CONTENTS

THE SAQA BULLETIN IS PUBLISHED AND DISTRIBUTED BY THE DIRECTORATE: STRATEGIC SUPPORT, SAQA, POSTNET SUITE 248, PRIVATE BAG X06, WATERKLOOF, 0145.
FAX NUMBER: 012 346-5814. PLEASE DIRECT CORRESPONDENCE TO THE EDITOR, SAQA BULLETIN.

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 7 6 5	Higher Education and Training	– Further Research Degree – Doctorate – Masters Degree – 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) *(Fundamental, Core, and Elective learning:* number of credits to be	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
FURTHER EDUCATION AND TRAINING CERTIFICATE			
4 3 2	Further Education and Training	– National Certificate (120+ credits - 72+ at or above level at which certificate is registered) *(Fundamental learning:* • 20+ credits from field of Communication Studies & Language; • 16+ credits from sub-field of Mathematics) *(Core and Elective learning:* 52+ credits)	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
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) *(Fundamental learning:* • 20+ credits from field of Communication Studies & Language; • 16+ credits from sub-field of Mathematics - including numeracy) *(Core and Elective learning:* 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 responses to concrete but often unfamiliar problems, based on informed judgement
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 than one area	The analysis, reformatting, and evaluation of a wide range of information	The formulation of appropriate responses to resolve both 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

1.3 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.

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

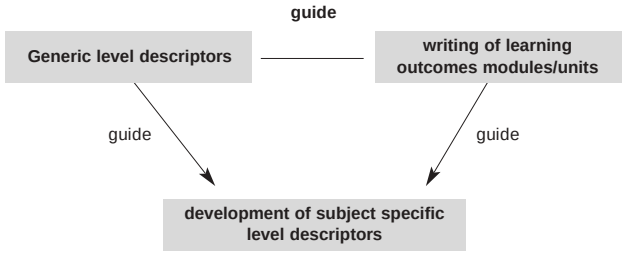
Level descriptors describe the characteristics of learning performance and expectations for personal skills development/demonstration and, as such, underlie curriculum design.

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.

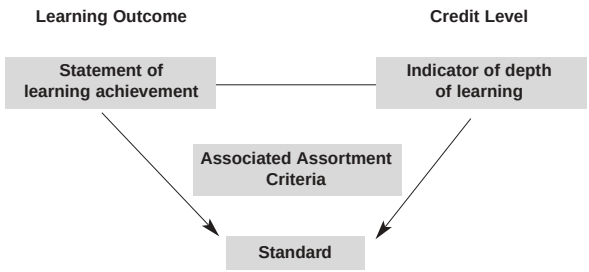
4.2 Do level descriptors describe the minimum acceptable standards, or the standard achieved by an average student?

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	• 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.	• 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.	• Carry out directed activity under close supervision. • Rely entirely on external monitoring of output and quality.
1	• 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.	• Show basic competence in a limited range of predictable and structured contexts. • Utilise a clear choice of routine responses. • Co-operate with others.	• 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	• Apply knowledge with under pinning comprehension in a number of areas. • Make comparisons. • Interpret available information. • Demonstrate a range of skills.	• Choose from a range of procedures performed in a number of contexts, some of which may be non-routine. • Co-ordinate with others.	• 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	• 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.	• 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.	• 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	• 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.	• 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.	• 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	• 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.	• 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.	• Accept responsibility and accountability within broad parameters for determining and achieving personal and/or group outcomes.
6	• 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.	• 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.	• Accept accountability for determining and achieving personal and/or group outcomes.
7	• 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.	• Conduct research, or advanced technical or professional activity. • Design and apply appropriate research methodologies. • Communicate results of research to peers.	• Accept accountability in related decision making including use of supervision.
8	• Make a significant and original contribution to a specialised field of inquiry.	• Demonstrate command of methodological issues. • Communicate results of research to peers and engage in critical dialogue.	• 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.

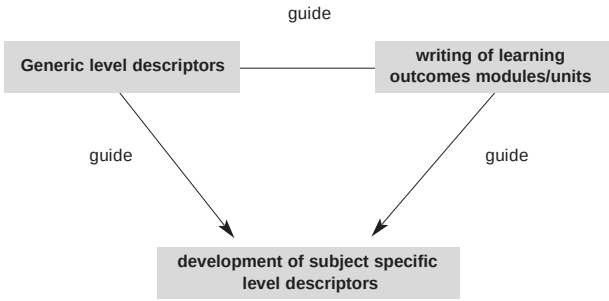
6.4.5. The level descriptors are designed to be generic in nature. As the use of the word 'generic' implies, the descriptors are intended to integrate vocational, academic and professional aspects of learning and apply to all learning contexts - classwork, practical work, work-based learning and so on.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

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 under-graduate 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.*

> ** 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 under-graduate programme gain a broader achievement across the level descriptors at NICATS level 6.*

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.

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	• 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.	• 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.	• 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	• 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.	• Show basic competence in a limited range of predictable and structured contexts. • Utilise a clear choice of routine responses. • Co-operate with others.	• 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	• Apply knowledge with underpinning comprehension in a number of areas. • Make comparisons. • Interpret available information. • Demonstrate a range of skills.	• Choose from a range of procedures performed in a number of contexts, some of which may be non-routine. • Co-ordinate with others.	• 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	• 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.	• 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.	• 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	• 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.	• 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.	• 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	• 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.	• 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.	• 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	• 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.	• 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.	• 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.

"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	• 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.	• Conduct research, or advanced technical or professional activity. • Design and apply appropriate research methodologies. • Communicate results of research to peers.	• 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	• Make a significant and original contribution to a specialised field of inquiry. • Command highly specialised and advanced technical, professional and/or research skills.	• Demonstrate command of methodological issues. • Communicate results of research to peers and engage in critical dialogue.	• 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.

References

Bloom BS, Hastings JT, Madaus GF (1971) *Handbook on Formative and Summative Evaluation of Student Learning.* McGraw-Hill, Inc.

Bridges PH, Faithorn R & Sand B (1994) *Establishing an Integrated Credit System at the University of Derby.*

Bridges PH, & Sand B (1998) *A guide to the Integrated Credit System: a credit system for post-school education.* University of Derby.

Bridges, PH (1996) *The Fluttering Standard: How should Higher Education approach academic standards in the 21st Century.* The University of Derby.

Bridges PH (1997) *Credit based modular systems: principles and issues* (unpublished)

CNAA Handbook (1988) CNAA: London.

Derbyshire Regional Network. *The credit framework and the credit accumulation and transfer system.* (Brochure).

Further Education Unit (1995) *Framework Guidelines 1: levels, credit value and the award of credits.* Blackmore press, Shaftesbury, Dorset.

Further and Higher Education Act (1992) Chapter 13. London: HMSO.

HEQC working paper: *Towards a better understanding of the meaning and use of level in setting explicit academic standards.* (June 1997).

Moon J (1995) *The Description of Learning Levels in Higher Education.* UCoSDA Briefing Paper Twenty-Seven.

Moon J (1995) *Credit in Higher Education: The Implications for Staff Development.* UCoSDA Briefing Paper Twenty-six.

Moon J (1996) "Generic Level Descriptors and Their Place In The Standards Debate", in *Modular Higher Education In The UK In Focus.* HEQC.

New Zealand Qualifications Authority (1996) *Framework Levels Descriptors: A guide for advisory groups and writers.*

Robertson, D (1994) *Choosing to Change: extending access, choice and mobility in higher education.* The report of the HEQC CAT Development Project. London HEQC.

South East England Consortium for Credit Accumulation and Transfer: Credit Guidelines, Models and Protocols (1996) DfEE.

Steinaker NW & Bell MR (1979) *The Experiential Taxonomy: a New Approach to Teaching and Learning. Academic Press Inc.*

Welsh Higher Education Credit Framework Handbook. Higher Education Credit Initiative Wales (1996) DfEE.

Wilson P (1993a)5 CAT Network Consultation Paper (Further Education Unit).

Wilson P (1993b) "Developing a post-16 Credit Accumulation and Transfer Framework: The Technical Specifications", in *Discussing Credit: A collection of occasional papers relating to the FEU proposal for a post-16 credit accumulation and transfer framework.* Further Education Unit.

Winter R (1993) *The problem of educational levels: Conceptualising a Framework for Credit Accumulation and Transfer.* Dvd McKay Company Inc.

APPENDIX 1

Membership of the Working Group on Level Descriptors

Mr Sam Bell
Curriculum and Learning Support Officer, North East Institute of Further and Higher Education

Mrs Anne Clarke
Faculty Adviser, Belfast Institute of Further and Higher Education

Dr Tony Cooke
Assistant Director, Educational Development Unit, University of Ulster

Dr Frank Curragh
Queen's University of Belfast

Ms Monica Deasy
Further Education Adviser, Northern Ireland Council for Adult Education

Dr Caroline Egerton
NICATS Development Officer, University of Ulster

Ms Sandra Griffiths
Director of the NICATS Project and Director of the Educational Development Unit, University of Ulster

Mrs Annie Moore
Director of the Northern Ireland Open College Network

Mrs Marianne Moutrey
Integration Project Officer, School of Nursing, Queen's University of Belfast

Mrs Joan Mullholland
Lecturer in Nursing and Director for CATS/APEL in Nursing, University of Ulster

Mrs Pat Patten
Acting Director, Institute of Continuing Education, Queen's University of Belfast

APPENDIX 2

Membership of the Task Group on Level Descriptors

Mr Sam Bell
Curriculum and Learning Support Officer, North East Institute of Further and Higher Education

Mrs Anne Clarke
Faculty Adviser, Belfast Institute of Further and Higher Education

Ms Monica Deasy
Further Education Adviser, Northern Ireland Council for Adult Education

Dr Caroline Egerton
NICATS Development Officer, University of Ulster

Mrs Marianne Moutrey
Integration Project Officer, School of Nursing,Queen's University of Belfast

Mrs Joan Mullholland
Lecturer in Nursing and Director of CATS/APEL, University of Ulster

Mrs Pat Patten
Acting Director, Institute of Continuing Education, Queen's University of Belfast

APPENDIX 3

Glossary

CAT	Credit Accumulation and Transfer
CNAA	Council for National Academic Awards
DENI	Department of Education For Northern Ireland
FE	Further Education
FEDA	Further Education Development Agency
FEU	Further Education Unit
GNVQ	General National Vocational Qualification
GSP	Graduate Standards Programme
HE	Higher Education
HE CATS	Higher Education Credit Accumulation and Transfer System
HECIW	Higher Education Credit Initiative in Wales
HEQC	Higher Education Quality Council
InCCA	Inter-Consortium Credit Agreement
MIS	Management Information Systems
NC	National Curriculum
NCVQ	National Council for Vocational Qualifications
NICATS	Northern Ireland Credit Accumulation and Transfer System
NOCN	National Open College Network
NUCCAT	Northern Universities Consortium for Credit Accumulation and Transfer
NVQ	National Vocational Qualification
NZQA	New Zealand Qualifications Authority
SCAA	Schools Curriculum Assessment Authority
SCOTCAT	Scottish Credit Accumulation and Transfer Scheme
SEEC	South East England Consortium

QUALITY ASSURANCE AGENCY FOR HIGHER EDUCATION

LEVELS, STANDARDS and CREDIT BASED AWARD-FRAMEWORKS

THE REPORT TO QAAHE FROM DR ROY PARTINGTON – OCTOBER 1997

Contents and Organisation of the Report

The Report consists of Sections A - I and five appendices as follows:

Appendices:

Section A: Introduction

The purpose of this Report is to bring together the work and insights gained during the SCOTCAT Levels Project and to offer to the Higher Education community some conclusions and observations about the nature and definition of levels of learning. The Report offers a definition of credit level in the context of the SCOTCAT Higher Education credit framework which is part of the proposed post-16 credit-based qualification framework for Scotland. A three-fold typology of levels is suggested in order to address the needs of the three identified constituencies involved in the matters of programme design and academic standards within disciplines and across the HE sector as a whole. Working within the present SCOTCAT framework of four credit levels exemplar generic descriptors have been developed and these are related to broad discipline areas and to specific programmes of study. The relationship between standards and generic levels is clarified and a model is suggested which, it is believed, will support the security of standards and awards across the sector. The Report points towards further development work on credit levels and suggests a means of carrying this out which could lend significant support to the proposals for the development of threshold standards emanating from the Dearing and Garrick Reports.

This project has been enormously interesting and challenging. That it has been successfully brought to a conclusion is due very much to the support and encouragement I have had, before and during the project, from many colleagues in universities and colleges in Scotland. They and staff in HEQC, now QAAHE-, have been generous in giving time, advice and constructive criticism. The Project Steering Group has been especially helpful in many ways and I wish to record my thanks to them all for their attention to the details of discussion papers and the Report as it was generated. Two individuals must be thanked especially. Norman Sharp for his work as Convenor of the Steering Group and for his steady support and guidance throughout the project. And David Bottomley who, as Project Manager, was every ready to provide a listening ear, to offer advice and encouragement and generally ensured that the project was linked with the many other strategic developments which are presently taking place in post compulsory education and training in the wake of the Graduate Standards programme and Dearing and Garrick Reports.

Lastly I wish to thank Mrs Hilda Connelly for her secretarial support and her skills in translating my initial drafts into accessible documents.

Section B: Background and Context

1. One of the themes of this Report is that the meaning and significance of a concept largely derives from the context of its use. The Report is written at a particularly interesting time in the developing story of higher education in Scotland and in the United Kingdom. In the wake of large shifts in the sheer size and scope of higher education in the UK, the system is endeavouring to redefine its purpose and explain itself to society. Equally society, through government, industry and commerce, is asking higher education to justify its call on national resources. In meeting the needs of society Universities and Colleges must begin to express their purposes not only in traditional terms of academic teaching and research, but in terms of how they relate, perhaps explicitly, to the world of industry and commerce and to social and political agendas. These themes are reflected in the recent publication of the Dearing and Garrick Reports, and may be anticipated in the Government White Paper on Life Long Learning.

   "No man is an island". This also applies to institutions and the Higher Education sector. There is a natural and productive tension between the autonomous free individual and the need for individuals to co-operate for the greater good of the group. There are parallels for Higher Education institutions and academics within them, and this Report points towards the need for the collaborative development of an explicit, but agreed, language and a set of values, which will describe the substance and essence of higher education learning and teaching and the standards of programmes and awards in Scottish universities and colleges.

2. Most would agree that the most significant feature of higher education in the UK in the late 1990's is that it is now a mass system[1]. It is not yet universal, but it is now vastly changed in size from the time of the Robbins Report. The system[2] now admits far larger numbers of students, from a wider range of backgrounds and age groups, and with a variety of entrance qualifications. Institution size alone has undergone significant transformations since the 1950's and 1960's. One of the largest redbrick civic universities in England in the late 1950's had a total student population of 6,500. It now has 18,000. In Scotland there are now 21 higher education institutions, 12 of which are universities. In the 1960's there were 5 universities, and the two largest had student populations of the order 6,000. Another significant feature in Scotland is the role of the FE sector in providing for higher education. It delivers more than 25 per cent of all Scottish higher education provision through courses designed primarily by the colleges and validated by the Scottish Qualifications Authority.

3. In order to deliver programmes of study and related awards the number and range of courses and programmes have clearly increased enormously. Yet the mechanisms for course approval, assessment and examination have adapted in a piecemeal fashion. Many systems and features have developed for a variety of reasons: for example franchising, off campus accreditation, modular programmes of study. The range and type of awards, with a proliferation of degree titles, has added to the array of 'products' which the higher education system has created to attract, and meet the needs of, students.

4. An important development has been the creation of credit frameworks and credit-based qualification frameworks. Many of these are institutionally based. More recently there have been moves to establish geographically based frameworks such as SCOTCAT. Such frameworks offer the potential to facilitate the articulation of HE and FE provision, and to link with vocational and professional training qualifications. Of course, many universities have long experience of such links and it should be remembered that one of the main functions of universities in Britain before the late 19th century was the training of the future professional classes.

5. However, it is now abundantly clear that the mass HE system can no longer rely on small close-knit networks of academics operating in an elite system to articulate and cherish the definitions and standards of awards and courses. Recent reports on the External Examination mechanisms in UK universities and the GSP illustrate this point clearly.[3]

6. Nevertheless, the system as a whole has to find appropriate ways of presenting to its students and other stake holders just what it claims to deliver through its programmes of study that lead to awards. Equally, individual institutions have to do this, and obviously many do it with varying degrees of success, in order to attract students to their courses and so sustain their existence.

7. At the same time institutions, and in a few cases, institutional consortia, have been developing their curricula in new ways to try to meet the various needs of students and to manage limited teaching and learning resources. The most significant has been the development of modular programmes, which can allow for flexibility in delivery in time and place and can incorporate student choice. In theory modular systems can show gains in resource utilisation - though this is often less evident in practice. In order to exploit flexibility various forms of credit-based systems are coupled to modularity. In fact, it is sometimes erroneously believed that in order to have a CAT scheme, there must be modular provision: and conversely that modularity of programme design necessarily requires a credit system.

8. Consequent on a shift from conventional year-long full-time taught provision the matters of coherence and progression become explicit and important concerns. This is not to say they did not exist before, but they were addressed in various, often implicit, ways. And with these concerns the matter of academic level becomes an explicit issue for consideration. In very simple terms the question of "where does this module fit" in a programme of study, or in the bank of modules in an institution, depends on an understanding of the idea of level.

9. Of course, the notion of level of study or of achievement is not new. But modularity, CAT schemes, and accreditation of learning achieved elsewhere make the idea of level, and how it is used, sufficiently important for it to be necessary to think about it much more carefully.

10. The idea of level is widely used in describing a variety of educational and training processes and structures. There are references to level in documents as widely different in purpose as national reports and course validation papers. The term is used to qualify a range of features associated with learning. Thus there are levels of achievements, performance levels, levels of award, levels of study, levels of learning, credit levels and levels in qualification frameworks. The term is used as a broad indicator of the place of study in the general picture of educational provision as in 'higher education level'. or 'school level', and as in descriptors of particular elements of a course such as a module being 'at SCOTCAT Level SD2', or 'at SVQ3'.

11. Within HEls level is widely often used to indicate the location of study of a module or unit of work. In this sense the reference is generally to the place of the module or unit in a programme of study, or course. The term may be simply a descriptor in terms of time as in 'second year level'; it may imply, and actually indicate, the relative demand or difficulty of the module in a progressive programme of study. Progression, it should be noted, may denote progression in time, though it more often suggests a progressive increase in demand and is expressed in terms of pre-requisite and sequential units of study. In such cases progression is in the level of learning demand or other parameter which purports to 'measure' learning.

12. Level is used to differentiate academic, professional and vocational awards. There are undergraduate and postgraduate levels; there is work at initial and post qualifying professional levels; and vocational qualifications carry explicit reference to the level of award. In first degree programmes sub-degree awards are made on the basis of study at appropriate lower levels, and regulations for all the awards are based on progression through various stages of learning. The term is also attached to achievement, and it is not uncommon to find reference to 'level of achievement' at a particular 'level of study' - as in "level of achievement at Honours level". It is probable that what is meant by this locution is that there is a standard of achievement at a particular level of study. It is easy to see how the idea of standards and level became confused on occasion, and if nothing else, it shows the need to qualify the use of the term, and observe some care in its application.

13. While the idea of level underpins much of the discussion about educational and training provision in the UK at the present time, there has been for some time an implicit understanding of level, encapsulated in the idea of a first degree of a British University. Certainly within subject disciplines, in the HE sector up to the 1960's, it could be assumed that there were sufficient common features of content, and process, and a generally accepted, though not articulated, set of expectations of performance in degree examinations, and at the "year end" stages before the final examinations.

14. The enormous expansion of provision and the creation of a mass higher education system have put tremendous strains on the network for sharing the values, expectations, and unwritten rules and standards that supported the previous dispensation. The HEQC Graduate Standards Programme[4] has explored this territory in great detail, and its outcomes have informed the work of the Dearing Committee[5] as well as the work of this project. In order to make standards in credit and award frameworks more secure this Report suggests that there should be greater clarity, and a consequent reduction in dubiety about the definition of level. There are limits to the degree of precision of such a definition based on its use and function. Nevertheless, if the dangers of confusion in application arising from its use in too wide a range of contexts are to be avoided, it is important that attempts are made to agree on a suitable definition, and to create useful and meaningful descriptions of the various levels in credit based qualification frameworks.

15. This Report endeavours to explore and tease out the issues surrounding the idea of level, how level is most usefully described, and to locate these ideas within the context of the emerging credit-based award framework for post-compulsory education and training in Scotland.

Section C: The Levels Project

1. The preceding section of this report has presented an overview of the significance of the concept of level in higher education, and has described in general ten-ns the range of ways in which level is used. It is evident that there are difficulties surrounding the use of the term, and because of its centrality as a conceptual tool in the structures and processes of education and training it is important that the higher education community reaches clear understandings about its meaning.

2. The Dearing Report[5] makes a clear reference to level as a fundamental feature of "a national framework of qualifications based on credit points at different levels." And Garrick[6] sees the concept of level of learning as a key feature of its first recommendation " to consider and adopt an integrated qualification framework based around level of study and SCOTCAT credit points" Further, these reports strongly support and recommend that current work on credit frameworks should be taken forward so that higher education provision will be more effectively articulated with school and further education provision. In addition it is clear that the vision of these reports includes a recognition that access to higher education, and the place of higher education in a life-long learning society, should be unproblematic.

3. This view of the nature of higher education provision depends on the creation of credit- based qualification frameworks. Such frameworks should enable, in principle, the whole range of assessed learning to be recognised for awards which will reflect an agreed set of expectations and standards. One of the fundamental building blocks of a credit-based qualification framework is the concept of level of learning.

4. This project had as its overall aim to develop a sector-wide agreement in Scotland about the definition of level and how it can be usefully described. Equally importantly the project was tasked with describing ways in which level descriptors could support the definition and assurance of quality and standards of credit based learning within

the proposed post-16 credit framework for qualifications in Scotland. More generally the project outcomes were expected to feed into the UK wide work currently in progress in the Graduate Standards Programme, which, it is by now clear, has fed into the work of the National Committee of Enquiry into Higher Education – the Dearing Report.

5. The project brief was founded on the current SCOTCAT Credit Framework of four undergraduate levels, and the proposals for a post-16 credit framework for education and training provision in Scotland.

6. Project objectives

   Taking the undergraduate levels of the SCOTCAT HE Framework as the vehicle for its explorations and drawing on the proposals for a post-16 credit framework in Scotland, the Project took as its objectives to review and assess the potential benefits of, and make proposals on:

   (i) the definition, general nature and purpose of 'Level', including the relationship to, and the ways in which levels can help support the definition and assurance of standards of credit-based learning, and including the relationship between levels and:

   – awards and awards frameworks;
   – years of learning in higher education;
   – programmes;
   – learning achievement/outcomes;
   – assessment criteria;
   – progression of learning;
   – academic, professional and vocational learning;
   – core skills.

   ii) the most useful number of SCOTCAT levels;

   iii) a series of generic descriptors of the learning associated with each SCOTCAT level and the ways in which such descriptors can contribute to the quality assurance and standards of credit-based learning.

7. During the period of the project (February 1997-September 1997) the work of the Dearing and Garrick committees was published and the context within which the project was originally founded changed in terms of a number of respects. The most significant of those concern the recommendations (see Appendix 1) for a comprehensive qualification framework for Scotland. These make proposals for the number of levels of learning, and recommendations relating to the nature and type of undergraduate awards which include issues to do with the relationship between specialisation and level of learning. Clearly these proposals will be subject to debate elsewhere and it is thus difficult for the project definitively to fulfil objective (ii) above. In turn this creates a problem for objective (iii), in so far as each level would have an associated generic descriptor. Additionally, the suggestion in both of the above Reports, that standards will be based on thresholds identified by subject and professional groups, calls for careful consideration of the purpose of generic and other level descriptors and how they will be generated and owned within the sector.

   It is thus somewhat difficult to make firm proposals for a set of generic level descriptors for the SCOTCAT HE framework because: -

   (i) the present SCOTCAT HE Framework will form part of the Scottish post-16 credit based qualification framework and will thus include the full range of post compulsory awards in education and training i.e. VQ's, academic awards, initial and post-qualifying professional qualifications and Higher National Certificate and Higher National Diploma Awards;

   ii) within the HE sector the nature, type and number of undergraduate and sub-degree awards has yet to be clarified;

   iii) the number of levels in the proposed post-16 framework – both within the HE section and in the whole of the post-16 framework has yet to be determined. (See Appendix 1)

9 . Nevertheless, this does not mean that the project cannot fulfil a useful purpose. Rather, that its character is changed and that it seeks to make a contribution to what will be a continuing debate. By focusing on objective (i) the project seeks to clarify the understanding of level as used in credit and award frameworks. It also shows how a careful understanding of how level is described and used can help to secure academic and vocational standards. In doing this one purpose of the Report is to stimulate discussion and to contribute to growth in understanding the nature of teaching and learning in Higher Education - and indeed, in the post compulsory sector in general. In dealing with the matter of generic and other level descriptors the present four level SCOTCAT HE framework is used with the proviso that it may yet be expanded to accommodate the range of first degree awards as suggested in the Dearing and Garrick Report

Note on Methodology

10. From the outset this project was able to draw on the strengths of the network of Scottish HEIs, which has been enhanced in recent years by the development of SCOTCAT. All the HEIs in Scotland are party to the SCOTCAT Guidelines and there is in each institution a SACCA contact person. In addition the SCOTCAT Development Group and the SCOTCAT Fora (Social Work, Health Studies, Teacher Education, Business Studies, Adult and Continuing Education and an APEL Group) provided a body of experience and individual contacts in the institutions.

11. The project had broadly three phases. In phase one the Project Officer carried out a literature survey. Published and unpublished documents and papers originating in the HEQC together with the reports emerging from the work of credit consortia in England, Wales, Northern Ireland and New Zealand have provided valuable information and insights. (see Bibliography). At the same time, informal discussion took place with individuals in the ancient universities in Scotland who were involved in work on the development of levels and award regulations. Contact with the newer universities was maintained through the existing links established through the SCOTCAT fora. The officer also drew on the experience of staff in the London and Glasgow offices of HEQC, and participated in an HEQC Levels Seminar held in London in April 1997.

12. Phase two centred on a survey questionnaire to all HEls in Scotland and to selected FE Colleges involved in delivery of Higher National programmes and sought views on the project aims and objectives, and the usefulness of proposed generic levels descriptors. The response was good: 23 returns from 31 institutions, and provided sufficient information and material for a workshop on levels descriptors to be mounted in June 1997. This was well attended and from the comment at the meeting and subsequent feedback was judged to be a valuable exercise. Some staff in the sector were not able to attend but the officer was able to meet with them on other occasions and to explore with them some of the workshop themes. The Officer has endeavoured throughout the project, in trying to clarify the idea of level, to identify those themes and ideas around which a consensus could be agreed through discussion and consultation. During this phase and the following one links were maintained with other credit consortia. The report draws on the views put forward by colleagues in the universities, colleges and other agencies in Scotland, moderated by the Steering Group.

13. The final phase addressed the matter of writing and preparing the Report - by then (July /August) a task which had to be carried out in the light (or shadow) of the impending publication of the Dearing and Garrick Reports. It was decided to put out to the sector, and to other credit consortia in the UK, a discussion paper as an interim measure. The paper reflected the thinking of the Project Officer at that stage, and while being a personal view, was designed to stimulate discussion in the various institutions. Responses to it were generally favourable though the number of actual written replies were small probably because of the timing of its distribution which coincided with the publication of the Report of the National Committee and its Scottish sub-Committee.

14. Throughout the Project, the Project Officer met and corresponded with individuals in the various fora and institutions and with the members of the Steering Group in order to test out ideas and to obtain advice. In addition the Officer has been able to build on the important ground work by colleagues in the other UK credit consortia and in the Quality Enhancement Group of the HEQC, now QAAHE. However the final report and conclusions are the responsibility of the Project Officer.

Section D: The Concept of level of learning

1. The term level is used in a variety of different ways and contexts. There are references, for example, to levels of achievement, performance levels, levels of awards, levels of learning and credit levels. The concept is central to the idea of progression and to award and credit frameworks.

2. This report focuses on level as used in credit-based award frameworks since it is this context that much if not all of the provision of future educational opportunity is likely to be located. The identification of the ways in which level is used should enable the characterisation and meaning of the term 'credit level' to be better understood.

3. The word level suggests either comparison as in the relative levels of something, or equality as when the reference is to different things being 'at the same level'. However, fundamentally the underlying sense is one of the position - where something is with respect to some base line or benchmark. So contour lines, isobars, and degrees of temperature are all 'levels'. Using such scales of levels it is possible to establish, for example, where something is on a hillside, that two weather systems have the same pressure, and that average daily temperature gets progressively higher as one approaches the equator.

4. In educational settings levels of learning represent positions of equivalence. They are simply "where learning or study is" with reference to some benchmark. It is also evident that levels themselves may on occasion be used as reference benchmarks. Clearly our understanding of the structure of learning is based on our long experience of, for example, degree programmes. It is intuitively understood that in a given subject there are certain expectations of what might be studied, and how it would be approached and assessed, in for example, the second year of a Scottish degree course. It is this sense which presently contributes to our understanding of what level "SD2" means in a particular subject.

5. There is, then, an intuitive notion of level based on the experience of teaching particular subjects. This notion is usually expressed in terms of the timescale of courses and programmes of study and accepted ideas of the sequence of topics and concepts within these courses. It is thus possible to use, for example, the expression "third year level work" and assume, within a subject area, that other teachers in the same field have a broad understanding of what is meant and what is expected of student approaches to study and how they might go about the business of getting on the inside of the task in hand.

6. However, levels in credit based award frameworks are, by definition, not a function of time lapsed from the start of the programme. Particular levels of learning are founded in judgements about demand, complexity and depth of study and expectations of learner attributes. It may be that in some disciplines there is an inherent logic which yields a convenient set of bounded groupings of topics, or of shifts in

demand, or perceived difficulty. Such a structure would provide a rationale for defining credit levels, and of creating explicit descriptions of each of the levels. But it would clearly be dependent on a fairly precise understanding of the structure of a particular discipline. It is in this discipline sense that the majority of teachers in higher education view levels of learning i.e. the levels are a way of structuring the teaching and learning in a particular subject programme of studies. Thus the idea of level appears, at first sight, to be meaningful only in terms of particular programmes of study in a given subject within a discipline.

7. Levels, then, represent positions of equivalence in higher education programmes of study and are fundamentally linked to the idea of progression. (Jackson, 1997)7 Progression might be defined in terms of time (year 1, 2 etc), distance travelled through a curriculum, change in intellectual demand or difficulty, or other features of the learning situation. Progression is also linked to performance or attainment. Jackson points out that 'notions of progression are built into the design of programmes and their assessment strategies while the notion of relative performance is built into the design of assessment instruments and the process of assessing and ranking students'. Thus the term level is sometimes used to differentiate between different measures or standards of attainment. Herein there is considerable scope for confusion and this issue will be explored in Section E.

8. There is also an understanding of level in terms of expected performances at various stages in a programme of study. It is thus possible to have a low level of performance at a high level of work. In the first instance the reference is to the performance of a particular student. The second reference is to the relative position of the work, in terms of demand or difficulty, in a programme of study.

9. In order to avoid confusion with 'level' meaning a discriminator in grading of performance it is proposed that from here on the term credit level will be used to mean level of learning. It is, of course, the level of learning at which credit is assessed and allocated. From time to time in the text both level and credit level are used according to the particular context, but both usages refer to level of learning as should be clear from the context.

10. Another approach would be to try to identify general descriptions of the various stages of progression throughout the higher education experience and to use these as reference points or markers for locating specific learning expectations or outcomes. As a start to the problem of identifying these stages it would not be unreasonable to derive a set of broad expectations from current understandings of the general characteristics of HE awards. This might seem to be somewhat circular, but it is doubtful whether it is possible to identify ab initio the progressive stages of higher education learning without reference to our current experience and understanding of learning in higher education based as they are in the present system of courses and awards frameworks. It is easy to see how levels of progression have been associated with year of study since much of the experience of teaching and learning in HE undergraduate work is based on the three and four year full-time periods of attendance which universities have demanded - for historical reasons as much as anything else - before a degree may be awarded. The ends of academic years act as transition points where decisions about going in to the next year are made as the result of examinations. In the case of those institutions organised around semesters the same situation applies in principle.

11. It is interesting to ask whether progression has always been understood in the sense of the next year somehow being 'above' the previous year. Is progression always upwards in the sense of the previous year's study being a pre-requisite for entry to the next year? In the case of many traditional degrees clearly not. The traditional Ordinary Degree in the ancient universities in Scotland required students to study a variety of subjects during three academic years of attendance. Only a few of these subjects had to be at the 'second' level. It is, for example, possible to get an Ordinary Degree in some Scottish Universities by studying five subjects at "the first year level", and three at "the second year level". In the third year of attendance on such a programme a student could well be in a class with first year students and assessed with them. Thus progression may mean merely to go forward to the next year without necessary reference to any sense of moving up a scale of, for example, intellectual demand. This suggests that the matter of the coherence of the overall combination of subjects within the programme of study leading to such awards might be a matter for discussion.

12. Progression and coherence as sector wide and nationally used terms in the sense of implying a positive upward change and challenge together with a sense of programme focus and relatedness seem to have arrived in their most explicit form with the CNAA, though it was generally evident before that in those programmes of study which had a built in requirement of pre-requisite studies. They have also existed, often implicitly, in more focused programmes of study such as those leading to Honours degrees, and certainly in disciplines like Mathematics, the Sciences and Engineering - again expressed in terms of pre-requisite studies. If progression means an increase over time in the conceptual, and intellectual demands and degree of maturity expected of students, then levels of learning can be thought of as ways of describing, both qualitatively and quantitatively, those progressive demands. Credit levels provide ways of talking about progression in terms of the way some learning may depend on prior knowledge and understanding and expressing such requirements in a quantifiable way.

    The idea of credit level is also a relative concept: the meaning of a particular credit level is conferred by reference to levels above and below. Each credit level in a sequence of levels represents a position of broad equivalence - in intellectual or learning demand, in the expectations of study skills, or the manner in which the discipline is approached and studied. In this sense it is where the studies 'are' with reference to some reference points(s) or benchmarks(s) - above and below.

13. Level can be defined in terms which relate to any of the notions of progression outlined above, and in the past notions of progression through time or through a syllabus were the most appropriate ideas to guide practice and institutional regulations. The development of flexible credit based modular curricular formats has caused a

shift in focus to the notion of level as an indicator of the progressive increase in intellectual demand through a programme. This requires explicit definition and description of the cognitive and behavioural features which will evidence such a progressive change. It is clear that the meaning of level emerges from a consideration of its purpose and how it is used, and from the particular features or dimensions of the descriptions of each level. These descriptions are known as **descriptors**.

14. The idea of level is clearly central and important, but it is certainly not without[7] considerable difficulties. On the one hand the GSP (1997) *op cit* asserts "the concept of levels can facilitate the process of securing standards, but is by no means viewed in the same way across the higher education sector. A clear and agreed definition of levels is required for further progress to be made". But Robertson (1994)[8] makes the point "that levels of achievement are indeed arbitrary conventions: they may be rendered less arbitrary wherever possible, but to search for the ultimate precision and fairness might cause the entire edifice of qualifications and progression to unravel in a fruitless search for the impossible". He also reminds us of the importance of asking "why do we wish to know about level?" What, indeed, is level for? In his extensive report there is no detailed exploration of the concept: indeed, he is sceptical about the value of over zealous attempts to define what is meant by levels of achievement, and the provision of detailed descriptions of what might comprise each of the levels.

15. The expression 'level of achievement' needs to be carefully understood and used because it can (a) be confused with standard of achievement and (b) it is not always clear whether it refers to what students actually achieve - as a result of learning and assessment - or whether it refers to the intended achievements or outcomes which are planned to be realised by following the programme of study.

    This is to emphasise the crucial importance of the use of language. Much of the current discussion about levels involves serious attempts to develop a technical language and a set of conventions to describe the educational enterprise of teaching and learning in as clear a way as possible. It goes without saying that we should try to reach agreement as to the meaning and use of terms such as level, achievement, attainment, performance, expectation, learning outcomes, credit, standards, grade, programme course unit and module. Many of these terms have an everyday meaning as well as both tight and loose technical meanings.

16. An important, perhaps the crucial, feature of the idea of level is that of where to "itch the level" of instruction, and assessment demand when designing and delivering teaching programmes. For behind such endeavours lie assumptions about learning – how students learn, how much they have learned, and how they win engage with the present and particular learning tasks. But in truth we know little of what goes on in the heads of our students. Neither do we know much of the internal logic, indeed if one exists, of the relationships between contents and processes of various academic and professional disciplines. In some programmes of study there are fairly clear features of progression; in others the order of studying the units or modules is apparently of little consequence. Nevertheless this question is a key one and relates to the matter of standards.

17. Level is used in different ways by different groups in HE, and it acquires therefore apparently different meanings. For some practitioners levels are a device for managing and advising on student progression: for others it is to assist in the process of curriculum planning. For yet others it is helpful in managing and advising on strategies in life long learning. There are also contexts where an understanding of levels may lend "some clarity, accountability and quality assurance to the purpose of higher education" (Robertson 1994). One particular example of the importance of understanding credit level occurs in APEL work, where in order to accredit learning acquired in the work-place, or anywhere else, judgements are made about the equivalence of assessed prior learning against an approved, structured programme of study. An understanding of credit level as a measure of demand or difficulty is necessary if this type of judgement is to be made with security. The activity of accrediting modules to programmes of study involves similar judgements, and again relies on understanding the meaning of level in the process of comparing new, or additional, study material, with existing material. These aspects are likely to be of increasing importance as pressures towards increasing explicitness of academic standards increases.

18. The use and definitions of level are interrelated because of the way context informs understanding of the meaning of the term level. The final report of the Graduate Standards Programme (GSP)op cit highlights problems in definition, and "shows that the concept of level may be used in different ways which it is useful to distinguish. For example, level may be employed as:

    (i) a measure of intellectual demand or difficulty (as in whether two modules are designed and assessed at the same level);

    (ii) a measure of progression through a curriculum or syllabuses (as in whether a module at one level has to be completed before studying a module at a higher level); and

    (iii) a discriminator in the grading of academic performance (as in a student's work being judged to be at first class honours level)".

    Reflection on the above three ways of using the term is interesting.

    Consider (iii) above. Here the term is used in a way which conflates standards and levels. The award of first class honours is made if certain assessment criteria are met. These criteria are at the level of learning which expresses the dimensions of an honours award and are one of the two components of the standards required for the award to be made at that level. The logic of (iii) above suggests that it is possible to identify "levels" for any number of assessment bands *ad infinitum*. This is surely not what is intended. The difference between (i) and (ii) is more apparent than real. In both cases what is being referred to is the level of demand or difficulty in two modules. In (i) it is explicitly about demand, in (ii) the reference is to the ordering of the level of demand. Thus, level in these cases is referring to the same thing; viz. the degree of demand, or difficulty of the learning. The point is that the significance and meaning of the term only emerges from a careful consideration of its purpose as used in a particular context.

19. Levels are one of the core features of credit frameworks: indeed credit frameworks are based on the idea that study and its outcomes can be quantified in terms of credit points - based on the amount of student work or effort and compared in terms of "where the work is - or where the outcomes are" relative to some, at present un-articulated but seemingly understood, benchmark. The term credit level is used here to encapsulate the idea of comparative equivalence, so that work, study, or whatever can be compared and if necessary transferred and/or accumulated. The benchmark is not an absolute reference point: for example as far as higher education in Scotland is presently concerned there seem to be two such traditional benchmarks higher grade and honours Degree. But precisely what these mean does not bear close examination. Higher Education frameworks at present place themselves with respect to what they perceive as the completion of fifth and sixth year work in schools however shaky this foundation may be. Historically the end of senior school work was itself benchmarked against what was understood to be required for entrance to a University education. It doubtful whether there ever has been a considered effort to establish a rational basis for the start of higher education work and study.

20. To summarise, the range of contexts in which level is used is as follows:

    (i) meaning the level (or degree) of difficulty of learning outcomes within a designed programme of progressive study (as in 'credit level');

    (ii) level of award - e.g. undergraduate, or postgraduate;

    (iii) the reference 'marker' for the description of study or practice against which the experiential learning is judged for the ward of credit (in the APEL context);

    (iv) the reference marker for the accreditation of modules and courses towards particular award programmes;

    (v) in describing progression as the (comparative) term to establish the relative degrees, or phases, of difficulty or increase in maturity/demand;

    (vi) in educational guidance as an indictor of level of studies, and as a relativity of place in order to establish "where a student is" with reference to a number of parameters in the learning environment;

    (vii) in the description of different standards and indicators of achievement, as well in reference to a range of standards of achievement at a particular level of expectation of performance.

    All of the above demonstrate the importance and centrality of the idea, and it is evident that the term level is used in a number of different contexts. Jackson (*op cit* has argued that level is given meaning through the processes of contextualisation and socialisation within the academic, professional and other communities which use the concept. There is the potential for what is taken to be a central concept having a range of particular meanings depending on who and for what purpose the concept is being used.

21. It is the idea of the credit level descriptor as describing "where the learning is" with respect to agreed, conventional benchmarks that is most useful. This view of level as position can be expanded to include notions of vocational skills, professional practice, and learner attributes. In all of these it is possible in principle to allocate or award credit points at a particular level as a way of measuring the notional amount of effort required for an average/typical learner to demonstrate to a specified standard the learning or skill, or professional practice or learner attributes or vocational competence. Underlying this is the basic notion that the acquisition of knowledge, understanding, skills or professional performance, requires time. This is a crude measure of human effort involved. It is nevertheless the best proxy available at present for expressing the extensive properties of what ever is involved in learning.

22. It is therefore important that the Higher Education community endeavours to get a clear understanding of the meaning of level of learning and to agree conventions about the use of the term. The matter of the definition of level of learning in the context of the SCOTCAT credit based award frameworks will be addressed in section F. For the present it is suggested that level is best understood in terms of **where** (on a scale of something) **the work** (done by a student) or **learning outcomes** (expected in order to complete a module) **is** with respect to some agreed baseline of learning demand, or position. The baselines which credit and award frameworks use are matters of convention. Level refers to where, on a linear scale of some feature of the learning context, the learning is located in the framework. It does not tell us anything else. It does not tell us how much learning has been achieved, nor how much work has been done nor how good or bad the learning /work is, nor neces-sarily where the work or learning stands with respect to work and learning in other frameworks and award streams.

Section E: Credit based award frameworks and standards

1. The work of the Graduate Standards Programme (GSP) confirms that the concepts of 'level' and 'credit' are becoming increasingly important in HE, for many reasons, including the moves being made to make academic standards more secure, i.e. clear, consistent, equitable and assured. This involves making more explicit the standards associated with levels of study and with awards, the regulations for which are increasingly expressed in terms of credit points at a number of different levels of learning. Thus levels are related, albeit indirectly, to the matter of academic standards.

2. At the outset it is important to be clear about the meaning of credit in the context of credit frameworks. Credit for assessed learning is expressed, for example as " 15 SD2 points", which means "15 credit points at Scottish Degree Level 2". Credit is described by two parameters:

   (i) the (relative) amount [volume of learning] of learning expressed in numerical points; and

   (ii) the position of that learning relative to agreed benchmarks - its level.

   It is very important not to confuse the level at which credit is awarded with the amount or volume of notional student effort [or NSE] (see Appendix 2 for the SCOTCAT definition of NSE) involved in achieving the outcomes of learning, nor with the rate at which the outcomes may be overtaken and thereby achieved. Neither length of time of study nor volume of notional student effort expressed as credit points are indicators of 'level' of study. This is important principle contributes to the security of the titles of degree awards and highlights the issue of the use of postgraduate award titles in the case of Honours degree programmes which are extended in time to cover more material without assessment criteria which reflect post-graduate dimensions and requirements. A similar arguement applies in the use of potentially confusing undergraduate award titles such as 'Higher' Honours unless it can be made clear what exactly is the difference between the awards is in terms of level(s) of learning. The title of the award should reflect a minimum amount of assessed learning and study at the highest level of learning in the programme of study and thereby demonstrate accepted dimensions and features of the award in question. Careful examination and appreciation of the concept of credit level should contribute to an understanding of just how clear the boundaries between undergraduate and post-graduate awards should be. This is important for the security of the meaning of award titles in credit based qualification frameworks.

3. Within awards frameworks levels the various generic awards titles are associated with particular credit levels. In the Scottish undergraduate awards framework the title of Honours Degree is linked to studies at levels SDI to SD4, the ordinary Degree to levels SD I to SD2 and / or SD3, and sub-degree awards - where they are provided for - are linked to SDI (Certificate in Higher Education) and SD2 (Diploma in Higher Education).

4. Where the awards frameworks are credit-based the award not only reflects the coverage of particular contents and the experience of certain learning processes, but includes in a clear quantitatively expressed manner the relative balance of the constituent studies at the defined levels of demand or difficulty. These details are expressed in the regulations for the award and the award is made after appropriate credit points at the various levels of demand have been acquired. Regulations for the award express the number of necessary credit points at each of the various of levels of learning required for the award.

5. Awards and therefore awards frameworks, also enshrine standards of achievement. That is, in order to gain the awards, not only have learning outcomes, specifying content and processes, to be achieved but there are assessment criteria related to these contents and processes which have to be satisfied. Standards reflect agreed outcomes and the criteria for successful achieving of the outcomes Credit points are only awarded as a result of success in meeting the assessment criteria.

6. The standard of an award indicates that certain contents and processes have been successfully understood and demonstrated. In addition the standard of the overall award also implies that the experience of study has been at various different levels of demand or difficulty. And further, the standard implied by the awards is informed by cross-reference to other similar awards through the process of external reference and examination.

7. It follows that in credit-based awards frameworks, standards of awards can be expressed in terms of quantified elements of study expressed as credits at defined levels of learning within a particular discipline or subject area.

8. The award and its title imply:

   a) that certain contents and understandings and related process have been covered and expressed in terms of credit/levels;

   b) that agreed threshold standards (assessment criteria) in respect of the specific elements of (a) above have been met; and

   c) that the credits and levels in (a) above are meaningful in terms of, and can be understood as relating to, the broad framework and dimensions of the credit based award scheme.

9. What all this means is that the terms **standards**, levels, and **credit points** can provide the conceptual language for discussing and comparing courses and programmes of study within and between institutions.

10. Credit based award frameworks provide not only a mechanism for designing programmes of study, and for facilitating student progression and transfer, through and between courses, but, perhaps more importantly, are the context in which it is possible to share and develop knowledge and understandings about a range of courses

of study and awards. Locating programme of study within agreed frameworks, and linking these programmes to awards at the various levels of the framework suggests that a number of dimensions and features of the programmes could well be held in common. Such frameworks are conceptual and operational contexts wherein a language for discussing all aspects of learning of the range of courses and programmes can be developed. It is within this type of environment that discourse about standards and the meaning of awards can be most usefully carried out.

11. The general concept of a credit based award framework also entails two other significant principles, which are best illustrated by reference to the proposed Scottish Credit Framework for the Recognition of Achievement. These are:

    (i) that a need exists in for an open and flexible system of education and training, one which encourages and supports the progress of all learners, recognises and values individual achievement, and provides greater opportunities for continuing and life-long learning and training;

    (ii) that, within the terms of individual qualification frameworks, all appropriate achievement, provided it can be assessed, can be recognised in terms of credit points and levels.

    The core features of the proposed Scottish Credit Framework are a unified system of levels (indicating relative levels of provision/awards) and a common credit point system(indicating the 'volume' of provision/awards). In this respect, the proposed post-16 Credit Framework is an extension of, and based upon the principles and features of, the SCOTCAT Higher Education Framework.

12. As well as providing a context for developing and sharing the meaning of standards, levels, credit, and awards, credit-based frameworks such as SCOTCAT are capable of articulating with larger frameworks which address wider constituencies. It should therefore be possible in principle to work towards a UK credit-based framework for HE awards. This is important because of the broader context of life-long learning and the potential contribution that credit-based learning can make to increased flexibility for both learners and providers of learning opportunities. Credit levels need not always be thought of as a solely hierarchical concept. It is important that we are as aware of horizontal relationships as vertical relationships as learners are faced with the varying offerings of different award frameworks meeting their evolving range of vocational, professional and personal learning needs over their lifetimes.

Section F: The meaning of level in the SCOTCAT Higher Education framework

1. The previous sections have addressed the matter of the general idea of level, its relation to credit based award frameworks and how levels can provide a context for establishment of standards of achievement. The remainder of this report focuses on the issue of level in the SCOTCAT higher education framework, which is the established credit-based award framework in Scotland and has been accepted by all HEI's in Scotland. This report is a contribution to the development of the fundamental underpinning features of that framework, and at the same time exemplifies that important aspect of credit based award frameworks which is about being a context for discourse about the dimensions of learning in higher education.

2. In an attempt to establish a useful definition of level which is sufficiently general in its application the following seems to be a reasonable, if very general, starting point.

    "A level represents a position within a continuum of incremental change in one or more specified parameters which are an indicator of the progressive development of one or more features of the learner. In particular in higher Education we refer to progressive intellectual development and capabilities of the individual learner. Each level represents a position or statement of general equivalence - e.g. in time, in curricular stage, in intellectual demand, in the expectations of how students relate to their chosen subject of study." (Jackson) *op cit*.

    The key sentence is the third, which sees levels as statements of general equivalence in terms of specified parameters.

3. In terms of usefulness of the definition it is relevant to ask who, or which groups, will be using the definition - individuals designing modules and building teaching programmes, or professional/discipline based practitioners concerned with sector wide standards, or institutional managers concerned with broad comparability of standards of awards, or the various constituencies and stakeholders outside the world of higher education who wish to know what programmes and awards mean in terms of standards and extent of knowledge and understandings and skills in which they are interested.

    Recall the point made earlier that, when designing and delivering teaching, the idea of level as "where to pitch the level of instruction" or "where does this topic best fit into the course" is important. And employers may wish to know that all graduates can demonstrate certain general skills as well as appreciating that possession of a degree signifies certain qualities of mind, and the possession of particular skills.

4. A broad definition of level which seems to be acceptable in the context of Scottish Higher Education is:

   "A level is an indicator of relative demand and complexity of learning associated and of learner autonomy with a body of knowledge, understanding and skills and of learner autonomy".

   It should be noted that when the above definition is placed in the context of the post16 credit framework the term 'learning' should be interpreted in a wide sense. That is, it is to be understood as being not simply academic learning but embracing recognised learning in the context of everyday life and work, as well as in specific vocational and professional occupations.

5. Some have queried the final phrase which refers specifically to 'learner autonomy', arguing that it is implicit in the notion of demand and complexity. The following point deserves emphasis. The first two indicators (demand and complexity) refer to the substance of what is being learned. It is, however, important to signal that a significant feature of level of learning, including learning in Higher Education, refers to features which describe *attributes and qualities of the learner* and not just what is learned. The argument for this rests in the notion that there are certain shared values, attributes and characteristics which are inculcated in students of whatever particular discipline or profession as a result of their experience of learning whether in academic institutions or in the workplace.

6. What is evident is that it is how level is described at each level which is of significant and useful value. Thus, at the various levels of a credit based framework, what are the particular features which are deemed to be characteristic of that level? This points to the importance of level descriptions as giving useful meaning to the concept of level. This is the substance of the next section of the report.

7. Before exploring the matter of descriptors it is necessary to recall the idea of progression and to note its relation to credit level. Careful thinking about the expression 'credit level' indicates that it means the **level** (of demand, or difficulty of learning) **at which the credit is assessed and awarded**. So the expression credit levels is a short hand way of referring to levels of learning in a programme of study, or levels in a curriculum, where we understand levels as defining (successive) broad bands of learning expectations. That is, they are a way of describing how the learning expectations are arranged in some form of progressive hierarchy. This also points to the underlying and relative nature of levels, for it is generally a matter of pragmatic judgement as to how we define and decide to section off programmes of study, and indeed whole curricula. Remember that traditionally, the most convenient way to structure the curriculum or programme of studies was in terms of time; but such an arrangement is, in fact, circumstantial reflecting the accepted norm of a full time year of academic study, rather than reflecting fundamental structural levels.

8. In the SCOTCAT HE framework, credit levels are indicators of relative demand and complexity of learning and of learner autonomy. Further, the credit levels are made real in terms of the description of each level. The descriptors consist of statements which spell out for learners and teachers what is meant by demand, complexity and learner autonomy at each level at which credit is awarded.

9. Different constituencies are interested in differing degrees of detail or generality. Thus levels descriptors can be used to express different dimensions of levels according to how the descriptors will be used or who will use them.

Section G: Levels Descriptors

1. The meaning and significance of level is realised in practice in the way in which levels are described. That is, it is level descriptors that enable us to understand more fully what level is and to apply it appropriately. The concepts of level and levels descriptors, are used by different constituencies for different, but related, purposes. Some of these different uses have been listed earlier in section D, but it is clear that credit levels can be described with varying degrees of generality or specificity depending on the context of discussion. For example, it is possible to refer to "level SD2" studies to mean:

   - the broad expectations of study at the second level of HE experience in Scottish universities and colleges;
   - the expectations of study at the **second** level in a HE subject/discipline in Scottish universities and colleges;
   - the expectations of study at the second level in a particular course in that subject/discipline.

   All these statements refer to the expectations and dimensions of study and learning at the 'second level' – level being defined as in section F. But they require different degrees of detail in order to be useful in their contexts.

2. Levels descriptions, then, are the means by which what is meant by level is under stood 'IN' a particular context. The descriptors must be useful in the context for which they are written. It follows that purpose and use are important factors to be considered when creating levels descriptors. Recall the points made in paragraph F4 about who will be using the descriptors. In credit-based award frameworks what are the descriptions of the levels for? Who will need to use these descriptions? That is, who will need to know what, for example, level SD2 means? It is valuable to ask these questions because it is then possible to develop level descriptors from quite different standpoints.

3. One approach would be to attempt to analyse the syllabus content of a complete course of study in terms of increasing conceptual demand and intellectual difficulty. This can be very difficult, except in those cases where, for example, certain

techniques, and understandings are obviously and necessarily dependent on other techniques and understandings. Such a detailed approach might yield descriptors which could only be understood and useful in the context of particular disciplines because they would be likely to be focused on content.

A second, and possibly fruitful, approach could be to start by using a taxonomy of learning as a means of categorising learning activities and associated outcomes. A number of credit consortia, e.g. SEEC/HECIW[9] have used Bloom's Taxonomy in this way. However, this taxonomy needs to be understood and used with care. It can yield a large number of potentially confusing categories of learning which are not always immediately helpful to course developers. Such taxonomies focus on features of the range of learning processes and using the taxonomy might yield descriptors which have application across a range of disciplines but which could be difficult to apply in a given circumstance.

Thirdly descriptors might be written in terms of the cognitive developmental features of learning expected of an average student. Such a method would require wide acceptance of the particular theories which underlie current views of how students learn. This is also potentially problematic.

A fourth, and clearly utilitarian, approach would be to write the descriptors in terms of advice and guidance for different user groups.

4. It is this latter approach which has been adopted by this project. It has led to the proposal laid out in the next section for a typology of credit level descriptors, and, it is claimed, it clarifies how and where the matter of standards of awards and associated teaching and learning are located in credit based frameworks such as SCOTCAT.

5. This way of developing descriptors addresses the question of how useful are generic descriptors. In the work of other credit consortia it seems that generic descriptors have been sought which could be used directly to inform the process of module and programme design and development in a particular discipline and at the same time be used to compare, in terms of level and standard, different programmes of study both within and across subject boundaries-in short, across the spectrum of HE, and in some cases post-compulsory, provision. It has been argued that the utility of the concept of level lies in its all embracing nature, and in the way it links to progression and performance in academic and regulatory practice. (Jackson, *op cit*). A case can be made for accepting a variety of different uses, while stressing the need to be clear and explicit about defining how the concept is applied in a particular circumstance. On the other hand, in the GSP Report, the view is expressed that there should be greater clarity and an implied reduction in dubiety in the definition of level. While there are limits to the degree of precision of the definition of level, it seems that if the concept is all embracing there will remain a persistent danger of confusion in application in using the term in a wide range of contexts which are themselves not always open to precise delineation.

6. A functional approach to the problem of writing descriptors enables the matter of how standards and levels are related to be seen in a new light.

   The Graduate Standards Report sees the expression of standards as involving three aspects.

   - *general intentions or expectations of what should be achieved by students*
   - *specific intentions or expectations of what should be achieved by students*
   - *the actual learning attained by students*

   Level descriptions are (in the GSP) general statements about what kinds of learning are expected at the different academic/ professional levels of higher education.

   Specific expectations and intentions of courses and programmes are guided by the above and are expressed as:

   - *programme/module learning outcomes - at a particular level*

   The specific expectations are specific to the level at which they apply, and are clearly context and user dependent.

   At a particular level there are:

   - *general intentions/expectations expressed as general descriptions (generic descriptors)*
   - *specific intention expressed as programme/module outcomes.*

7. There is, however, a problem in moving from general intentions implied by an award to the specific intentions of a particular course. How 'general' is general? Does this refer to the notion of

   - *awards within the boundaries of a discipline or professional group; or*
   - *awards at a particular level (!) in an institution; or*
   - *awards of a particular type and title in the HE sector as whole.*

   To put it another way, to what extent can a set of generic descriptors apply to all of the above circumstances?

8. Using the idea of purpose and use and coupling this with the concept of degree expectations and dimensions as developed in the GSP enables a way out of this difficulty to be found. The GSP suggests that it is possible to establish acceptance of the idea that there are dimensions of HE awards - degrees - which are common across the range of institutions. That is, at a high level of generality, it is possible to discover a set of expectations or attributes of graduates - this is the notion of 'graduateness' which can be expressed in terms of a range of degree dimensions. (GSP Annex C). It is in this context of consideration that generic descriptions of credit levels would apply.

9. However, to connect these general expectations and dimensions with specific learning outcomes of courses in particular disciplines it seems appropriate to propose an intermediate stage of descriptions or descriptors which would be located in the area of cognate subject or discipline and professional groups. The reason for this is as follows, and it is connected to the issue of standards. Learning outcomes are focused, precise and clearly articulated expressions of learning. They are used to express the intended purposes of particular programmes of study and find their most precise use in course modules or units. In course modules, for example, there is, or should be, a clear link between the learning outcomes, the content, the methodology, the assessment instruments and the assessment criteria. It is precisely here that standards are located i.e. standards involve expectations and actual performance. Assessment criteria relate directly to the learning outcomes and are module/unit/course/programme specific. Academic standards are the explicit *measures* of academic attainments that are used to describe and measure academic requirements and achievements. So standards are measures of how well the learning outcomes of particular programmes or courses are achieved or whether achieved at all.

10. A generic descriptor is not a statement that defines a standard. it does however provide a guide as to what a statement about a standard may contain, because such a statement must refer to learning outcomes. It is in this way that the generic descriptor enables the standards to be located - through its link to learning outcomes in a framework of levels.

    Conceptually the general expectations contained in the generic level descriptor enable academic standards to be compared and judged because the set of specific learning outcomes are linked to specific assessment criteria and the specific learning outcomes are located at a particular generic level.

    The link between level and standards is via specific learning outcomes at a level and their associated assessment criteria. The achievement of these standards or otherwise is confined through the assessment process associated with the application of the assessment criteria. Generic descriptions of levels which relate broadly across all subject areas therefore create a shared context within which detailed descriptors, learning outcomes and assessment criteria may be developed by groups of practitioners in different contexts. This addresses the matter of how standards may be assured across a variety of programmes.

11. With reference to the linkage between levels and standards it is worth restating that neither levels not generic level descriptors are standards. It is nevertheless easy to see how confusion may arise since we speak of “a high level of work” when we may mean either a high standard of work or work at a high level. Work of a low standard may be carried out at a relatively high level of demand or difficulty; and work at a low level of learning may be of a high standard.

    To refer to ‘levels of achievement’ and ‘achievement levels’ can be somewhat problematic and can on occasion provide an opportunity for confusion between standards and levels. There are standards of achievement at particular levels of learning and so we may speak of ‘achievement standards’. Strictly, **achievement is at a level (of learning)**. The problem is to be clear about whether we are referring to what is intended or what happens as a result of engaging in learning. What is achieved the actual outcomes of study or whatever - meets a certain standard at a particular level of learning. At the risk of repeating this point: standards relate directly to assessment criteria and learning outcomes - at a particular level. The level describes “where” the work is or the outcomes are - in terms of demand, and difficulty relative to other work or other outcomes. The standards are the criteria for measures of relative success in achieving the outcomes. For example, honours degree classifications describe different standards of performance at the level of study appropriate to the final stage(s) on Honours degree programmes.

12. The problem is this. How should or can those who are developing and teaching programmes of study interpret generic descriptors in such a way that their standards are at least comparable with other groups of practitioners teaching at the same level and in a similar discipline or professional area?

13. The difficulty can be addressed in the Scottish HE context by establishing sector wide groups of academic and/or professionally based teaching staff who can use the generic descriptors to develop advice and guidance (i.e. discipline or professional descriptors) for particular discipline and/or professional areas. At the same time such groups, in the light of their shared understanding of level, can contribute to the generation of threshold standards at the levels of learning in question. This approach provides a way of supporting and taking forward the suggestion in the Dearing Report for the establishment of external examiner groups to oversee standards in cognate disciplines and professional areas. The approach inevitably involves some collaboration on the part institutions for it would mean that within cognate subject or discipline areas there would have to be some explicit agreements about what were considered to be essentials in terms of content and process and also what constituted acceptable achievement for particular awards.

14. From the point of view of those engaged in the tasks of preparing learning material and teaching and assessing course work the relationship between the various levels of generality of specification of a programme of study leading to an HE award is as follows.

Generic Descriptors	Guidance as to broad expectations at the agreed levels of study in HE
Discipline/Professional Descriptors	Guidance as to expectations and threshold standards at agreed levels of study in the discipline or professional area
Programme/Module Descriptors	The learning outcomes, assessment criteria, and explicit standards

15. In using these descriptors it has to be remembered that the generic and discipline/ subject/professional descriptors are intended, by their very nature, to be advisory so that no one programme or module descriptor would have to meet all the components of the advisory or guiding descriptor in the typology. In establishing, for example, the level of a module or a portfolio of experiential learning by comparison with the features of the advisory level descriptor it should be possible to do this by reference to a substantial number of features of the level descriptor, but not necessarily all of them. The point is that as in a credit rating the matter of professional judgement is crucial.

16. The next section develops in greater detail the idea of having different types of descriptors based on their purposes and how they may be used.

Section H: Types of Levels Descriptors

1. The previous section has shown how descriptors have different purposes and uses while nevertheless being based on the same underlying sense of where learning is located in a credit based awards framework. It seems, therefore, that a useful approach to describing levels is one which includes the idea of different purposes.

   This is shown in diagram 1 and is further elaborated in diagram 2.

2. **Descriptor Types**

   Generic descriptors lay down the expectations of progressive development in terms of general demand, maturity of study, capability and relationship of the learner to the chosen study.

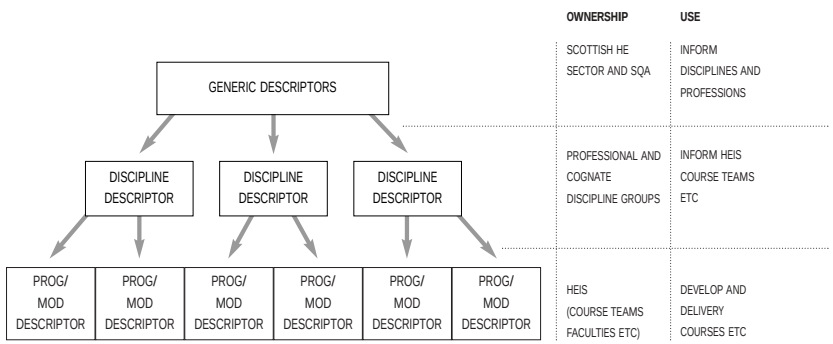
   > One important dimension in this relationship is that of autonomy in the context of higher education learning. Autonomy is expressed along an axis *of dependency -independency*. It will readily be seen that the concept of autonomy can be applied to the relationship which human beings have with respect to learning at all stages of life from nursery school upwards. In the case of the generic descriptors in HE Credit frameworks the dimension describes the relationship which the learner with respect to the concern for knowledge and understanding which is the fundamental and characteristic feature of higher education.

   These generic descriptors function as guidelines about the dimensions of learning for all awards and in the programmes which lead to them. They express the broad expectations and dimensions associated with the awards in the credit based framework. The generic descriptors should also make reference to agreed key or core skills* in order to ensure that they are given due recognition in the discipline/ professional descriptors. However, since the development of key skills will inevitably be dependent on the particular subject or professional context it is not expected that there should be anything other than a very general description of them at each generic level. e.g. communication, numerical, IT, and problem solving skills.

Diagram 1: Typology of Credit Level Descriptors

Level Designators	Credit Level / Descriptor / Types			HE Awards based on regulations incorporating credits & levels
	Generic	Disciplines	Programmes /Modules	
SD1	Generic Descriptor 1	Discipline Descriptor 1	Programme/Module Descriptors 1	Cert HE HNC
SD2	Generic Descriptor 2	Discipline Descriptor 2	Programme/Module Descriptors 2	Dip HE HND
SD3	Generic Descriptor 3	Discipline Descriptor 3	Programme/Module Descriptors 3	General/Ordinary /Broad Degree
SD4	Generic Descriptor 4	Discipline Descriptor 4	Programme/Module Descriptors 4	Honours/Special/ Professional Degree
Generated and Owned by →	The HE Sector and Representative Bodies Incl. SQA	Subject and Professional Bodies	Institutions (depts/Faculties programme Committees)	

Diagram 2: Showing relationship and flow of advice/guidance/information



These descriptors would necessarily be generated by a representative body of all HEIS in Scotland and thus owned by the sector as a whole.

Discipline/professional descriptors – layout the general content, skills, and competencies for different cognate discipline groups and professional fields.

These descriptors should be generated by appropriate practitioner groups with sector wide representation within particular disciplines and professional fields. These groups would give advice on the incorporation of key/core skills in the context of the discipline as well as specific contents and skills in relation to professional and discipline based awards. The purpose of these descriptors is to act as guidelines for individual course and programme teams in HEls. in doing so they would be a means of ensuring, within a given cognate discipline or Professional group, that there is a sufficient means of consistency in the content skills and competences associated with awards.

These groups could share membership with the expert teams suggested by the Dearing Report (Recommendation 25) which are to develop benchmark or threshold standards within the proposed credit based qualification frameworks.

Programme and Module Descriptors – are those which are developed by teachers and others within institutions who are responsible for the design, delivery and assessment of modules and Programmes of study.

They are generated and owned by HEIs - in practice, departments, subject boards and programme committees. These descriptors are those which are subject to validation and approval by institutions and are the basis for the teaching and learning which is experienced by the students.

Programme and module outcomes are related, through content and process to assessment instruments and criteria for assessment. Programmes, which lead to awards, inevitably are the expression of regulations for those awards. Programme and module assessment criteria relate directly to standards. Programme documentation provides explicit description of the standards expected, and the means by which such standards may be achieved, through the criteria for successful achievement of outcomes.

3. The three types of descriptors have a 'nesting' relationship which is represented below (Diagram 3)

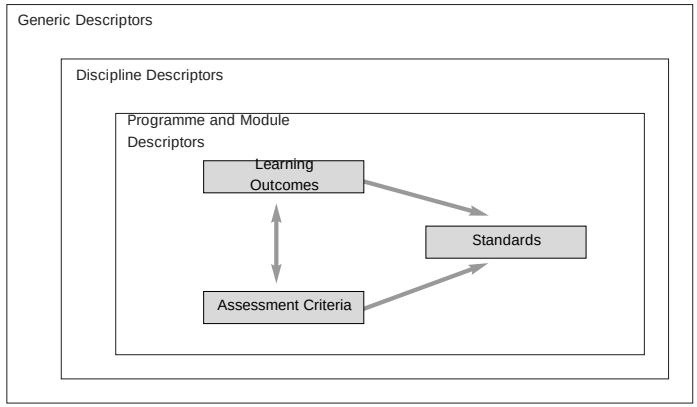


Diagram 3

To make the relationship between programme/module descriptor and generic descriptors clearer, Diagram 3 is expanded to that shown in Diagram 4.

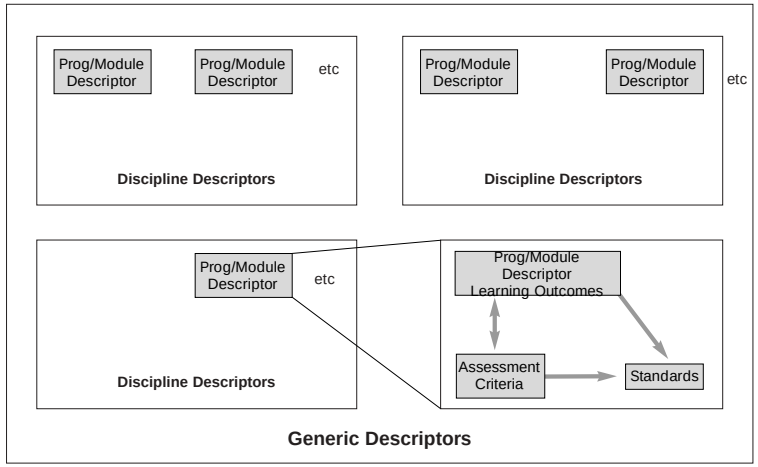


Diagram 4: showing nesting relationship and how standards are located in the overall scheme

4. In summary, the descriptors for modules and programmes would be guided by the discipline descriptors which in turn would be derived using guidelines given by generic descriptors. Generic descriptors offer guidelines about expected study features and degree dimensions at each level, while discipline descriptors address the issues of expectations in terms of the broad requirements for awards in cognate disciplines and professional studies. Finally programme and module descriptors describe the actual contents and processes and learning outcomes of particular programmes in individual institutions.

   The generic descriptors which follow are written in somewhat lengthy terms in order to express their usefulness to the relevant user groups. It is perhaps worth noting that a number of respondents to the discussion paper commented on the usefulness of them despite, or because of, their length. The first three generic descriptors (SD I SD3) are based on similar ones developed by the course team for the BA (Professional Development) at Northern College. The descriptor for SD4 was developed in the course of this project. It should be noted that key/core skills are not yet identified for each of the following generic level descriptors-but see section I.

Generic Descriptors

SDI The emphasis at this level is on learning through transmission of information to the learner, and establishing the "ground rules" for the discipline or professional field in question. There is limited scope for student self-direction in study with directed study being the characteristic form of work. Students are at the early stages of learning about their subject matter in the case of some subjects, and in other subjects they will be concerned to establish confidence in the new intellectual and social context of learning.

Students address the need for study skills which are content-related and appropriate for the subject matter. Knowledge is understood but not necessarily integrated into a broad frame of reference.

This knowledge and understanding is demonstrated by summaries, reports, descriptions, solutions to standard problems and the appropriate use of conventions or formulae. Analytical skills are largely related to the selection and Organisation of information in order to make effective presentations.

In terms of learning from their own personal or professional experience students are beginning to reflect on their own practice and draw out strengths, weaknesses and levels of capability against frameworks which were offered by the course. Students are likely to be at the beginning of "learning to learn" in the context of higher and professional education and have only limited experience of the idea of the reflective practitioner. At this level guidance of tutors directly and indirectly through course materials with respect to content and process is strong. Activities and tasks focus on systematic procedures and show evidence of ability to plan, implement and evaluate experiments, presentations, and similar activities.

Set texts, a relatively narrow range of reading, and the performance of standard tests, skills and experiments characterise this level. Such activities are likely to exemplify the defining characteristics of the subject or professional/ vocational field.

SD2 At this level widening appreciation of the scope of the field of study enables students to map knowledge into a coherent picture of their discipline or professional field. This suggests opportunities to explore the extent and boundaries of the discipline.

The significance of central and peripheral areas emerges. The need to be selective in marshalling facts and ideas in order to justify their position and views is recognised. Some confidence and skill in evaluation of ideas, principles, theories and practices is demonstrated, and students display some mastery over what is given to the course.

Significant critical analysis is expected, exemplified by contrasting authors, ideas and methods. While still remaining under tutor supervision, students are expected to work towards increasing independence from tutors as they learn to question, challenge, and evaluate different authorities.

Students are expected to give evidence of application and inter-relatedness of theories and practice in fieldwork, professional practice as well as in academic work. In evaluation, reflection plays a significant part, and aids to reflection, which have personal relevance as well as to the task undertaken, will be utilised.

Students will be expected to show evidence of systematic inquiry into selective aspects of practical/fieldwork related knowledge and practice, and thus contributing explicitly to construction of their own professional knowledge.

SD3 At this level students are expected to show confident familiarity with the broad areas of the knowledge/subject bases of their programme of study. Viewpoints are expressed articulately and issues addressed logically and systematically. Some understanding of the limits of the broad area of study is expected, together with an ability to relate the different areas to one another.

Students are expected to combine more extensive literature/data searches with appropriate investigative approaches and methodology and to use advanced methods of information technology. With reference to practical work students are expected to show confidence in planning, implementation and evaluation, together with the application of particular knowledge and skills in a range of practical situations.

At this level students are expected to process their studies with increased responsibility with reference to decisions about what they need to learn, how to learn and how to present essays and reports. They are expected to use a variety of sources of learning including the beginnings of networks and to be able to engage others in appropriate roles such as mentor to support the beginnings of self directed learning and to achieve course directed goals.

SD4 At this level students have a confident familiarity with the defining concepts and features of their specialist subject of study, or professions. They have a clear understanding of its boundaries, and of the limits of its application, and of the range of methods of study and types of judgement employed. They are expected to demonstrate a capacity for independent study, expressed through the completion of a dissertation or project, involving the self-selection and use of processes of study and investigation appropriate to the circumstances.

Students at this level can be regarded as being on the threshold of becoming independent professional or academic practitioners. While their study may have some features mastery, - it will normally be distinguished from it by a relative lack of a body of experience. It is not normally expected that the work of the project should meet the criteria for publication in professional or academic journals, but that it should how the potential to satisfy those criteria.

Critical, evaluative, and argumentative kills are well developed, and where appropriate, reflect the relevant academic and/or professional values. Students are expected to accept complete degree of accountability for achieving personal and group outcomes, and a high level or responsibility for safety, security and ethical standards associated with their work.

At this level students can be expected to challenge existing orthodoxies, and to make cogent proposals for new approaches and understandings.

Section I: Conclusions and Recommendations

1. As was foreshadowed in section C, the outcomes of the project are less definite than might have been hoped. Given the rapidly changing context within which this work was carried, this is perhaps not surprising. However, it is possible to draw a number of useful conclusions which will support the development of the SCOTCAT credit based framework of awards.

2. The explanation of the concept and meaning of level presented in this Report will, it is believed, enhance understanding of credit based frameworks in Scottish HEls. In doing so the report lends strong support to taking forward the recommendations 1 - 5 of the Garrick Report. The understanding of the concept of level as identified in paragraphs 4.2 - 4.12 and 4.21 - 4.22 and 4.42 et seq. of the Garrick Report will be enhanced if HEls and other agencies can use this report and the earlier discussion paper as catalysts for discussion and exploration of the field.

3. The project has shown that it is possible to reach a measure of agreement across the sector in Scotland about an acceptable definition of level - section F5. The definition is not conclusive and indeed may well be refined in the light of use. However, it is hoped that it may provide a good basis for development of the SCOTCAT framework and it is suggested that this definition be adopted by SCOTCAT for the present.

4. The report also supports the formation of discipline-based groups of academics and professionals as envisaged in the Dearing Report (paras. 10.66, 10.67, 10.91, 10.92). Such groups are tasked with addressing the matter of [threshold] standards, and will inevitably have to grapple with the description of the levels of credit based award frameworks in order to place threshold standards in a real context. It seems logical and economic for these groups to take on board both tasks. While Dearing sees these as short life groups, it would seem sensible to ensure some degree of extended life. No subject or discipline is static in terms of its content and teaching processes. It is surely a feature of a credit based award framework that, in providing a context for sharing standards, and the many dimensions of learning , that it is a dynamic and living structure. Credit based frameworks are not simply and only bureaucratic structures for credit transfer and recognition. Rather they are information networks which provide contexts for the discussion and evaluation of learning and teaching and location of standards of achievement.

5. The project has given rise to four generic levels descriptors, and has provided exemplar generic level descriptors based on the current SCOTCAT HE framework of four undergraduate levels of learning. These descriptors appear to be broadly acceptable as a basis for future work and are considered to be useful in supporting the work of the proposed subject/professional groups, and beyond them, the work of course and programme teams in HEls. Some further work will be necessary to include agreed expressions of the key/core skills for each generic level descriptor.

6. The proposed typology of level descriptors addresses the need for interpretation of level by different constituencies. The typology provides a clear context for showing the relationship of standards of student work to generic descriptions of level associated with awards at degree and sub-degree level. It also identifies the location of discipline/subject/professional groups for the exercise of their role in establishing threshold standards in the areas of discipline and professional studies.

7. The proposed generic levels will provide contexts in which to enhance the better articulation of HNC and HND awards with other academic and professional awards. They will also clarify the expectations and dimensions of the awards of Certificate and Diploma of Higher Education and they will assist in clarifying and enhancing the proposal to encourage greater participation in broad general degrees based on three undergraduate levels of learning.

8. General acceptance of the generic levels descriptors will support a measure of desirable consistency in the descriptions and expectations of awards, and the dimensions of study and learning associated with the status and concept of a university graduate.

9. However, in the interests of broad agreement about the expectations and dimensions of awards in the SCOTCAT framework, it will be necessary to develop a shared understanding among the institutions on the matter of how levels of learning and awards are described. This is not in any way a suggestion of a ‘national curriculum’. It is a matter of agreement, expressed through the medium of the generic level descriptors, about the dimensions, attributes and expected standards of achievement a graduate of a UK university.

   The significance is that, perhaps for the first time, what are implicit understandings about the nature of higher education awards will be articulated in explicit forms.

10. Implicit in the matter of expressing the dimensions of awards in terms of levels descriptors, and identifying how standards relate to levels of learning, is the point that assessment criteria, assessment instruments, contents, methods and learning

outcomes assume greater significance in the teaching and learning process because they become explicit . This will necessarily have implications for the practice and status of teaching in HE.

11. It is important to point out that these conclusions do not point to a bureaucratic model for the delivery and development of Higher Education teaching. The learning experience of students will still depend on the skill, imagination, energy and flair of good teachers. What the development of a secure credit based qualification framework based on agreed generic descriptions of levels can do is to provide a language and context for the discussion and enhancement of teaching and learning, and for the clear presentation of standards at various stages of learning and practice.

    As has been pointed out elsewhere credit-based award frameworks are not primarily numerically based bureaucratic structures. Credit rating is not founded in the application of formulae, but in academic and professional judgement about

    - where learning is relative to agreed benchmarks; and
    - how much notional effort is required to overtake the final outcomes.

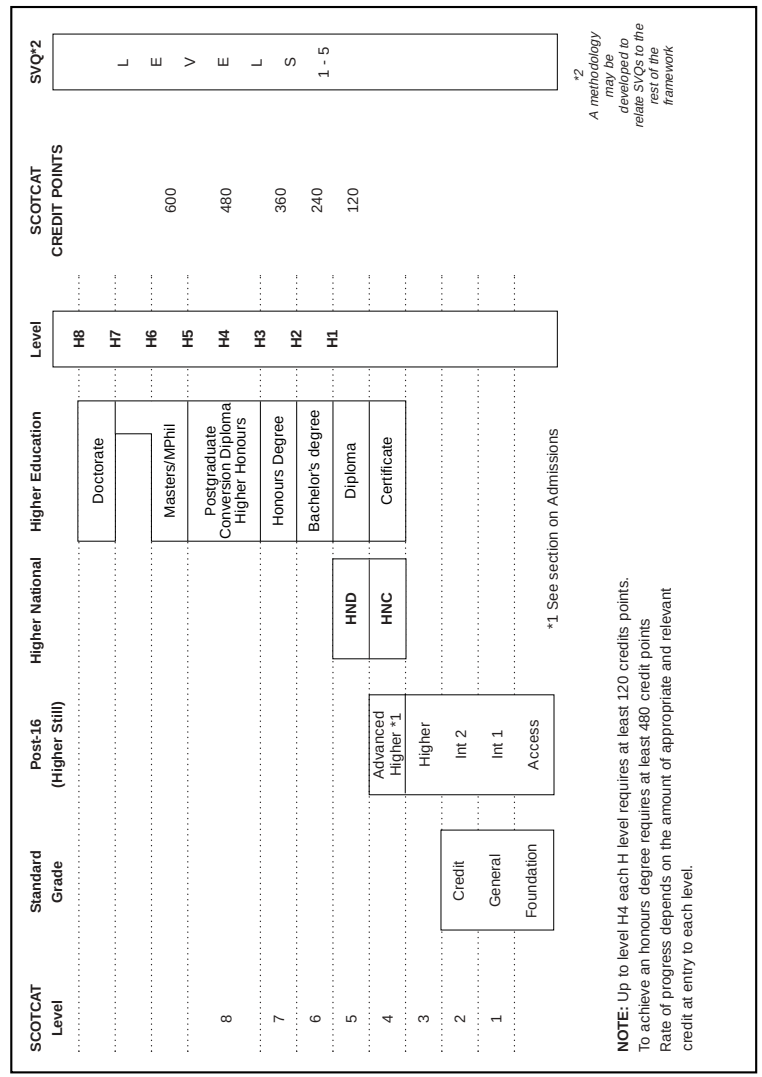
    The numbers involved are proxies for the judgements made about these two dimensions which are reached in a context of shared academic and professional decision making.

12. There is one further important issue for urgent attention. The remit of this project has been in relation to the concept of level in the context of Higher Education. In the light of the proposed development of the comprehensive post-16 credit based framework for awards in Scotland, of which the SCOTCAT HE award framework is a part, it will be important to examine how the proposed descriptors articulate with the proposals emanating from the development work associated with that framework.

13. Consequent on the above conclusions the next stages for development suggest themselves. Firstly, discipline and professional based groups should be set up to develop discipline and/or professional area descriptors and to see how the descriptors might provide a useful context for describing threshold standards. These groups could be the same as or overlap with those envisaged in the Dearing Report which have been tasked with exploring the matter of threshold standards. These groups might be founded on the model of the current SACCA Advisory Fora and SACCA and the SCOTCAT Development group might have a role in coordinating some of this development. Secondly the generic descriptors should be examined by a number of discipline and professional groups with a view to see how useful they are in giving advice and guidance to the groups. It will be important to recognise the need for the generic descriptors to be useful in both academic and vocational contexts and to include expressions of requisite key and core skills associated with each generic level of learning.

APPENDIX 1

(extract from The Garrick Report, Chart 4.2, p37): A Qualifications Framework for Scotland - From 2001/02



APPENDIX 2

NOTIONAL STUDENT EFFORT (Extract from the SCOTCAT Quality Assurance Handbook 1995, Section 3.2, p9)

Notional Student Effort

The concept of notional student effort involves all activities related to assessed learning. Within institutions this will include all time spent in lectures, tutorials, seminars , laboratories, IT centres, libraries, private study, counselling, reflection, study, counselling, reflection, revision, preparation of assignments, programme planning, and all forms of assessment. In many programmes this will also include time spent on relevant professional and work-based learning activities. It is clearly appreciated that in practice there are wide differences in the amount of time individual students spent on tasks and also wide variations for any one student at different points in the year. The concept of notional time or effort refers to the average time envisaged to be required by the average student by the curriculum planner.

Guideline 1. Notional Student effort refers to the average time envisaged by the curriculum planner to be required by the student in order to achieve defined learning outcomes, and includes all appropriate learning activities related to assessed learning, including the assessment itself

APPENDIX 3

References

1. Scott, P: 'The Meanings of Mass Higher Education' SRHE/OUP 1995
2. Shattock, M in 'The Creation of a University System' ed. M Shattock, Blackwell 1996
3. HEQC Assessment in Higher Education and the role of 'graduateness' 1997
4. HEQC. Graduate Standards Programme. Final Report 1997
5. Higher Education in the Learning Society Report of the National Committee of Inquiry into Higher Education - Summary Report, HMSO, July 1997 (The Dearing Report)
6. Higher Education in the Learning Society - Report of the Scottish Committee, HMSO, July 1997 (The Garrick Report)
7. Jackson, N. Towards a better understanding of the meaning and use of Level in setting explicit academic standards (unpublished discussion paper).
8. Robertson D. Choosing to Change, HEQC 1994
9. Guidelines on Levels and Generic Levels Descriptors. SEEC/HECIW 1996
10. Regulatory frameworks for assuring academic standards in Credit based modular higher education. HEQC 1997

Bibliography

Changing Conceptions of Academic Standards. Brennan, J.Frazer, M.Middlehurst, R. Silver, H. Williams, R. Quality Support Centre Report No 1 - OU. 1996.

The Fluttering Standard: How should HE approach academic standards in the 21st Century? P.H.Bridges, University of Derby 1996

Learning Outcomes in Higher Education. Sue Otter, UDACE. 1992

Survey of awards in eleven Universities, HEQC 1997

Quality, Standards and Professional Accreditation. HEQC 1997

Threshold and other Academic Standards, HEQC 1997

Understanding academic standards in modular frameworks, HEQC 1996

Repositioning Higher Education, ed.Coffield, F.and Williams,W. SRHE/OU 1997

The Changing University? ed.Tom Schuller SRHE/OU 1995

The Quest for Quality, Sinclair Goodlad, SRHE/OU 1995

The Limits of Competence, Ronald Barnett, SRHE/OU 1994

A Future for Scottish Higher Education, ed.Ronald Crawford, COSHEP/BP 1997

Higher Level Vocational Qualifications: the role of Higher Education, M.J.Frazer, SRHE 1996

Northern Ireland Credit Accumulation & Transfer System (NICATS)

Consultation Paper on the development of Generic Level Descriptors June 1997

Towards a better Understanding of the meaning and use of level in setting explicit academic standards. A discussion paper resulting from the HEQC Levels Seminar in April 1997. June 1997

Standards and Quality in Education, R.Pring, B.J.Ed.Stud. Vol XXXX No. l 1992

The description of learning levels in Higher Education, J.A.Moon, UCOSDA Briefing Paper 27 1995

New Zealand Qualification Authority Framework for Level Descriptors

The Problem of Educational levels, R. Winter, Part 1, JFHE 17(3) 1993

and Part 2, JFHE (I 8) 1994

APPENDIX 4

List of Institutions represented at the Workshop

Higher Education

University of Aberdeen
University of Abertay
University of Dundee
Glasgow Caledonian University
University of Glasgow
Heriot-Watt University
Moray House Institute of Education
Napier University
Northern College of Education
University of Paisley
Queen Margaret College
Royal Scottish Academy of Music and Drama
Scottish College of Textiles
Scottish Agricultural College
St Andrew's College
University of St Andrews
The Robert Gordon University
University of Stirling
University of Strathclyde
Open University (Scotland)

Further Education Colleges represented or submitting comments

Aberdeen College
Bell College
Falkirk College
Lauder College
James Watt College
Perth College
Stevenson College

Agencies and Public represented or consulted or which submitted comments

RCN Institute in Scotland
Scottish Qualifications Authority
Scottish Wider Access Programme
HEQC

Individuals consulted or who submitted comments

Professor J Richardson, University of Edinburgh
Dr. G. Badcock, University of Edinburgh
Dr. Norman Fancy, University of Edinburgh
Dr. B. Barron, University of Edinburgh
Dr. D. Truman University of Edinburgh
Dr. R.V. Emanuel, University of Glasgow
Professor D. Swinfen, University of Dundee
Dr. C. Carter, University of Dundee
Mr. J. Dalziel, Stevenson College
Professor J.R. MacCallum, University of St Andrews
Ms K.M. Munro, Scotcat Health Care Forum
Ms K Skinner, Scotcat Social Work Forum
Dr. S. Mellows, University of Strathclyde
Mrs S. Charlesworth, Heriot-Watt University
Dr. A.J. Walker, Scottish Agricultural College
Mr. W.T. Yule, Glasgow Caledonian University
Ms F.D. Whyte, The Robert Gordon University
Mr. C. Thomson, Fife College
Mrs J.L .Rees, Bell College
Mrs. M Kay, James Watt College
Mr. G. Ross The Robert Gordon University
Professor S. Brown, University of Stirling
Prof G-Fielding Napier University
Dr. J. Cowan OU (Scotland)
Dr. J George OU (Scotland)
Dr. K Allen, University of Dundee
Mr D-Jones, University of Aberdeen
Mr R. Tuck, SQA
Mr D. Gunning, SQA
Dr M Burdon, SQA
Mr. J Hart, SQA

APPENDIX 5

The Project Steering Group

Convenor

Mr. Norman Sharp, HEQC now QAAHE

Dr. Peter Clark, University of St Andrews

Ms. Ailsa Crum, COSHEP

Mr. Tom Drake, Scottish Qualifications Authority

Prof. Geoff Fielding, Napier University

Prof. Michael Jackson, University of Stirling

Dr. Robin Jackson, HEQC now QAAHE

Mr. Gavin Ross, The Robert Gordon University

Mr. Bill Thomson, University of Strathclyde

Dr. Donald Truman, University of Edinburgh

Project Manager and Secretary to the PSG

Dr. David Bottomley, HEQC now QAAHE, Project Manager and Secretary to the PSG

Project Officer

Dr. Roy Partington

Project Secretary

Mrs. Hilda Connelly, Northern College, Dundee Campus