines or functions.• Take responsibility for the nature and quantity of outputs.• Meet specified quality standards.

LEVEL 4: Guidelines for Interpretation

Intellectual skills and attributes

Knowledge	Develop a rigorous approach to the acquisition of a broad knowledge base.
Skills	Employ a range of specialised skills.
Problem solving	Determine solutions to a variety of unpredictable problems, generate a range of responses, a limited number of which are innovative, to well defined but often unfamiliar problems.
Information management	Evaluate information, using it to plan and develop investigative strategies.

A rigorous approach involves logical validity and accuracy in argument, judgement or conduct. There is a gradual shift at this level from well defined to abstract thought processes. There is greater complexity of knowledge, skills and attributes and the generation of ideas through the analysis of well defined information and concepts. At this level research and investigative skills are being developed; information must be processed and analysed in order to complete required activities.

Processes

Context	Operate in a range of varied and specific contexts involving creative and non-routine activities.
Process	Exercise judgement in planning, selecting or presenting information, equipment, services and techniques.
Role & function	Organise work for self and/or others.

“Increased complexity at this level involves a shift towards either very varied methods and procedures or in those that are specialised and technical” (NZQA, 1996 p.14). Process outcomes are not necessarily predictable or predetermined. Judgement is required in planning and selecting appropriate responses to a variety of information occurring in multiple contexts.

Accountability

Autonomy	Undertake self-directed and a limited amount of directive activity, operate within broad general guidelines or functions.
Output	Take responsibility for the nature and quantity of outputs.
Quality	Meet specified quality standards.

Full responsibility and self direction for all outcomes is required at this level. The individual still operates under general guidance. The leadership role may be extended.

LEVEL 5

Summary of level descriptor

Learning accredited at this level will reflect the ability to:

generate ideas through the analysis of concepts at an abstract level, with a command of specialised skills and the formulation of responses to well defined and abstract problems; analyse and evaluate information; exercise significant judgement across a broad range of functions; and accept responsibility for determining and achieving personal and/or group outcomes

Complete table of level descriptors

Level	Intellectual skills & attributes	Processes	Accountability
5	<ul style="list-style-type: none">• Generate ideas through the analysis of information and concepts at an abstract level.• Command wide ranging, specialised technical, creative and/or conceptual skills.• Formulate appropriate responses to resolve well defined and abstract problems.• Analyse, reformat and evaluate a wide range of information.	<ul style="list-style-type: none">• Utilise diagnostic and creative skills in a range of technical, professional or management functions.• Exercise appropriate judgement in planning, design, technical and/or supervisory functions related to products, services, operations or processes.	<ul style="list-style-type: none">• Accept responsibility and accountability within broad parameters for determining and achieving personal and/or group outcomes.

LEVEL 5: Guidelines for Interpretation

Intellectual skills and attributes

Knowledge	Generate ideas through the analysis of information and concepts at an abstract level.
Skills	Command wide ranging, specialised technical, creative and/or conceptual skills.
Problem solving	Formulate appropriate responses to resolve well defined and abstract problems.
Information management	Analyse, reformat and evaluate a wide range of information.

Edwards (in NZQA document, 1996, p.15) mentions the generation of ideas and the transformation of data not in readily useable form at a level characterised by analysis and abstraction. At this level the formulation of the problems to be solved becomes a consideration.

Processes

Context	Planning and design related to products, services, operations or processes.
Process	Utilise diagnostic and creative skills to make and execute judgements across a broad range of functions. Exercise appropriate judgement.
Role & function	Technical, professional or management/supervisory.

The utilisation of diagnostic and creative skills is introduced at this level to represent higher order aspects of problem solving. Increased emphasis on judgement and a command of a specialised area are key features at this level.

Accountability

Autonomy	Accept responsibility and accountability within broad parameters.
Output	Determine and achieve personal and/or group outcomes.

Accountability is defined more in terms of a function than a specific task. The ability to negotiate outcomes under guidance and to take personal responsibility for planning and delivery is required.

LEVEL 6

Summary of level descriptor

Learning accredited at this level will reflect the ability to:

critically review, consolidate and extend a systematic and coherent body of knowledge, utilizing specialised skills across an area of study; critically evaluate new concepts and evidence from a range of sources; transfer and apply diagnostic and creative skills and exercise significant judgement in a range of situations; and accept accountability for determining and achieving personal and/or group outcomes

Complete table of level descriptors

Level	Intellectual skills & attributes	Processes	Accountability
6	<ul style="list-style-type: none">• Critically review, consolidate, and extend a systematic and coherent body of knowledge.• Utilise highly specialised technical, scholastic or basic research skills across an area of study.• Critically evaluate new information, concepts and evidence from a range of sources.	<ul style="list-style-type: none">• Transfer and apply diagnostic and creative skills in a range of situations.• Exercise appropriate judgement in a number of complex planning, design, technical and/or management functions related to products, services, operations or processes, including resourcing.	<ul style="list-style-type: none">• Accept accountability for determining and achieving personal and/or group outcomes.

LEVEL 6: Guidelines for Interpretation

Intellectual skills and attributes

Knowledge	Critically review, consolidate, and extend a systematic and coherent body of knowledge.
Skills	Utilise highly specialised technical, scholastic or basic research skills across an area of study.
Problem solving	Critically evaluate.
Information management	Independently access new information, concepts and evidence from a range of sources.

The creation of ideas and solutions through analysis and transformation at an abstract level which Edwards (in the NZQA document, 1996) describes as the level of synthesis.

Processes

Process	Transfer and apply diagnostic and creative skills in a range of situations.
Role & function	Exercise appropriate judgement in a number of complex planning, design, technical and/or management functions related to products, services, operations or processes, including resourcing.

A high level of complexity requiring the exercise of significant judgement in a wide range of complex and variable contexts. The NZQA document (1996) points out however that distinguishing between the complexity of this and the flanking levels is not easy because complexity varies from learning area to learning area and within learning areas. Intellectual skills and attributes and accountability are thus likely to be more reliable indicators.

Accountability

Autonomy	Accept accountability for determining and achieving personal and/or group outcomes.
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“Full responsibility and accountability for all aspects of work and learning including planning, resourcing, quality standards and/or secondary responsibility for the work and learning of others” (NZQA document, 1996, p.18)

LEVEL 7

Summary of level descriptor

Learning accredited at this level will reflect the ability to:

display mastery of a complex and specialised area of knowledge and skills, employing advanced skills to conduct research, or advanced technical or professional activity, accepting accountability for related decision making including use of supervision

Complete table of level descriptors

Level	Intellectual skills & attributes	Processes	Accountability
7	<ul style="list-style-type: none">• Display mastery of a complex and specialised area of knowledge and skills.• Demonstrate expertise in highly specialised and advanced technical, professional and/or research skills.	<ul style="list-style-type: none">• Conduct research, or advanced technical or professional activity.• Design and apply appropriate research methodologies.• Communicate results of research to peers.	<ul style="list-style-type: none">• Accept accountability in related decision making including use of supervision.

LEVEL 7: Guidelines for Interpretation

Intellectual skills and attributes

Knowledge Display mastery of a complex and specialised area of knowledge and skills.

Skills Demonstrate expertise in highly specialised and advanced technical, professional and/or research skills.

The most significant characteristic is the exploration of boundaries where preceding levels focused on knowledge and skills within them.

Processes

Process Conduct research, or advanced technical or professional activity.

Role & function Design and apply appropriate research methodologies. Communicate results of research to peers.

Highly complex tasks and procedures are featured at this level

Accountability

Autonomy Accept accountability in related decision making including use of supervision.

Accountability is usually to peers rather than to superiors. The learner is responsible for initiating supervisory and peer support contacts.

LEVEL 8

Summary of level descriptor

Learning accredited at this level will reflect the ability to:

make a significant and original contribution to a specialised field of inquiry demonstrating a command of methodological issues and engaging in critical dialogue with peers; accepting full accountability for outcomes

Complete table of level descriptors

Level	Intellectual skills & attributes	Processes	Accountability
8	<ul style="list-style-type: none">• Make a significant and original contribution to a specialised field of inquiry.• Command highly specialised and advanced technical, professional and/or research skills.	<ul style="list-style-type: none">• Demonstrate command of methodological issues.• Communicate results of research to peers and engage in critical dialogue.	<ul style="list-style-type: none">• Accept accountability in related decision making including use of supervision.

LEVEL 8: Guidelines for Interpretation

Intellectual skills and attributes

Knowledge	Make a significant and original contribution to a specialised field of inquiry.
Skills	Command highly specialised and advanced technical, professional and/or research skills.

*Make a **significant** and **original** contribution - the essential difference between level 7 and level 8 is the satisfaction of both of these requirements.*

Processes

Process	Demonstrate command of methodological issues.
Role & function	Communicate results of research to peers and engage in critical dialogue.

Learners will have command and confidence in the application of discipline-related research methods and in the discussion of methodological issues

Accountability

Autonomy	Accept accountability in related decision making including use of supervision.
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6.6. Guidelines for writing units of assessment

6.6.1. Introduction

A unit of assessment consists of the following:

Title	a well-defined and specific name
Learning outcome statements	what a learner is expected to know, understand and do
Assessment criteria	standards for achieving outcomes
Level	level of demand (NICATS stipulate nine levels from basic education to doctoral level)
Credit value	a numerical value indicating unit size

Figure 9: An illustration of a unit of assessment

UNIT NO. 0271	TITLE: Personal Development Plan
LEVEL: 4	CREDIT VALUE: 1
LEARNING OUTCOMES	ASSESSMENT CRITERIA
<p>The learner will be able to:</p> <p>1 Undertake a personal SWOT analysis.</p> <p>2. Undertake a personal STEP analysis.</p> <p>3. Undertake a personal training needs analysis.</p>	<p>The learner can:</p> <p>I. Recognise own strengths in the workplace. II. Evaluate own weaknesses in the workplace. III.Appraise the opportunities available to the organisation and the individual through recognition of personal strengths. IV.Determine the threats facing the organisation and the individual through recognition of personal weaknesses.</p> <p>I. Recognise the range of sociological effects on the individual and the organisation. II. Evaluate the range of technological effects on the individual and the organisation. III.Determine the range of political effects on the individual and the organisation.</p> <p>I. Evaluate personal training needs arising from SWOT and STEP analysis. II. Negotiate an agreed training programme with the appropriate authority. III.Review, reflect on and revise the agreed training programme with the appropriate authority.</p>

6.6.2. Unit Title

The unit title is the overall learning outcome; it should:

1. Specify the overall purpose and nature of the achievement being described.
2. Give a clear indication of the learning involved, that it is accurate.
3. If necessary, include a descriptor such as ‘Basic’, ‘Foundation’ or ‘Introduction’ to indicate the level of the work involved.
4. Give other tutors who may want to use the unit of assessment, a clear sense of what it is about.

6.6.3. Writing Learning Outcomes

Learning outcomes are statements of what a learner is expected to know, and/or understand and/or be able to do after completion of a process of learning, in order to obtain the credit. This learning may result from a formal process of instruction, work-based instruction or other experiences. The following guidance is offered for writing learning outcomes:

1. Learning outcomes should identify what the learner will know, understand and/or be able to do at the end of a learning experience, describing the results of the learning rather than the learning process itself.
2. Learning outcomes should be prefaced with: “On completion of this unit of assessment the learner will be able to” This phrase will help to maintain focus when writing the learning outcomes.
3. The key features of a clear learning outcome are:
 - an action verb (e.g. understand)
 - defined content (e.g. the roles which managers play in different organisations)

From the above example the learning outcome would therefore be: *Understand the roles which managers play in different organisations.*

4. It is not possible to prescribe precisely how specific learning outcome statements should be. There is a balance to be struck between the degree of specificity in a learning outcome statement and that provided by the assessment criteria. The greater the specificity, and, in particular, the greater the use of performance indicators (qualifiers), the more the learning outcomes become assessment criteria.

Example 1 : The distinction between learning outcomes and assessment criteria

An example for practical subjects (level 3)

Learning Outcome	Assessment Criteria
verb & content	action verb + content + performance qualifier*
The learner will be able to: <ul style="list-style-type: none"> show familiarity with a range of hand tools and their uses 	The learner can: <ul style="list-style-type: none"> show complete facility with hand tools use tools to achieve accurate results and high degree of finish as appropriate appraise results identifying successful and inadequate products and suggesting means of achieving greater accuracy in production

An example for non practical subjects (level 3)

Learning Outcome	Assessment Criteria
verb & content	action verb + content + performance qualifier*
The learner will be able to: <ul style="list-style-type: none"> demonstrate comprehension of what is meant by 'market research' and its applications 	The learner can: <ul style="list-style-type: none"> analyse methods of market research in operation, identifying their appropriateness to particular situations create a questionnaire re a product/service, get responses and analyse results show a broad understanding of the implications/applications of market research

**The main constituent of assessment criteria is the performance qualifier which indicates the degree of intellectual demand, complexity of process and autonomy.*

5. The choice of action verbs in learning outcomes is important as they should precisely convey the core of the outcome. The appropriateness of a particular verb will also depend on the context (see section 6.6.5. on action verbs for learning outcomes).

6. It may be possible for learning outcomes to be similar in adjacent levels as long as the assessment criteria are distinct and relate to level descriptors appropriately (see section 6.7.2. 'ascribing level').

7. Many learning outcome statements are not written with sufficient clarity to communicate adequately what a learner is expected to achieve. All learning outcome statements,

individually and collectively, should use language as clearly and unambiguously as possible and:

- be as simple as possible;
- eliminate unnecessary words;
- avoid vague verbs with differing meanings.

8. All learning outcome statements should be coherent:

- balanced with respect to required knowledge and skills;
- logical in sequence;
- avoiding duplications;
- avoiding inconsistencies.

9. A whole range of different terminology is in use. There is also no agreed way of expressing outcomes, this makes it difficult to identify common curriculum areas and areas of overlap and duplication. The latter reduces the possibility of rationalising provision and developing opportunities for credit transfer.

10. Current qualifications are defined in a number of different ways, for example, 'A' levels usually have minimal specifications in the form of syllabuses and the NVQs place much more emphasis on detailed written specifications.

11. All learning outcome statements should:

- be of maximum relevance and utility;
- relate to previous 'level' of learning outcome statements;
- be applicable to new (unforeseen) situations;
- be motivational, rewarding and enriching to the learner.

12. In defining learning outcomes it is essential to test out proposed units with colleagues and users. This involves:

- talking to colleagues, explaining to others and getting their feedback;
- checking out users' interpretations;
- asking questions, making judgements.

13. During development, the intended learning outcome statements should be refined when feedback from implementation and the nature of learner achievement have been evaluated.

6.6.4. Writing Assessment Criteria

Assessment criteria have a direct relationship with learning outcomes. The purpose of assessment criteria is to establish clear and unambiguous standards of achievement in respect of each learning outcome. They should describe what the learner is expected to do, in order to demonstrate that the learning outcome has been achieved. The following guidance is offered for writing assessment criteria:

1. When writing an assessment criterion it should be prefaced with a statement, such as ‘The learner has demonstrated the ability to.....’ (An alternative to this could be ‘the learner has achieved this learning outcome because s/he can.....’)
2. As described previously in example 1 (section 6.6.3.), the main constituent of an assessment criterion is the performance qualifier which indicates the degree of intellectual demand, complexity of process and autonomy of achievement. Criteria should therefore consist of an action verb, content and qualifiers.
3. The assessment criteria attached to learning outcomes at different levels must be modified to reflect the degree of intellectual demand, complexity of process and autonomy appropriate to a given level. For further explanation see example 2 below.

Example 2: A learning outcome and related assessment criteria at different levels:

Learning Outcome	Assessment Criteria			
The learner will be able to:	The learner has demonstrated the ability to:			
	Entry Level	Level One	Level Two	Level Three
Present an opinion orally	Express a point of view	Order and present a selection of relevant opinions	Explain differing opinions; develop and structure an argument	Evaluate differing views when developing and presenting a coherent argument

Assessment Criteria MUST relate closely to Learning Outcomes, providing detail of what a learner knows, understands or can do in order to achieve at a particular level

4. To maximise the flexibility of how units can be used, reference to assessed activity within assessment criteria should be avoided wherever possible. Unless bound by the nature of the learning outcome, assessment criteria should not be “assessment method specific” i.e. the criteria should be written so they are applicable and appropriate to a range of assessment methods. This will make the unit of assessment more versatile and compatible with a wider range of teaching and assessment strategies.
5. There should be at least one assessment criterion (and probably more) for each learning outcome. The essential constituent of any assessment criterion is to provide amplification of the verbs used in the associated learning outcome. Some learning outcomes will require more amplification than others. Example 3 illustrates a learning outcome which requires very little supporting information to be placed in the assessment criterion.

Example 3

Learning Outcome

At the end of the learning process the student will know/be able to:

tie six different knots suitable for use on a small boat and know the situations to which each knot is best suited.

Assessment Criteria

The learner has achieved this learning outcome because he/she can:

tie six knots correctly and identify the situations to which they are best suited

6. The task of amplifying the learning outcome is more difficult when an outcome is concerned with less tangible achievements, such as the acquisition of an understanding of a topic or the use of a skill which is less visible. In such instances it is necessary to unpack or expand the learning outcome, so that it becomes clear exactly how the learning outcome will be achieved. Example 4 illustrates how the assessment criteria have been written, in order to achieve this clarity.

Example 4

Learning Outcome

At the end of the learning process, the student will know/will be able to:

1. Summarise the skills and knowledge necessary for competent advice giving.

Assessment Criteria

The learner has achieved this learning outcome because he/she can:

1.1 outline the main roles and responsibilities of the advice giver.

1.2 identify the skills and knowledge necessary for competent advice giving.

1.3 evaluate the impact of adviser skills/knowledge on the provision of advice.

1.4 explain the purpose and importance of a referral policy.

In example four it is clear what standards the writer of the learning outcome has in mind to judge the student's achievement. However, there are terms included in the assessment criteria, such as 'competent', which could be said to require further amplification. In such circumstances, the choice is between unduly long and fragmented criteria or leaving the interpretation to professional judgement.

7. Writers of units of assessment will always need to exercise professional judgement in order to avoid too little or too much amplification. While professional judgement exercised by tutors and moderators will always remain important in interpreting assessment criteria, the criteria themselves must contain enough detail so that they are an effective tool for judging the standard of work produced by the learner. It is useful for those constructing units of assessment to ask themselves what characterises a good piece of work produced in response to a learning outcome and what distinguishes it from a poor piece. The answers to such questions will aid the formulation of assessment criteria which amplify the learning outcome and make clear the standard and quality of the work required to ensure the learning outcome has been achieved.

8. A further illustration of where there is a need for amplification of the learning outcome is shown in example 5. The learning in this case deals with a less tangible or visible outcome so

in order to make the standard of work expected from the learner clear, the assessment criteria are more detailed and explicit.

Example 5

Learning Outcome

At the end of the process of learning the student will know/be able to:

1. Take part in discussions on a one-to-one and group basis.

Assessment Criteria

The learner has achieved this learning outcome because he/she can:

- 1.1 Give and obtain information and exchange ideas in a variety of routine situations on familiar subjects with people known/unknown to the learner.
- 1.2 Use specialist vocabulary accurately and express ideas in different ways to play an effective role, taking account of the audience, context and purpose of the discussion.
- 1.3 Make contributions which build on the contributions of others and take forward the discussion using synthesis and summary.
- 1.4 Respond appropriately to questions resulting from own contribution to discussion.

9. Aim for as much clarity and specificity as possible in assessment criteria. Specificity aids quality of judgement, reduces subjectivity and increases the chances of fair and consistent assessment. Such clarity and specificity is important for the learner, tutors, assessors and external moderators/examiners. Learners need to be certain of the standard of performance required to achieve a learning outcome. Tutors and assessors also need clarity in order to devise assessment activities which are well matched to expected learning outcomes and so provide a valid assessment of the proposed learning. External moderators/examiners depend on clarity in order to verify that learning outcomes have been achieved and that the award of credit is justified.

6.6.5. Table 2: Action verbs for learning outcomes and assessment criteria (from the HECIW handbook, 1996)

ACTIVITIES GIVING:	ACTION VERBS
EVIDENCE OF	define, describe, identify, label, list, name, outline, reproduce,

KNOWING	recall, select, state, present, be aware of, extract, organise, recount, write, recognise, measure, underline, repeat, relate, know, match.
EVIDENCE OF COMPREHENSION	interpret, translate, estimate, justify, comprehend, convert, clarify, defend, distinguish, estimate, 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.
EVIDENCE OF APPLICATION 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
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.
EVIDENCE OF SYNTHESIS:	propose, present, structure, integrate, formulate, teach, develop, combine, compile, compose, create, devise, design, explain, generate, modify, organise, plan, re-arrange, reconstruct, relate, re-organise, revise, write, summarise, tell, account for, restate, report, alter, argue, order, select, manage, generalise, precise, derive, conclude, build up, engender, synthesise, put together, suggest, enlarge.
EVIDENCE OF EVALUATION	judge, appraise, assess, conclude, compare, contrast, describe how, criticise, discriminate, justify, defend, evaluate, rate, determine, criticise, choose, value, question.

6.7. Guidelines for determining credit value

6.7.1. Introduction to determining credit value

Credit is quantified in the form of a credit value which should always be expressed in terms of a number of credits at a specified level. The credit value is meaningless if the level of the

credits is not specified. Ascribing and approving the credit value to be attached to a unit of assessment must be part of the validation process. The number of credits is an indication of the relative magnitude of the learning effort expressed as notional learning hours. The level is an indicator of the relative demand, complexity and depth of learning and of learner autonomy.

6.7.2. Ascribing level

Although credits could be accumulated without having levels ascribed to them, credits that are not related to levels of achievement cannot be recognised, exchanged or transferred as part of a CAT system. The NICATS level descriptors should be used to assist the practitioner in ascribing the appropriate level to units (See section 6.4. for guidelines to use the NICATS generic level descriptors). The following guidance is offered for ascribing level:

1. The strands of progression within the NICATS level descriptors are intellectual demand, complexity of process and autonomy. Assessment criteria qualifiers should refer to one or more of these in addition to standards of performance.

2. Units should be assigned to only one level. The level to which the unit of assessment is ascribed will be indicated primarily in the assessment criteria and their relationship to level descriptors; and to a lesser extent in the learning outcomes. It may be possible for learning outcomes to be similar in adjacent levels as long as the assessment criteria are distinct and relate to level descriptors appropriately. If a satisfactory criterion at a higher level cannot be devised, then either the use of the same outcome should be reconsidered or the presence of a genuinely higher level of achievement should be questioned. It is not correct to assume that learning outcomes are infinitely applicable at higher levels; some work may quite legitimately 'top - out' at a particular level (*taken from The TRAC OCN guidelines, 1997*).

3. Professional experience will be important in guiding decisions about level. If it is the intention to write units of assessment at several levels, it is best to start at a familiar level where the learning needs of the students concerned are more readily envisaged. It will then be easier to pitch the higher and/or lower level units. It is not a good idea to write learning outcomes and assessment criteria in the hope that the right level will emerge by default (*Taken from The TRAC Open College Network (OCN) Guidelines, 1997*). This process is referred to within the NICATS guidelines on the use of level descriptors as triangulation.

4. Qualifications within a credit framework will contain credits at a number of levels. If the recommended approach of ascribing the 'correct level' to learning is adopted, some 'postgraduate' qualifications such as the PGCE may well be found to extend knowledge at degree level (NICATS levels 5 & 6) rather than contribute to achievement at the higher levels (NICATS level 7). It is the contention of NICATS that the adoption of credit framework specifications and guidelines could make sense of the present HE qualifications if the content of these qualifications is analysed and assigned a CATS level in accordance to the relative demands of the qualification. Thus, modules/units at different levels may be combined towards an overall qualification. In order to maintain standards and consistency it may be necessary to prescribe rules of combination. For example, the SEEC (1996) credit framework guidelines prescribe the proportion of the award which can be taken at a lower level.

“The award of a Masters degree requires the accumulation of 180 credits of which a minimum of 120 must be at M level”

“The award of a postgraduate diploma requires the accumulation of 120 credits of which a minimum of 80 credits must be at M level”

“The award of a postgraduate certificate requires the accumulation of 60 credits of which a minimum of 40 credits must be at M level”

6.7.3. Ascribing credit value

Credit value refers to the number of credits a unit of assessment at a specific level is worth. The following guidance is offered for ascribing credit value:

1. Credits are determined by estimating the amount of notional learning time required, on average, for a learner to achieve the learning outcomes identified within a unit of assessment. Notional learning time is intended to recognise both formal delivery time and personal learning time.
2. Credit is given for achievement, not for learning effort. However, it is necessary to have some concept of the volume of learning related to the achievement of specified outcomes for recognising equivalence. This is the function of the notional learning time.
3. Notional learning time refers to the time which an average student might spend in achieving the learning outcomes. All learning relevant to the learning outcomes should be considered when notional learning time is being assessed including lectures, essential practicals and visits, project work, private study, assessment etc.
4. Notional learning time is not equivalent to the actual time that any particular learner needs to spend in order to acquire the learning outcomes. The real time will vary according to the individual’s capability, degree of prior experiential or other learning, any concurrent learning required within the work place, etc. (*taken from the HECIW handbook, 1996*).
5. Within this concept of notional time award of credit is possible via a process of accreditation of prior learning or experience [AP(E)L]. Such processes take account of outcomes which have been achieved through a variety of experiential or informal learning processes. Thus, although accreditation may appear to be based on achievement of outcomes alone, time has been invested in a learning process prior to the assessment (*taken from the HECIW handbook, 1996*).
6. A single credit represents 10 hours of notional learning time in relation to the achievement of a specific set of learning outcomes.
7. Units of assessment can be ascribed a credit value of more than one depending upon how much notional learning time it takes a learner, on average, to achieve the learning outcomes specified in a unit of assessment. Fractions of credit (e.g. 0.5 credit, 1.5 credits) cannot be awarded to learners.

8. The size of a unit of assessment is expressed in terms of notional learning time in hours. In order to determine the credit value, the size of the unit of assessment is divided by 10 notional hours.

$$\text{Credit value} = \frac{\text{Size of unit of assessment (notional learning time)}}{10 \text{ hours}}$$

Agreeing a credit value for a unit of assessment signifies that:

- the learning outcomes are properly specified
- the size and level are accepted

9. Credit value is ascribed to units of assessment through a process of accreditation/validation. Ascribing credit will be undertaken according to the NICATS agreed quality assurance procedures.

10. Once accredited, a unit of assessment may then be offered for learners to achieve credit. The ascribing of credit value to a unit of assessment is therefore a critical part of a CAT system, and an essential prerequisite to the award of credit.