







THAILAND-EUROPEAN UNION
Policy Dialogues Support Facility

Case Study: Implementing a QF with LOs, credits & QA

THE SCOTTISH CREDIT AND QUALIFICATIONS FRAMEWORK

This Framework diagram has been produced to show the mainstream Scottish qualifications already credit rated by SQA and HEIs. However, there are a diverse number of learning programmes on the Framework, which, due to the limitations of this format, cannot be represented here. For more information, please visit the SCQF website at www.scqf.org.uk to view the interactive version of the Framework or search the Database. N.B. MA Frameworks have a notional level on the SCQF, but all component parts are credit rated



SCQF Levels	SQA Qualifications			Qualifications of Higher Education Institutions	SVQs/MAs	
12	Some SQA qualifications are changing between 2013-2016. See www.sqa.org.uk/readyreckoner				Doctoral Degree	Professional Apprenticeship
Masters Degree, Integrated Masters Degree, Post Graduate Diploma, Post Graduate Certificate					Professional Apprenticeship SVQ 5	
Honours Degree, Graduate Diploma, Graduate Certificate					Professional Apprenticeship	
9					Professional Development Award	Bachelors / Ordinary Degree, Graduate Diploma, Graduate Certificate
8		Higher National Diploma			Diploma Of Higher Education	Technical Apprenticeship SVQ 4
7	Advanced Higher Scottish Baccalaureate	Higher National Certificate			Certificate Of Higher Education	Modern Apprenticeship SVQ 3
6	Higher				Modern Apprenticeship SVQ 3	
5	National 5 Intermediate 2				Modern Apprenticeship SVQ 2	
4	National 4 Intermediate 1			National Certificate	National Progression Award	SVQ 1
3	National 3 Access 3					
2	National 2 Access 2					
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Framework for higher education

Degrees and awards of HEIs in Scotland:

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Described in terms of:

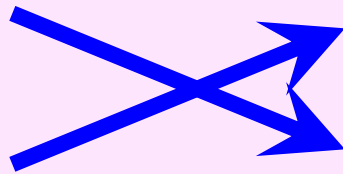
- General description; characteristic outcomes; 'typical' learning outcomes
- SCQF level (described by generic SCQF level descriptors)
- SCQF/ECTS credits, with min number of credits at level of award



Bloom's Revised Taxonomy (cognitive domain)

Original Noun

- Evaluation
- Synthesis
- Analysis
- Application
- Comprehension
- Knowledge



New Verb


- Creating
- Evaluating
- Analyzing
- Applying
- Understanding
- Remembering

Categorising learning

- Bloom's taxonomy: 3 domains, 5-7 levels
- National QFs: 2,3,4,5,6,7, or 8 domains;
5,6,7,8,9,10, or 12 levels;
- Remember: context is paramount!
- Bloom, Anderson, Krathwohl, Cruikshank et al worked at *generic* level – NQFs *specific*
- HE mostly within cognitive domain
- 'Domains' = types: horizontal, no progression
- levels = hierarchy: vertical, progression

Levels/hierarchy of Learning

Indicative verbs for ILOs

Increasing level 	Memorise, identify, recognise, current, define, draw, find, label, match, name, quote, recall, recite, order, tell, write, imitate
	Classify, described, list, report, discuss, illustrate, select, narrate, compute, sequence, outline, separate
	Apply, integrate, analyse, explain, predict, conclude, summarise (précis), review, argue, transfer, make a plan, characterise, compare, contrast, differentiate, organise, debate, make a case, construct, review and rewrite, examine, translate, paraphrase, solve a problem
	Theorise, hypothesise, generalise, reflect, generate, create, compose, invent, originate, prove from first principles, make an original case, solve from first principles

Biggs & Tang 2011: p123

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Levels/hierarchy of learning

More indicative verbs for ILOs

Remembering	Define, describe, draw, find, identify, label, list, match, mean, quote, recall, recite, tell, write
Understanding	Classify, compare, conclude, demonstrate, discuss, exemplify, explain, identify, illustrate, interpret, paraphrase, predict, report
Applying	Apply, change, choose, compute, dramatise, implement, interview, prepare, produce, role-play, select, show, transfer, use
Analysing	Analyse, characterise, classify, compare, contrast, debate, deconstruct, deduce, differentiate, discriminate, distinguish, examine, organise, outline, relate, research, separate, structure
Evaluating	Appraise, argue, assess, choose, conclude, critique, decide, evaluate, judge, justify, monitor, predict, prioritise, prove, rank, rate, select
Creating	Compose, construct, create, design, develop, generate, hypothesise, invent, make, perform, plan, produce

Biggs & Tang 2011: p124

he reference for more information on the concept of constructive alignment

Levels/hierarchy of learning: SCQF

SCQF glossary

Across each Characteristic, terms progress from least to most advanced:
information ... data

facts ... ideas ... theories ... concepts

a few ... some ... limited range ... range ... wide range ... significant range

simple ... basic ... routine ... straightforward with non-routine ... advanced
... specialised

personal ... everyday/commonplace ... familiar/straightforward ...
unfamiliar/new ... routine ... forefront

an appreciation ... an overall appreciation ... a knowledge ... an
understanding ... a critical understanding

LOs at Umbrella QF level (SCQF 10)

CHARACTERISTIC 1: KNOWLEDGE AND UNDERSTANDING Demonstrate and/or work with:

- An overall appreciation of the body of knowledge that constitutes a subject/discipline/sector.
- Knowledge that is embedded in the main theories, concepts and principles of the subject/discipline/sector.
- An awareness of the dynamic nature of knowledge and understanding.
- An understanding of the difference between explanations based on evidence and/or research and other sources, and of the importance of this difference.

CHARACTERISTIC 2: PRACTICE- APPLY KNOWLEDGE, SKILLS AND UNDERSTANDING:

- In practical contexts.
- In using some of the basic and routine professional skills, techniques, practices and/or materials associated with the subject/discipline/sector.
- To practise these in both routine and non-routine contexts.

CHARACTERISTIC 3: GENERIC COGNITIVE SKILLS

- Present and evaluate arguments, information and ideas that are routine to a subject/discipline/sector.
- Use a range of approaches to address defined and/or routine problems & issues within familiar contexts.

LOs at Umbrella QF level (SCQF 10)

CHARACTERISTIC 4: COMMUNICATION, ICT AND NUMERACY SKILLS

Use a wide range of routine skills & some advanced skills associated with a subject/discipline/sector, for example:

- Convey complex ideas in well-structured and coherent form.
- Use a range of forms of communication effectively in both familiar and unfamiliar contexts.
- Select & use standard ICT applications to process & obtain a variety of information & data.
- Use a range of numerical and graphical skills in combination.
- Use numerical and graphical data to measure progress and achieve goals/targets.

CHARACTERISTIC 5: AUTONOMY, ACCOUNTABILITY AND WORKING WITH OTHERS

- Exercise some initiative and independence in carrying out defined activities at a professional level in practice or in a subject/discipline/sector.
- Accept supervision in less familiar areas of work.
- Exercise some managerial or supervisory responsibility for the work of others within a defined and supervised structure.
- Manage limited resources within defined areas of work.
- Take the lead in implementing agreed plans in familiar or defined contexts.
- Take account of own & others' roles & responsibilities when carrying out & evaluating tasks.

NQF-HE LOs: Bachelor with Honours 'characteristic outcomes'

- i A **broad and comparative knowledge** of the general scope of the subject, its different areas and applications, and its **interactions** with related subjects. A **detailed knowledge** of a defined subject or a more **limited coverage of a specialist area** balanced by a wider range of study. In each case, specialised study will be **informed by current developments** in the subject.
- ii A **critical understanding** of the essential theories, principles and concepts of the subject(s) and of the **ways in which these are developed** through the main methods of enquiry in the subject. An **awareness of the provisional nature of knowledge**.
- iii **Familiarity and competence** in the use of **routine** materials, practices and skills and of **a few that are more specialised, advanced & complex**.
- iv **Well developed** skills for the **gathering, evaluation, analysis and presentation** of information, **ideas, concepts** and quantitative and/or qualitative **data**, drawing on a **wide range of current** sources. This will include the use of ICT as appropriate to the subject(s).

NQF-HE LOs: Bachelor with Honours

Typically, holders of the degree will be able to:

- a) use their knowledge, understanding and skills, in both **identifying and analysing** problems and issues and in **formulating, evaluating and applying** evidence-based **solutions** and **arguments**
- b) **communicate** the results of their studies and other work **accurately** and **reliably** in a **range of different contexts** using the main specialist **concepts, constructs and techniques** of the subject(s)
- c) **identify and address** their own learning needs, including being able to **draw on a range** of **current** research, development and professional materials
- d) **apply their subject and transferable skills** to contexts where criteria for decisions and the scope of the task may be **well defined** but where personal **responsibility, initiative & decision-making is also required.**

C1 Knowledge & Understanding

NB: Level Descriptors are for guidance only: it is not expected that every point will necessarily be covered!

LEVEL 7 - Demonstrate and/or work with:

- An **overall appreciation** of the **body of knowledge** that constitutes a subject/discipline/sector.
- Knowledge that is embedded in the **main theories, concepts and principles** of the subject/discipline/sector.
- An **awareness of the dynamic nature** of knowledge and understanding.
- An **understanding of the difference** between explanations based on evidence and/or research & other sources, and of the importance of this difference.

LEVEL 8 - Demonstrate and/or work with:

- A knowledge of the **scope, defining features, & main areas** of the subject/discipline/sector.
- Specialist knowledge in some areas.
- A **discerning understanding** of a **defined range** of core theories, concepts, principles and terminology.
- **Awareness and understanding** of some **major current issues** and **specialisms**.
- **Awareness and understanding** of **research** and equivalent **scholarly/academic** processes.

C1 Knowledge & Understanding

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LEVEL 9 • Demonstrate and/or work with:

- An **understanding** of the **scope and defining features** of a subject/discipline/sector, and an **integrated knowledge** of its main areas and boundaries.
- A **critical understanding** of a **range of the principles, principal theories, concepts and terminology** of the subject/discipline/sector.
- Knowledge of one or more **specialisms** that is informed by **forefront developments**.

LEVEL 10 • Demonstrate and/or work with:

- Knowledge that **covers and integrates most of the principal areas, features, boundaries, terminology and conventions** of a subject/discipline/sector.
- A **critical understanding of the principal theories, concepts and principles**.
- **Detailed knowledge and understanding in one or more specialisms**, some of which is **informed by, or at the forefront of**, a subject/discipline/sector.
- Knowledge & understanding of the ways in which the subject/discipline/sector is **developed**, including a **range of established techniques of enquiry or research methodologies**.

Enhancement-Led Institutional Review (QAAS)

Part of Quality Enhancement Framework, which also includes:
'Quality Enhancement Themes' (dissemination of best international practice); institution-led quality review (subject level); student engagement in quality management; public information on quality

Universities must take into account several 'reference points': Quality Code Subject Benchmark Statements (QAA); Framework for Qualifications of HEIs in Scotland; UK Professional Standards Framework; Quality Enhancement Themes.

'Reflective Analysis' document must describe how the institution uses these benchmarks

External Review (ELIR) examines how the institution does so in practice, using peer reviewers, including a student and an international reviewer

Writing Learning Outcomes

LOs have 3 parts: active verb (what learner can do); topic; context

Example: “Apply [verb] the concept of constructive curriculum alignment [topic] in teaching practice in higher education” [context]

LOs should be:

- fit for purpose & context.
- at programme level, relatively broad & generic
- at module or class level, relatively detailed & specific
- aligned to appropriate level of QF
- aligned with teaching, learning and assessment tasks

[source: ‘Learning Outcomes Topic Guide’, Alan T. Davidson, 2013]

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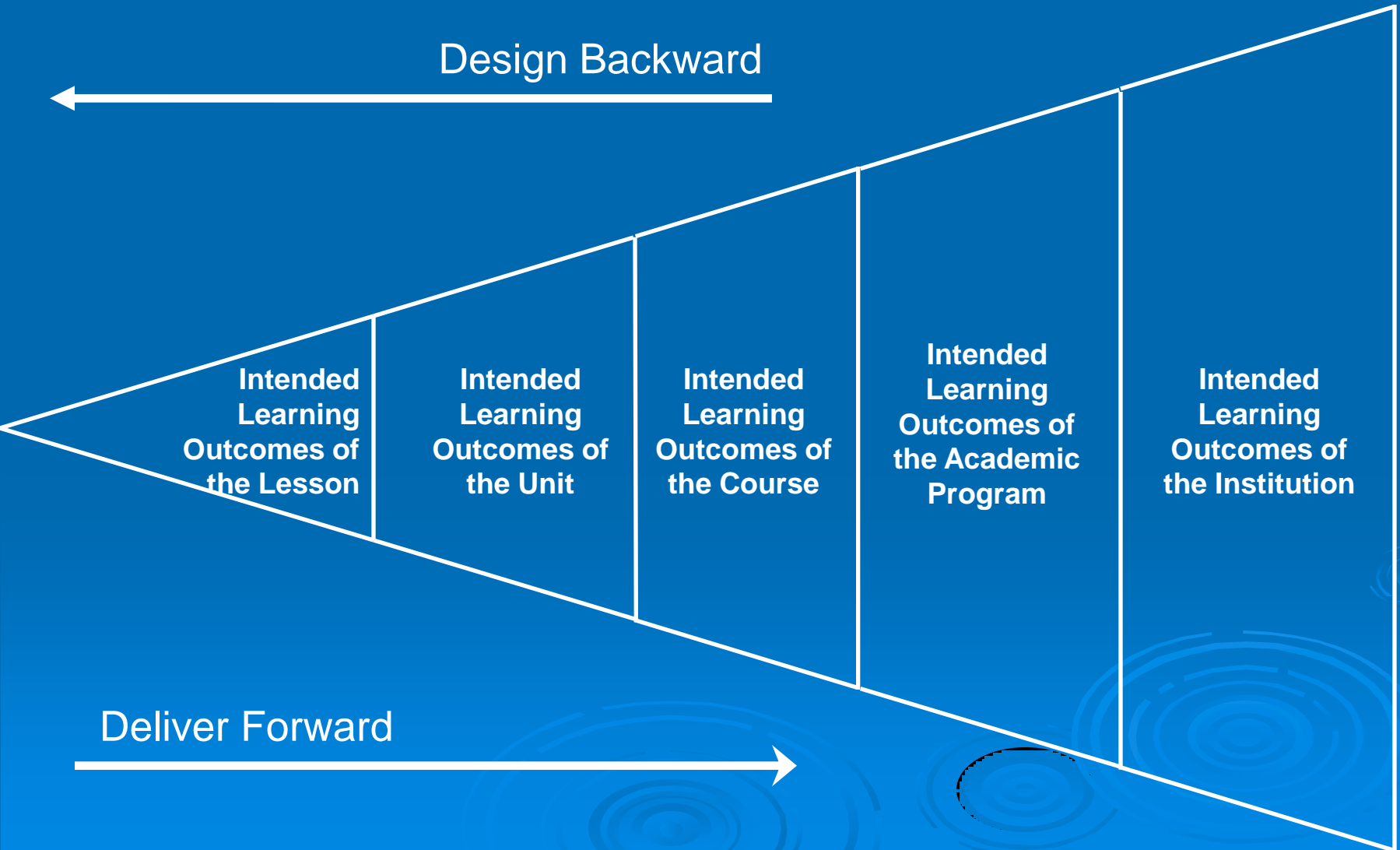
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Alignment Between Course Outcomes and Institutional Outcomes



Scotland: LOs at level of module

Physiotherapy :

SCQF Level 7 SCQF Credits 30 ECTS credits 15

Aims of module: To provide the student with an understanding of the structure and function of the human body.

On completion of this module, students will be able to:

1. Describe the position & orientation of major structures in the body.
2. Describe the structure and function of the different cells and tissues of the human body.
3. Identify & describe the structure of the major systems of the body.
4. Describe the functions of the major systems.
5. Relate the structure to the functions of the major systems.

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Scotland: LOs at level of module

Physiotherapy : Clinical Education CA7

SCQF Level 10 SCQF Credits 15 ECTS credits 7.5

Aims of module: To enable students to apply knowledge and skills in the assessment and treatment of patients to the practice setting On completion of this module, students will be able to:

- 1) Independently **plan, implement** and **evaluate** physio-therapeutic **programmes** which address the **holistic** needs of the patients.
- 2) **Evaluate** the roles of **all the MDT members** involved in the **holistic management** of patients.
- 3) **Provide a co-ordinated approach** to care through **facilitating interaction** with other professionals and carers.
- 4) **Contribute to his/her personal and professional development** by **reflection** on their practice and own values, beliefs and attitudes.
- 5) **Take full responsibility for the organisation of physiotherapy provision and the discharge of patients.**

‘Best fit’ concept/approach

- NO NQF fits exactly with Bloom etc.
- NQFs don’t fit exactly with ‘regional’ QFs
- Different, but complementary purposes
- ‘umbrella’ NQFs don’t fit exactly with QFs for VET or HE or schools
- HE QFs don’t fit exactly with context, vision etc. of individual HEIs

Things don't need to be identical!



The right tool for the job!

Generic






Precision



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Situation of Scottish higher education

- Fully integrated into EHEA – one of 1st to have HE QF, LLL QF, QA processes & agency for HE verified against European standards
- Despite no 'seat at the table', strongly influenced developments
- Genuine partnership, engagement & shared goals of stakeholders – universities, quality agency, students, government, employers
- Quality Enhancement Framework – universities, students, QAA all working in cooperation to improve student experience/outcomes
- Recognised at forefront: NQFs, LOs, QA, student engagement
- Thousands of students switch from 2-yr VET to 3rd yr of degree
- High graduate employment 87%, student satisfaction 86%
- Greater trust, autonomy, funding, stability for universities

‘Generic’ does not/cannot fit ‘local’

- NO NQF fits exactly with Bloom etc.
- NQFs don’t fit exactly with ‘regional’ QFs
- Different, but complementary purposes
- ‘umbrella’ NQFs don’t fit exactly with QFs for VET or HE or schools (nor QF-EHEA/EQF-LLL)
- HE QFs don’t fit exactly with context, vision etc. of *individual* HEIs
- ‘Best fit’ is a virtue, not a vice!

Other lessons learned

- ‘stakeholder’ input essential
- international input positive: often appreciates value of ‘local’ aspects & context
- implementation brings relevant organic convergence
- Engagement brings mutual confidence, leads to better recognition and understanding
- Reforms a ‘package’ – the more implemented, the greater the mutual confidence/recognition
- elements – can be ordered, located, implemented in local context & culture
- QFs can provide stable context for dynamic systems