

CONTENTS

The Status of Articles in this Bulletin	2
Editorial	2
Towards the Development of Level Descriptors in the NQF: A point of departure <i>by Michael Cosser</i>	3
The NICATS (Northern Ireland Credit Accumulation and Transfer System) Project: The Development of Generic Level Descriptors.....	14
Levels, Standards and Credit based award frameworks A Report to QAAHE <i>by Roy Partington</i>	52

LAUNCH OF LETTER AND PROVIDER NEWS PAGES

In an effort to make the Bulletin a forum for the exchange of information on the development and implementation of the National Qualifications Framework (NQF), the Editor invites stakeholders and role players in the education and training sector – and indeed the public at large – to submit for publication in a Letters section of the SAQA Bulletin correspondence either in response to articles in the Bulletin or on issues surrounding the development and implementation of the NQF.

In addition, the Editor extends an invitation to all who are concerned with developing and implementing the NQF to contribute for publication in a Provider News section of the Bulletin brief accounts of policy development and NQF implementation strategies that might stimulate other providers of education and training to undertake similar courses of action in their own learning areas. For example, provider development of policies for the Recognition of Prior Learning (RPL) would be of interest to providers operating in comparable learning environments.

Contributions, addressed to “The Editor, SAQA Bulletin”, may be mailed to Postnet Suite 248, Private Bag X06, WATERKLOOF, 0145, South Africa; faxed to +27 12 346-5814; or e-mailed either via the SAQA web-site to saqainfo@saqa.org.za or to michael_cosser/saqa@saqa.co.za.

THE STATUS OF ARTICLES IN THE SAQA BULLETIN

SAQA reasserts its statement in previous issues of the Bulletin that only those parts of the text clearly flagged as decisions or summaries of decisions by the Authority should be seen as reflecting SAQA policy.

EDITORIAL COMMENT

This edition of the SAQA bulletin focuses exclusively on the issue of level descriptors. Initially it was decided that the level descriptors should be developed in an iterative process through the standards setting structures of SAQA in consultation with stakeholders. This process is underway and possibilities have been discussed in a number of fora. The progress that has been made within SAQA structures to date is synthesised in the first discussion document “Towards the Development of Level Descriptors in the NQF: A point of departure”.

However in the interim, a number of international initiatives have focussed on this question and SAQA believes it is prudent to share those experiences and wisdom within South Africa. The intention of this sharing is to critically examine the work of other countries in an effort to inform the development of specifically South African level descriptors. SAQA is committed to a process of developing a National Qualifications

Framework that addresses South African needs and which is not unduly influenced by frameworks in other countries. However SAQA is bound by the SAQA Act to ensure international comparability of standards and qualifications registered on the NQF where applicable. For this reason it is appropriate to critically examine the comprehensive documents from Northern Ireland and Scotland in this regard with a view to learning from their experience.

The need for a comprehensive and practical set of level descriptors is becoming more and more critical in South Africa. The value of levels descriptors in the allocation of standards and qualifications to levels of the NQF is undisputed while its importance in guiding the development of the actual standards and qualifications, whether based on unit standards or not based on unit standards, cannot be under-estimated. As the impetus of standards setting increases, so too does the need for level descriptors.

The intention of this Bulletin is to raise awareness of this important debate among stakeholders in education and training in South Africa. It will be evident from Michael Cosser’s paper that debate in the higher education and training band i.e. levels 5 to 8 of the NQF, has been detailed, while the debate at the general and further band i.e. levels 1 to 4 of the NQF has been minimal. One could argue that a successful HET band can only be established if it is based on a carefully considered FET band. If this is true, then it is time for the level descriptors debate to focus on levels 1 to 4! Those stakeholders whose primary focus is higher education and training cannot ignore their responsibility in the development of other areas of the system.

TOWARDS THE DEVELOPMENT OF LEVEL DESCRIPTORS IN THE NQF: A POINT OF DEPARTURE

1 Status of the document

This document is the combination of two SAQA documents which have explored some of the issues surrounding level descriptors. It is being placed in the public arena to initiate and stimulate debate. Hence its primary purpose is to provide a point of departure from which critical discussion can grow and thereby assist and encourage the development of level descriptors that are helpful and acceptable for presentation to SAQA, for adoption as policy. The status of the document is then clearly: Towards the Development of Level Descriptors in the NQF: A point of departure (A SAQA discussion document – Version 1).

2 Purpose of Level Descriptors

Level descriptors, as the nomenclature suggests, provide a description of levels – in this instance, the eight levels on the National Qualifications Framework (NQF). The purpose of such description, from the perspective of a writer of standards or qualifications, is to facilitate the assigning of a unit standard, a standard, or a qualification to a particular level on the NQF.

3. Context of Levels on the NQF

- 3.1 Since *NQF Level* is one of four parameters on the NQF (see the table below), it is important to understand *level* in the context of the other three parameters – *Band*, *Types of Qualifications and Certificates*, and *Locations of Learning for Units and Qualifications*. Such contextualization will greatly facilitate the assignment of standards and qualifications to levels.
- 3.1.1 Thus a consideration of the band into which a standard or qualification will fall provides a useful starting point for such assignment. The notions of *General* and *Further* education and training, for example, indicate, as the terms suggest, whether the standard or qualification falls, respectively, under *general* or *further* education and training; if the Band is *General Education and Training*, the *Level* can only be 1; if the Band is *Further Education and Training*, the *Level* can only be 2, 3, or 4. And if the Band is *Higher Education and Training*, the *Level* can only be 5, 6, 7, or 8. Levels 1 and 8 are open-ended: there is neither a fixed entry point into Level 1 nor a fixed exit point out of Level 8 – this latter provision accommodating and promoting the notion of lifelong learning underpinning the NQF.
- 3.1.2 Similarly, a consideration of *Types of Qualifications and Certificates* may assist writers in placing their standards and qualifications on the framework – though such placing is easier in the case of the *Higher Education and Training Band* than in the case of the other two bands. Thus, for example, “Diplomas” and “First Degrees” are, at face value, distinguished by discrete levels, Level 5 accommodating the former and Level 6 the latter. The apparent facility of this classification, however, is deceptive: qualifications can span two (or more) levels – as in this instance, where First Degrees extend across Levels 5 and 6.
- 3.1.3 Attempts at positioning standards and qualifications in relation to the parameter *Locations of Learning for Units and Qualifications*, on the other hand, will be frustrated by the variety of learning sites reflected both in totality on the NQF and across bands. Recourse to this last parameter, therefore, will not necessarily prove particularly helpful in the determination of level.
- 3.2 The Appendix contains further guidelines on the assignment of standards to levels, particularly where distinctions between, for example, levels 2 and 3 or 3 and 4 are difficult to draw.

STRUCTURE OF THE NQF

NQF LEVEL	BAND	QUALIFICATION TYPE	LEARNING PROVIDER
8	Higher Education and Training	– Further Research Degree	Registered institutions (including universities, technikons, and colleges) accredited as Public or Private Higher Education and Training Providers in terms of the Higher Education Act, 1997 and the Education and Training Quality Assurance Bodies Regulations, 1998
7		– Doctorate	
6		– Masters Degree	
5		– Professional Qualification	
		– National First Degree (360+ credits - 72+ at or above Level 6)	
		– Higher Diploma	
		– National Diploma (240+ credits - 72+ at or above Level 5)	
		– National Certificate (120+ credits - 72+ at or above level at which certificate is registered)	
		(<i>Fundamental, Core, and Elective learning</i> : number of credits to be	
FURTHER EDUCATION AND TRAINING CERTIFICATE			
4	Further Education and Training	– National Certificate (120+ credits - 72+ at or above level at which certificate is registered)	Registered institutions (including universities, technikons, and colleges) accredited as Public or Private Higher Education and Training Providers in terms of the Higher Education Act, 1997 and the Education and Training Quality Assurance Bodies Regulations, 1998
3		(<i>Fundamental learning</i> : • 20+ credits from field of Communication Studies & Language;	
2		• 16+ credits from sub-field of Mathematics) (<i>Core and Elective learning</i> : 52+ credits)	
GENERAL EDUCATION AND TRAINING CERTIFICATE			
1	General Education and Training	Grade 9 ABET Level 4 – National Certificate (120+ credits - 72+ at or above level at which certificate is registered) (<i>Fundamental learning</i> : • 20+ credits from field of Communication Studies & Language; • 16+ credits from sub-field of Mathematics - including numeracy) (<i>Core and Elective learning</i> : 36+ credits)	Registered institutions (including schools) accredited as Public or Private General Education and Training Providers in terms of the South African Schools Act, 1996 and the Education and Training Quality Assurance Bodies Regulations, 1998

4. Sources of the Level Descriptors

Two sources have been used in the drafting of the level descriptors tables that follow: the descriptors developed by the New Zealand Qualifications Authority (NZQA; Methven, 1997); and the NQF developed for the South African education and labour ministries (*Lifelong Learning Through a National Qualifications Framework*, 1996). The tables reflect in this sense an attempt to apply a carefully crafted, cogently conceived system in the context of an NQF born out of and situated within the South African context.

5. Rationale Behind the Proposed Model of Level Descriptors

A difficulty with the NZQA level descriptors is that one cannot consistently trace, in schematic fashion, the progression from one aspect of a level descriptor to another – despite the assertion in the New Zealand level descriptors document that any level (higher than Q2) “has greater complexity of process, learning demand, responsibility, and application than [the previous] level *whose knowledge, skills and attributes it encompasses*” (Methven, 1997; emphasis added). Such encompassing must, for ease of standard and qualification writing reference, be readily demonstrable. For this reason, the NZQA descriptors have been adapted in the following ways.

- 5.1 The items constituting the column categories “Process”, “Learning Demand”, “Responsibility”, and “Application” have not been traced through the eight levels, as in the New Zealand system; rather, these four categories have been further broken down into their constituent parts for ease of reference. Such breaking down has necessitated, moreover, a change of nomenclature in three of the four category titles themselves: thus “Process” has become *Nature of Processes*, “Learning Demand” *Scope of Learning*, and “Application” *Learning Pathway*. The items constituting these categories, adumbrated in the NZQA level descriptors, have been foregrounded in the SAQA level descriptors tables: thus the category *Nature of Processes* encompasses the items *Skills, Procedures, and Contexts*, the category *Scope of Learning* encompasses the items *Knowledge, Information Processing, and Problem Solving*, the category *Responsibility* encompasses the items *Orientation of Activity, Application of Responsibility, and Orientation and Scope of Responsibility*, while the category *Learning Pathway* encompasses the items *Education Pathway and Training Pathway*. Each of the four categories is accorded its own table.
- 5.2 Levels in the New Zealand system are differently pitched from those in the South African system. While Level Q7 in the New Zealand system qualifies the learner for “entry to honours, postgraduate or equivalent tertiary education”, the attainment of Level 6 in the South African system qualifies the learner for such entry. This difference in conceptualization of learning pathway in the Higher Education and Training Band has obvious implications for the descriptions of the four levels which constitute this band, and the SAQA descriptors tables reflect this difference.

6. Using This Guide

Any writer of standards needs to consider in the first instance the *intention* behind the standard – the occupation, activity, or learning process that the person who has achieved the learning outcomes associated with the standard is qualified to undertake. The response to this question should be checked against as many criteria for that level as appears practicable in the context of the field, sub-field, and domain and of the nature of the decision being made. In the context of the level descriptors tables below, this means, optimally, that three criteria in each of three areas and one in the fourth area – a total of *ten* criteria – need to be taken into account in the determination of level.

For example, a consideration of *Level 3* would involve a reading of each of three categories in the first three tables and one of the categories in *Table 4*. A *Level 3* standard requires that the learner

- (from *Table 1*) display a well-developed range of **skills** and perform a significant choice of **procedures** in a range of familiar **contexts**;
- (from *Table 2*) possess some relevant theoretical **knowledge**, be capable of **information processing** at the level of interpreting available information, and from a **problem solving** perspective provide a range of known responses to familiar problems, based on limited discretion and judgement; and
- with regard to **orientation of activity** have his/her activity directed, with some autonomy (*Table 3*), **apply** his/her **responsibility** under general supervision and quality checking, and from the perspective of **orientation and scope of responsibility** assume significant responsibility for the quantity and quality of output, and possible responsibility for the output of others.

The *Level 3* learner would be following either the **education or training pathway** (*Table 4*) – either continuing secondary study or undergoing training towards certification in skilled occupations, crafts, and trades.

SOUTH AFRICAN QUALIFICATIONS AUTHORITY TABLES OF LEVEL DESCRIPTORS

Table 1. Nature of Processes.

Level	Skills	Procedures	Contexts
1	Limited in range	Repetitive and familiar	Closely defined
2	Moderate in range	Established and familiar	Routine and familiar
3	Well-developed range	Significant choice	Range of familiar
4	Wide-ranging scholastic or technical	Considerable choice	Variety of familiar and unfamiliar
5	Wide-ranging, specialised scholastic or technical	Wide choice, standard and non-standard	Variety of routine and non-routine
6	Wide-ranging, specialised scholastic or technical, and basic research, across a major discipline	Wide choice, standard and non-standard, often in non-standard combinations, in a major discipline	Highly variable routine and non-routine
7	Highly specialised scholastic or technical, and advanced research across a major discipline	Full range, advanced, in a major discipline	Complex, variable, and highly specialised
8	Expert, highly specialised, and advanced technical or research,	Complex and highly advanced both across a major discipline and interdisciplinary	Highly specialised, unpredictable

Table 2. Scope of Learning.

Level	Knowledge	Information Processing	Problem Solving
1	Narrow-ranging	Recall	Known solutions to familiar problems
2	Basic operational	Basic processing of readily available information	Known solutions to familiar problems
3	Some relevant theoretical	Interpretation of available information	A range of known responses to familiar problems, based on limited discretion and judgement
4	Broad knowledge base	Basic analytical interpretation incorporating some theoretical	A range of sometimes innovative of information responses to concepts
5	Broad knowledge base with substantial depth in some areas	Analytical interpretation of a wide range of data	The determination of appropriate methods and procedures in response to a range of concrete problems with some theoretical elements
6	Knowledge of a major discipline with depth in more	The analysis, reformatting, and evaluation of a wide range than one area	The formulation of appropriate responses to resolve both of information concrete and abstract problems
7	Specialised knowledge of a major discipline	The analysis, transformation, and evaluation of abstract data and concepts	The creation of appropriate responses to resolve contextual abstract problems
8	In-depth knowledge in a complex and specialised area	The generation, evaluation, and synthesis of information and concepts at highly abstract levels	The creation of responses to abstract problems that expand or redefine existing knowledge

Table 3. Responsibility.

Level	Orientation of Activity	Application of Responsibility	Orientation and Scope of Responsibility ^①
1	Directed	Under close supervision	No responsibility for the work or learning of others
2	Directed	Under general supervision and quality control	Some responsibility for quantity and quality, and possible responsibility for guiding others
3	Directed, with some autonomy	Under general supervision and quality checking	Significant responsibility for the quantity and quality of output, and possible responsibility for the output of others
4	Self-directed	Under broad guidance and evaluation	Complete responsibility for quantity and quality of output, and possible responsibility for the quantity and quality of the output of others
5	Self-directed, and sometimes directive	Within broad, general guidelines or functions	Full responsibility for the nature, quantity, and quality of output, and possible responsibility for the achievement of group output
6	Managing processes	Within broad parameters for largely defined activities	Complete accountability for achieving personal and/or group output
7	Planning, resourcing, and managing processes	Within broad parameters and functions	Complete accountability for determining, achieving, and evaluating personal and/or group output
8	Planning, resourcing, managing, and optimising all aspects of processes engaged in	Within complex and unpredictable contexts	Complete accountability for determining, achieving, evaluating, and applying all personal and/or group output

^① Responsibility for self is assumed for each of the levels in this category.

Table 4. Learning Pathway

Level	Education Pathway	Training Pathway
1	Entry to senior secondary education	Entry to career-based training
2	Senior secondary study beyond entry level	Training towards certification in sub-crafts and sub-trades
3	Continuing secondary study	Training towards certification in skilled occupations, crafts, and trades
4	Entry to undergraduate or equivalent education	Training towards certification in advanced trade and technical occupations
5	Continuing undergraduate or equivalent higher education	Training towards certification in technological or paraprofessional occupations
6	Completion of undergraduate or equivalent higher education and entry to honours, masters, or equivalent higher education	Subsequent completion of professional certification, and entry to professional practice and/or managerial occupations
7	Entry to doctoral and further research education, and to research-based occupations	Professional practice and/or senior managerial occupations
8	Academic leadership, advanced research, and/or research-based occupations	Professional practice and/or senior managerial occupations

7. Refinements in the HET band

Substantial discussions about the possibility of a single qualifications structure for the HET have taken place and during that process, there has been a lot of work in the area of level descriptors at levels 5 to 8 of the NQF. A number of issues have been raised, among which is the degree of specificity that is needed for level descriptors. A further point of discussion is whether a qualification or standard is required to meet all the elements of the level descriptors.

The expanded set of level descriptors for levels 5 to 8 is as follows:

LEVEL DESCRIPTORS FOR THE HIGHER EDUCATION AND TRAINING BAND OF THE NATIONAL QUALIFICATIONS FRAMEWORK

Level	Descriptor
8	Advanced study and research characterised by intellectual independence and capacity for further research at an advanced level; possession of great depth of knowledge in a complex and specialized area and/or across specialized or applied areas; capacity for dealing with complexity, lacunae, and/or contradictions in the knowledge base, and making confident selections of tools for the job; autonomous synthesizing of information and creation of responses to problems that expand or redefine existing knowledge; independent evaluation of and argument for alternative approaches, and accurate assessment of and reporting on both own and others' work, with justification; isolation, assessment, and resolution of problems of all degrees of predictability in an autonomous manner; full professional and academic communication with others in the field of study; working with and within a group towards defined outcomes, assuming leadership; negotiation and conflict resolution,

Level	Descriptor
	and effective motivation of others; capacity for, or actual, production of a thesis that places research within the broader context of the field, is capable of withstanding international intellectual scrutiny, and contributes original knowledge to the field in question
7	Introduction to the frontiers of knowledge, with an awareness of the provisional nature of the state of knowledge; mastery of theoretically sophisticated subject matter, with a comprehensive knowledge of the field of study; independent analysis of new and abstract data and situations deploying a wide range of techniques appropriate to the field of study, and transformation of abstract data and concepts towards the achievement of a given purpose; critical review of evidence supporting conclusions (including reliability, validity and significance), and investigation of contradictory information; critical evaluation of the literature pertaining to the field of study; specialization; confident deployment of well-developed research skills; confident and flexible identification and definition of complex problems and the application of appropriate skills and knowledge to their solution; effective engagement in debate in a professional manner and context, with production of detailed and coherent reports; effective interaction within a learning or professional group, with recognition or demonstration of leadership; negotiation within a learning or professional context, and management of conflict
6	Systematic and coherent introduction to, and incipient specialization in, one or several fundamental or applied disciplines , with detailed knowledge of the discipline(s) and an awareness of the variety of contexts within which it/they may apply; introduction to the principles and concepts underpinning the field(s) of study, to techniques of self-directed work and learning, and to basic research , and identification of key elements of problems and selection of appropriate methods for their resolution; development of skills and attitudes needed to comprehend and evaluate new information, concepts, and evidence from a range of sources; analysis of a range of information under minimal guidance, application of major theories of the discipline(s), and comparison of alternative methods for obtaining data; reformatting of a range of information towards the achievement of a given purpose; progressive study of the literature of the field(s) of study to a level which provides a basis for work at the next level; development of practical skills and techniques required in the effective application of knowledge in a professional context; effective communication in a format appropriate to the discipline(s) and clear and concise reporting of practical procedures in a variety of formats; effective interaction within a learning group, and development of professional working relationships within the discipline(s)
5	Introduction to and training in the fundamental disciplines of one field of study or activity ; possession of a given knowledge base, with an emphasis on appropriate terminology; analysis with guidance using given classifications or principles; collection and categorization of ideas and information in a predictable, standard format; evaluation of the reliability of data using defined techniques under tutor guidance; awareness of the necessary tools and materials used in the field of study, and accurate and careful application of tools and methods to well-defined problems; effective communication in a format appropriate to the discipline, and clear and concise reporting of practical procedures; meeting of obligations – to others (tutors and peers), offering and supporting of initiatives, and recognition and assessment of alternative options

Appendix

Guidelines on the Assignment of Standards and Qualifications to Levels

1 The NZQA has devised a means of assigning standards to levels by the elimination of outliers, according to the notion that if it proves difficult to assign a level by direct determination, one eliminates those levels that a standard or qualification does not fit (the outliers). The process suggested below, borrowed directly from the NZQA (Methven, 1997), progressively identifies and excludes the outliers, leaving a focused choice of two levels which can be considered in detail.

1.1 Construct the following diagram.

1 2 3 4 5 6 7 8

1.2 Beginning with 8, circle those levels into which the standard does *not* fit. Mark the next consecutive level with a question mark, thus:

1 2 3 4 5 6 7 8
?
1 2 3 4 5 6 7 8

1.3 Beginning with 1, repeat the process in the reverse direction.

? ?
1 2 3 4 5 6 7 8

1.4 Select the two *outer* levels (indicated by question marks). Determine which of the two the standard fits least well, and eliminate it. *If more than two levels remain*, add a question mark *next to* the level you have just eliminated.

? ? X
1 2 3 4 5 6 7 8

1.5 Repeat the process until there are *two* levels remaining. If no firm decision can then be reached, eliminate the level with the question mark attached to it.

ASSIGN THE UNIT STANDARD TO THIS LEVEL.

? ↓ ?
1 2 3 4 5 6 7 8

Works Cited

Isaacman, Jeannette (1996). *Understanding the National Qualifications Framework: A Guide to Life-Long Learning*. Johannesburg: Education Information Centre and Independent Examinations Board. (1996).

Lifelong Learning through a National Qualifications Framework. Report of the Ministerial Committee for Development Work on the NQF. Discussion Document.

Methven, Peter (1997). *Level Descriptors: A Guide for Advisory Groups and Writers*. Wellington: New Zealand Qualifications Authority.

THE NICATS (NORTHERN IRELAND CREDIT ACCUMULATION AND TRANSFER SYSTEM) PROJECT: THE DEVELOPMENT OF GENERIC LEVEL DESCRIPTORS

1 Introduction and Rationale

The development of generic level descriptors, as described in this paper, was conducted as part of a project which set out to develop the design specifications for a unified credit framework within Northern Ireland. The NICATS (Northern Ireland Credit Accumulation and Transfer System) Project was funded by the Department of Education for Northern Ireland (DENI) and co-ordinated by the Educational Development Unit of the University of Ulster.

The main advantage of a single credit framework for Northern Ireland is its potential to:

- allow for the recognition of achievement, wherever and whenever evidenced;
- make connections between occupational, vocational and academic awards; and
- provide continuity and progression between and within the school, further and higher education sectors.

Within a credit framework academic credit is awarded on the basis of the achievement of sets of learning outcomes at a given level. Consistent definition of levels is therefore an essential underpinning for a functioning credit framework.

Currently, in the United Kingdom, there is no single continuous hierarchy of level descriptors which describes achievement and progression; the Further Education (FE) and Higher Education (HE) sectors have different credit frameworks with distinct level descriptors. The present separation of FE levels and HE levels is artificial and counter-productive to the interests of learners.

It was against this background that the NICATS Steering Group decided that a Working Group should be set up to investigate level descriptors and the main issues surrounding levels of demand within a single continuum of learning. It was agreed that members of the Working Group should be curriculum specialists from both the FE and HE sectors. Membership of the Group is given in Appendix 1. From the Working Group emerged a smaller Task Group with a remit to produce a set of level descriptors which could embrace the learning programmes delivered within the Northern Ireland FE and HE sectors. The membership of this Group is provided in Appendix 2.

1.1 The nature and value of generic level descriptors

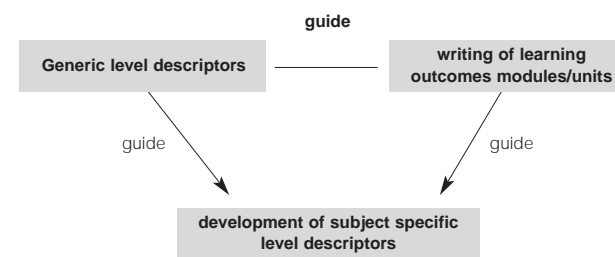
Level descriptors describe the characteristics of learning performance and expectations for personal skills development/demonstration and, as such, underlie curriculum design.

They represent an agreed stereotype or ideal of generic learning and skills expected at particular stages in education/learning. When descriptors for sequential stages are amalgamated they define progression in learning.

Where they have been defined, levels in education have been described in terms of awards or qualifications (e.g. undergraduate diploma, honours degree) or the years of a 3/4 year degree. However, with the pattern of change towards a more flexible education system, it is necessary to consider level descriptors that are no longer tied to awards or qualifications and years of a degree. This is essential as an underpinning for credit framework development.

As the use of the word "generic" implies, the descriptors are intended to cover all subject disciplines, including those where learning takes place and/or is assessed in an occupational setting. In this way they account for the range of contexts in which learning can occur (within and external to educational institutions), for example, traditional class-work, practical work, work-based learning and on-line/distance learning. Because the descriptors are dissociated from a particular year of study they can accord with learning programmes of all modes, styles and lengths.

Generic level descriptors guide the writing of learning outcomes for units of assessment (or modules of learning delivery) at a particular level. Learning outcomes are expressions of what the learner knows, understands and can do/demonstrate and represent statements of minimum acceptable achievement at the end of a period of learning. Generic level descriptors can either be used directly to guide the writing of learning outcomes or can be used to develop subject specific level descriptors, or standards which, in turn, guide the writing of learning outcomes (see diagram below).



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

2. The Structure of the Framework

2.1 Number of levels in the Northern Ireland Framework

The first major issue addressed by the Working Group was the number of learning levels appropriate for the Northern Ireland framework. This decision was largely dictated by the existing operational levels to which the framework must relate and the fact that there is almost universal agreement on the architecture of a common framework. The structure of levels of achievement is generally understood to follow a pattern compatible with those designed by the National Council for Vocational Qualifications (NCVQ) framework (in further education) and the Council for National Academic Awards (CNAA, 1988) framework (in higher education).

The Further and Higher Education Act (1992) quite clearly identifies four levels within the FE sector. These relate to National Vocational Qualifications (NVQ) levels one, two and three and their academic equivalents and an entry level prior to NVQ level 1 (or equivalent) (level E) for learners lacking basic skills or learners with learning disabilities.

Three levels in undergraduate higher education are understood and accepted, along with an 'M' level. It has been argued that undergraduate higher education is in reality one unified level, or two levels (foundation and graduate). However, this argument has not been accepted, as it does not advance the case for student progression. In higher education the M level incorporates different postgraduate programmes (Postgraduate Certificate, Postgraduate Diploma and the Masters degree). David Robertson (1994) argues that the framework could be further refined by internally dividing postgraduate programmes, but this could result in infinite regressions at other levels also. After considering the complexity of this area the Working Group initially decided that it would not be appropriate to proceed until a clear definition of the preceding levels was established. *(Later, after taking note of the increasing popularity of the professional or 'taught' doctorate it was decided, after the initial levels were finalised, that, since such qualifications lend themselves well to a credit based approach, a further level should be introduced to differentiate expected performance at doctoral level from that at masters level.)*

It was against this background that the Working Group initially agreed on eight levels of achievement and progression; and that qualifications should be aligned with these levels. It was proposed that these levels should be described as Entry level; levels 1-3 (FE); and levels 4-7 (HE). Subsequently, as stated above, in recognition of the growth of professional doctorate awards which may be credit based, a further level (8) was developed to define generic learning demand at the doctoral level.

Figure 1. How the proposed NICATS levels may articulate across the qualifications system

NICATS FRAMEWORK	NVQ	GNVQ	GCE Awards	NOCN	HE CATS
E				E	
1	1	1	GCSE (Grades d-g)	1	
2	2	2	GCSE (Grades a-c)	2	
3	3	3	A LEVEL	3	0
4	4				1
5	4				2
6	5				3
7	5				M
8					D

NVQ: National Vocational Qualification; GNVQ: General National Vocational Qualification; GCE: General Certificate of Education; NOCN: National Open College Network; HE CATS: Higher Education Credit Accumulation and Transfer System

3 Existing Models of Levels

The Working Group reviewed existing models of levels descriptors and agreed those which would be most useful to the Northern Ireland context. The models reviewed include those 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 levels (NCVQ); the Derbyshire regional network levels (University of Derby regulations); the New Zealand Qualifications Authority (NZQA;1996) framework of level descriptors; and the South East England Consortium (SEEC)/Wales levels descriptors (1996).

Each member of the Working Group reviewed the existing models independently. When the Group came together there was a general consensus on which models would be useful in the Northern Ireland context.

The New Zealand model was considered to be the most useful model since it embraced the totality of FE and HE and linked this to National Vocational Qualifications and their equivalents. It was believed that the model encapsulated many of the more generic NCVQ Key Skills areas and was user friendly.

The model integrated vocational, academic and professional aspects of learning. However, the language in which the descriptors were expressed could reflect a vocational bias, which would present problems with interpretation in the HE sector.

There was agreement that the Derbyshire levels, which built on the FEDA levels (FE levels Entry, 1, 2, and 3), were so broad as to lead to possibilities of ambiguity and inconsistency in their 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.

*FEU: Now the Further Education Development Agency (FEDA)

Members of the Working Group agreed that the SEEC/Wales level descriptors, which have 13 categories of descriptor for each level, were over-detailed, rather complex and too specific to an academic and subject based setting. Furthermore, the SEEC/Wales framework spans only higher education levels and does not, therefore, provide continuity with further education. Paul Bridges (1996) argues that another serious difficulty with the SEEC/Wales framework is that it conflates levels with standards. This point is explored in more detail in section 4.1 below.

4 Defining the Nature of the Level Descriptors

In defining the nature of the level descriptors the Task Group addressed the following questions:

- How should level be defined?
- Do levels describe minimum acceptable standards, or those of an average student?
- Do descriptors apply to a range of time or to a specific point of achievement?
- To what do levels relate/attach?
- Since the level descriptors must take cognisance of the existing world of levels, how can a single comprehensive structure of levels be established?
- To what extent can levels have a theoretical underpinning?

4.1 How should level be defined?

Jenny Moon (1995), in discussing generic level descriptors, makes reference to “minimum acceptable performance”, describes level descriptors as “generic learning outcomes” and relates them to standards. Paul Bridges, however, in “The Fluttering Standard” (1996), seeks to differentiate between levels and standards.

His first point is that the existence of a standard does not imply the existence of a level. “If we choose to define a First Class Honours standard, will that too become a further level? Surely not”. (Paul Bridges, 1996). Secondly, standards are in practice only verified in a subject-specific, criterion-referenced context, when a credit is achieved, a degree is classified, or an award is made (Paul Bridges, 1996).

Levels serve an altogether different purpose. “*The concept of level implies that broad equivalence of intellectual demand and rigour can be established*”. (Paul Bridges, 1996). Levels have to do with providing a framework for, and ensuring the equivalence of, credits awarded in a credit system. They are “indicators” of level, not assessment criteria. For the above reasons the NICATS Task Group believes that Paul Bridges’ differentiation is valid and necessary.

Paul Bridges also criticises the SEEC/Wales approach because he believes that, by defining level descriptors as threshold standards and expressing them as learning outcomes, the descriptors come to be regarded as the quality criteria which define the standard. This suggests that all thirteen categories of level descriptors must be met by a unit/module to achieve a particular level. But, in fact, SEEC does not insist on this. Consequently the level cannot be treated as a standard.

Initially tempted to associate some idea of “minimum” with the level descriptors, the NICATS Task Group now accepts that to do so confuses levels and standards. We therefore suggest that the generic level descriptors be regarded as “indicators of level” and as “qualities associated with a level”. This is reflected in the fact that the NICATS level descriptors are fewer and more comprehensive than those of SEEC/Wales and are expressed in a language of attributes rather than of learning outcomes.

This approach also acknowledges the following realities of credit frameworks:

1. It is unrealistic to expect those who achieve a credit at a certain level to have fully attained every aspect mentioned in the level descriptor.*
2. A module of learning may contain learning outcomes which, individually, represent a range of levels in the framework.

In support of this, Peter Wilson (1993a) argues that we should be wary of presenting the development of levels as an exact science; he argues that level descriptors should not be seen as sufficiently precise instruments in themselves to enable learner achievement to be located at specific levels within the framework. Instead, level descriptors should provide sufficient information to arrive collectively at rational decisions about how particular clusters of learner achievement (units/modules) can be compared with other similar clusters within the framework.

Based on the arguments above it was agreed that definitions of levels would be: “*A linguistic compromise between the philosophy of breadth and the pragmatism of precision*” (Peter Wilson, 1993a).

The Task Group agreed that the level descriptors should be broadly based, simple to use and unambiguous. They should be developed with the intention that the curriculum specialist would use his/her professional expertise to translate them into their own subject area. After examining many definitions of level it was agreed that the preferred definition of level was that adopted by the Derbyshire Regional Network, which was seen as a suitable amalgam of definitions and may be summarised as follows:

“A level is an indicator of the relative demand, complexity and depth of learning and of learner autonomy”

*The extent of coverage necessary will ultimately be decided within subject disciplines, but the Working Group recognises the need to clarify this issue further and provide guidance.

In accordance with the foregoing discussion it becomes clear that levels are generic attributes which might be associated with levels of achievement. Standards, however, will be set by specialists within each discipline. The subject specialist will relate the generic attributes at a particular level to the specific learning required within the relevant discipline and this will produce the required learning outcomes and their associated assessment criteria for a particular programme, i.e. the standard of performance required for achievement. In summary, standards are subject-related, while levels are generic attributes. Consequently the generic level descriptors should not be confused with standards.

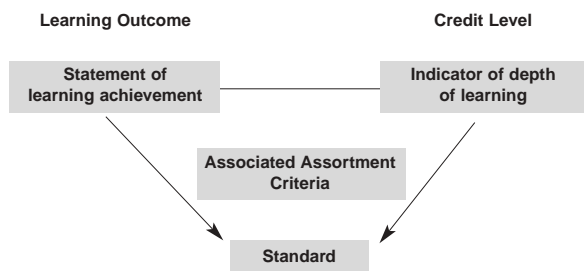
4.2 Do level descriptors describe the minimum acceptable standards, or the standard achieved by an average student?

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. 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. As stated above, 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.

For the above reasons the level descriptors should be seen as guides to the minimum acceptable, or 'threshold', level of performance required to satisfy the assessment criteria applied to specific learning outcomes within a course or programme.

4.3 Do descriptors apply to a range of time or to a specific point?

Another issue discussed by the Group was whether the descriptors should apply to a range of time or to a specific point. It was agreed that they should relate to the achievement evidenced at the end of a period of study. Moon (1995) supports the latter decision and argues that:

"In the context of credit developments (and probably for other uses of levels as well), level descriptors guide the development of learning outcomes for subject-specific modules, and as such must relate to the ends of periods of study".

4.4 To what do levels relate/attach?

The Task Group also considered that levels of the credit framework should be applied to clusters of learner achievement (expressed as units of assessment) in a learning-outcomes-based system. Qualifications and learning programmes should therefore be constructed of units at different levels.

The Council for National Academic Awards (CNAA (1988)) framework levels, used widely in the HE sector, are attached to awards and years. Levels are indicators of intellectual demand and are therefore quite distinct from years and stages. While the CNAA (1988) descriptors contain some assumptions that there are known characteristics which distinguish learners at different levels, the format and brevity of presentation do not make the descriptors explicit and thereby sufficiently open to debate. (For example, Level 2 is described as "work equivalent to the standard required for the fulfilment of the general aims of the second year of a full-time degree").

Few HE institutions have clear and explicit descriptions of the characteristics of the learning which might be expected at a particular level. Thus it is difficult for practitioners to define modules of delivery and units of assessment in terms of learning outcomes. The development of a more comprehensive set of level descriptors would overcome this problem.

The NCVQ and the FEDA descriptors tend to rely on relating attainment at one level to those in another (i.e., using relational terms such as "more competent in"). While this may not constitute a major problem in traditional (long) courses, it becomes an insurmountable obstacle in the accreditation of discrete clusters of learner achievement (units/of assessment).

4.5 Since the level descriptors must take cognisance of the existing world of levels, how can a single comprehensive structure of levels be established?

It is essential for the levels produced to have broad equivalence with the levels of national, regional and local awards so that they may be plotted onto the framework, thereby bringing clarity to the relative status of awards.

The Group agreed that, in order to construct level descriptors, the existing world of levels must be taken into account. Descriptors should encapsulate both existing definitions and implied concepts of level developed for very different purposes – academic, vocational, occupational and professional. The Group also agreed that the level descriptors should reflect the development of the more generic of the Qualifications and Curriculum Authority (QCA) Key Skills.

4.6 To what extent can levels have a theoretical underpinning?

While there are justifications for attempting to describe levels, there are some who dispute the validity of the descriptors which emerge, and/or their value. Professor Richard Winter (1993) examines the conceptual basis of level description in HE and concludes that it is an attempt to incorporate multi-dimensional concepts ('a loose amalgam of notions') without theoretical grounding into a simplified form. He demonstrates that words such as 'analysis' and 'evaluation', which are employed in level descriptors, can be and are applied at all levels in education and concludes that they are meaningless.

Jenny Moon (1995) argues that "*Winter is not incorrect in any of his criticisms, but is working from a purist academic frame of reference. The effort to describe levels is pragmatic. Moon goes on to argue that in describing levels there is 'no attempt in it to work from theory because there is as yet no useful theory'.*

It is interesting that Moon should make this latter point. When the Task Group began the process of writing the level descriptors, Bloom's Taxonomy of Learning (1971) was referred to on several occasions to help clarify thinking on several concepts of learning and was considered a useful theoretical model, reflecting the key areas of learning development. However, as Peter Wilson (1993b) points out, levels cannot be based on any consistent philosophical or psychological principles. We need to make pragmatic decisions about levels within the framework if we are to make progress.

5 The Process of Writing Level Descriptors

In the light of the foregoing discussion, it was agreed that, to ensure that level descriptors would be workable, they should draw upon theoretical models of learning development [e.g. Bloom's Taxonomy of Learning (1971) and Steinaker and Bell's Model of Experiential Learning (1979)] and the existing models of level descriptors. The descriptors should be clearly linked to national award levels. The academic and professional experience of group members would also be called upon to discuss and clarify emergent issues and make judgements on the emergent levels' framework.

5.1 Agreed categories of descriptor for each level

In devising the categories of descriptor for each level the Task Group examined those concepts which possessed the degree of fluidity needed to span the levels continuum. The categories of descriptor which were agreed as appropriate for the Northern Ireland framework included intellectual skills and attributes, processes and accountability. It was agreed that these broad categories could sufficiently embrace and simplify those descriptors outlined within the SEEC/Wales model.

5.2 The content of the level descriptors

The Task Group 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. After detailed analysis it was agreed that many descriptors in the SEEC/Wales framework overlapped and did not, therefore, 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 entitled 'accountability' within the NICATS model. The Task Group agreed that the level descriptors should reflect the following:

Intellectual skills and attributes It was agreed that the term "knowledge" might be viewed in higher education circles as more relevant to the lower levels of learning. The term "intellectual" was viewed as a more appropriate term to encapsulate the academic skills associated with knowledge, analysis, synthesis and evaluation. Consequently it was agreed that the first generic category of required attributes should be titled "intellectual skills and attributes", reflecting knowledge and understanding, application, analysis, synthesis/creativity and evaluation. This category would also reflect psychomotor skills, self-appraisal/reflection on practice, planning and management of learning, problem solving, communication and presentation, interactive and group skills. Since transferable skills overlap to a large extent with the more generic of the QCA Key Skills areas, it was agreed that the Northern Ireland descriptors should reflect their development.

Processes Processes should refer to the operational contexts within which the learner performs and should include the tasks and procedures required for the application of the intellectual attributes acquired.

Accountability For the purposes of the NICATS level descriptors the term accountability is understood as a broad concept embracing the underpinning attributes of autonomy, responsibility and ethical understanding. Thus, within the developmental continuum expressed by the succeeding levels, learners will be expected to demonstrate increasing autonomy in learning and the gradual acceptance of responsibility for self and others; incorporating the concept of ethical understanding at the higher levels.

5.3 The Process of Developing the NICATS generic level descriptors

The development of a single set of levels, and their level descriptors, was seen as a crucial aspect for a single credit framework for Northern Ireland and much effort was expended on this task. The steps and methodology involved in the development phases of the NICATS generic level descriptors are as follows:

5.3.1. Phase 1: Producing initial set of generic level descriptors (November 1996 - January 1998)

1. Task group established to produce initial set of generic level descriptors.

To produce an initial set of descriptors the task group carried out a detailed literature search and reviewed existing models of level descriptors (both nationally and internationally), including national award levels. Using the latter sources of information along with theoretical models of learning development (e.g. Bloom's Taxonomy of Learning (1971); Steinaker and Bell's Model of Experiential Learning; (1979)) and the academic and professional experience of group members, a draft set of descriptors was produced.

2. Consultation document prepared by the Task Group in June 1997.

This consultation document included a:

- detailed account of the development of the generic level descriptors;
- summary of the generic level descriptors which attempted to condense the categorised level descriptors into short sharp descriptions of the context of learning and the expectations of the learner at each level;
- table of generic level descriptors which gave a more detailed description of the levels; each level has three descriptor categories: intellectual skills and attributes; processes; and accountability.

3. Consultation period for generic level descriptors (June 1997 – October 1997)

The consultation document on the development of generic level descriptors was distributed to all institutional contacts in Northern Ireland (40 organisations in total) inviting comments. Guidelines were not suggested in terms of how organisations should respond and particular aspects or parts of the document were not flagged up

for comment/consideration. A total of twenty-four responded to the document – a response rate of 60%. In addition, responses to the consultation document were received from the Further Education Development Agency, the National Open College Network and the Derbyshire Regional Network.

4. Report produced on consultation exercise (January 1998)

The consultation responses were analysed in detail and a report produced and circulated to all those organisations who had been invited to participate in the exercise and also to other major credit consortia and relevant national agencies.

5. Generic level descriptors revised in the light of the consultation exercise

In the light of the consultation exercise, the task group revised the level descriptors and produced guidance notes for using and interpreting the generic level descriptors (December 1997).

5.3.2 Phase 2: Detailed consultation within subject areas (September 1997 – June 1998)

1. Recruitment and induction of curriculum specialists

In September 1997 six curriculum specialists were appointed, seconded (from educational institutions in Further and Higher Education) one day a week for nine months to carry out detailed consultation on the levels and their descriptors within the following subject areas:

- Art and Design
- The Built Environment
- Business Studies
- Social and Health Care
- Humanities
- Science (Chemistry and Biology)

From October 1997 to January 1998 the team, led by one of the Assistant Directors of the Educational Development Unit at the University of Ulster, undertook staff development exercises in order to become familiar with the NICATS proposals, and developed a methodology for consultation. The detailed consultation exercise was subsequently carried out between January and June 1998.

2. Remit of the team

The remit of the curriculum specialists was to consult on the applicability of the descriptors in selected curriculum areas which incorporated a wide range of qualifications and spanned all the levels. The team gathered evidence about the appropriateness and accuracy of the descriptors from practitioners in educational institutions and related bodies.

3. Methodology

a) Selecting Programmes and Institutions

In order to make a representative selection of programmes, each curriculum specialist researched the range of courses available in Northern Ireland in his or her specialism.

Several criteria were established for selecting programmes:

- Each specialism should undertake consultation, as far as possible, across all eight NICATS levels.
- Within each specialism and across the six specialisms, there should be a comprehensive range of programme types.
- Across the six specialisms there should be a comprehensive representation of institutions, both in terms of institution type and geographical spread. In particular Northern Ireland Universities should be involved.

Within these parameters, each specialist selected programmes and institutions at random, the lists being refined in consultation with other team members to ensure the above criteria were met.

In some cases where professional bodies were perceived to hold a significant degree of influence, these were also selected for inclusion in the process.

b) Agreed Testing Methodology

Having selected the programmes and institutions, a preparatory letter was forwarded to the heads of the selected institutions, alerting them to the existence of the exercise, and seeking their cooperation.

Each specialist subsequently made contact with the institution to identify personnel who could take part in the consultation process. The following elements formed part of the consultation process:

- NICATS literature was forwarded to the institutional contact person taking part in the consultation process.
- There was an initial meeting with the contact person to discuss the issues and familiarise him/her with NICATS.
- The relevant course documentation was examined to identify indicators of level.
- Data was gathered using an agreed semi-structured interview. The questions were unseen in advance of the interview, although the general topics to be covered were indicated. The interviews were confidential to the NICATS Project, and each interviewee was given the opportunity to review and correct his/her transcript.
- A form listing all the descriptors was used to identify those descriptors which were perceived as being appropriate or otherwise for each course.

4. The outcome of the consultation process

The curriculum specialists produced individual reports of the outcomes of their subject-based consultations. A summary of these individual subject-based reports was produced in August 1998. In the light of this summary report, the NICATS Task Group revised the generic level descriptors. The latter exercise included the development of a higher credit level for taught/professional doctorate awards. The revised descriptors and associated guidance notes were incorporated into a resource manual which was published in September 1998 (together with the other framework specifications and guidelines) and subjected to a final consultation.

6. The Nicats Level Descriptors

6.1 *Format of the NICATS generic level descriptors*

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

A summary of the generic level descriptors (see section 6.2)

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.

A table of generic level descriptors (see section 6.3)

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.

Guidance notes for the table of generic level descriptors (see section 6.4)

The guidance notes have been written to:

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

It should be noted that the table of level descriptors is based on the content and format of the NZQA framework of level descriptors. The members of The Working Group would like to extend their thanks to the NZQA for providing information on their level descriptors and allowing them to be developed for the purpose of NICATS

6.2 *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 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.
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.

	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.
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 inquiry. 	<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.

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.

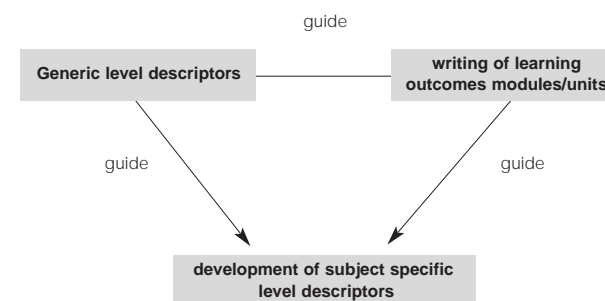
6.4.5. The level descriptors are designed to be generic in nature. As the use of the word ‘generic’ implies, the descriptors are intended to integrate vocational, academic and professional aspects of learning and apply to all learning contexts - classwork, practical work, work-based learning and so on. 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:

a) 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 3: The use of generic level descriptors to guide curriculum design



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

b) Guide the allocation of a unit to a level (via its learning outcomes and associated assessment criteria for units.

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).