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Employability

Benchmarking employability: a Scottish perspective
A handbook for Scottish academics

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Preface

The approach to quality and standards in Scotland is enhancement-led and learner-centred. It has been developed through a partnership of the Scottish Higher Education Funding Council (SHEFC), Universities Scotland, the National Union of Students in Scotland (NUS Scotland) and the Quality Assurance Agency for Higher Education (QAA) Scotland. The enhancement themes are a key element of a five part framework which has been designed to provide an integrated approach to quality assurance and enhancement, supporting learners and staff at all levels in enhancing higher education in Scotland drawing on developing, innovative practice within the UK and internationally.

The five elements of the framework are:

- a comprehensive programme of subject level reviews undertaken by the higher education institutions themselves; guidance on internal reviews is published by SHEFC (www.shefc.ac.uk)
- enhancement-led institutional review (ELIR) run by QAA Scotland (www.qaa.ac.uk/reviews/ELIR)
- improved forms of public information about quality; guidance on the information to be published by higher education institutions is provided by SHEFC (www.shefc.ac.uk)
- a greater voice for students in institutional quality systems, supported by a national development service - student participation in quality scotland (sparqs) (www.sparqs.org.uk)
- a national programme of enhancement themes aimed at developing and sharing good practice to enhance the student learning experience, which are facilitated by QAA Scotland (www.enhancementthemes.ac.uk).

The topics for the themes are identified through consultation with the sector and implemented by steering committees whose members are drawn from the sector and the student body. The steering committees have the task of developing a programme of development activities, which draw upon national and international good practice. Publications emerging from each theme are intended to provide important reference points for higher education institutions in the ongoing strategic enhancement of their teaching and learning provision. Full details of each theme, its Steering Committee, the range of research and development activities, and the outcomes are published on the enhancement themes website (www.enhancementthemes.ac.uk).

To further support the implementation and embedding of a quality enhancement culture within the sector, including taking forward the outcomes of the various enhancement themes, a new overarching committee has been established, chaired by Professor Kenneth Miller (Vice-Principal, University of Strathclyde). It will have the important dual role of keeping the five-year rolling plan of enhancement themes under review and ensuring that the themes are taken forward in ways that can best support institutional enhancement strategies. We very much hope that the new committee, working with the individual topic-based themes' steering committees, will provide a powerful vehicle for the progression of the enhancement-led approach to quality and standards in Scottish higher education.



Norman Sharp
Director, QAA Scotland

Acknowledgements

This handbook was drafted by a subgroup of the Quality Enhancement Themes Steering Committee for Employability, with invaluable assistance from the Higher Education Academy and the subject centres in the Higher Education Academy Learning and Teaching Support Network, plus Bianca Kubler and Peter Forbes of Employability Works.

Excerpts from various documents by the Quality Assurance Agency for Higher Education and the Higher Education Academy are gratefully acknowledged, as is permission to include the text of the presentation from Professor John Cowan.

1 Introduction

1.1 Background

'Employability' is one of the second pair of Enhancement Themes identified by Scottish higher education (HE) as areas for development that will enhance the student learning experience. These Enhancement Themes represent one element of the new approach to quality in Scottish HE, and are designed to encourage academic and support staff and students to share current good practice and collectively generate ideas and models for innovation in learning and teaching. The initiative is being implemented jointly by the Scottish Funding Council (SFC), Universities Scotland, National Union of Students Scotland and the Quality Assurance Agency for Higher Education (QAA).

'Employability' in this context is not just about student employment - it is far wider than that. It should be understood as: 'a set of achievements - skills, understandings and personal attributes - that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy' (Yorke, 2004: 7). University education is concerned with acquiring a body of knowledge to what we now describe as graduate level, but there is also no question that HE should prepare students for the world they will live in after they leave university. Graduates should have mastered an appropriate body of knowledge, developed a set of flexible skills, and become more aware of what they have to do to be a responsible citizen and an effective employee (or employer).

The work of the Employability Enhancement Theme in Scotland has built on the considerable body of research, information and resources drawn up by the Higher Education Academy (HEA) (currently) and the Enhancing Student Employability Skills Coordination Team (ESECT) (between 2002 and February 2005). ESECT was funded by the Higher Education Funding Council for

England to help the English HE sector to engage with the employability agenda. This handbook is primarily concerned with employability and subject-specific skills in a Scottish context.

1.2 Intended readership

It is envisaged that this handbook will be of benefit to all those in higher education institutions (HEIs) in Scotland who are concerned with curriculum design and implementation, including those who design student activities and assessments at module level. It is aimed at frontline academics rather than policy-makers.

1.3 Contents of the handbook

This handbook provides:

- a signpost to the most relevant tools and material available from the HEA web pages and other resources
- a signpost to what is available for the intended audience from the Employability Enhancement Theme's own website (www.enhancementthemes.ac.uk)
- a sample of how subject-specific knowledge and practice, which academics have agreed form core competences in their subject area - QAA subject benchmark statements - relate to graduates' lifelong employability prospects
- examples of how employability-related subject-specific skills align themselves with the Scottish Credit and Qualifications Framework (SCQF) at various levels (from SCQF 7 to 10, covering four years of undergraduate work at a Scottish HEI).

It therefore provides an essential guide for those concerned with embedding employability in Scottish undergraduate curricula.

The handbook concludes with the text of a presentation by a well-respected Scottish academic on 10 steps to enhance employability in the curriculum that do not require a major overhaul of the programme.

1.4 Employability and academic standards: why employability matters to all academics

We are keen to emphasise throughout that the pursuit of academic excellence and the enhancement of employability skills need not and indeed cannot be in conflict in developing an undergraduate degree programme. Embedding employability in the curriculum is not a threat to academic standards. Research by Knight and Yorke (2003) suggests that the outcomes required by high-level academic researchers and by the majority of employers are effectively the same.

This handbook highlights the ways in which employability is already a fundamental part of a larger set of competences which form the QAA subject benchmark statements for individual disciplines. It is hoped that this guide - and the accompanying website - will show how subject-specific knowledge facilitates the development of employability skills. It is clear that in all subjects, as defined by expert peer groups, there is a common thread which can be described variously as 'core skills' or 'personal transferable skills'. Such skills relate to lifelong employability, and not simply employment. This handbook illustrates ways in which generic employability skills can be shown to relate to specific subject knowledge. For instance, students in many subject areas - linguistics, mathematics, tourism and nursing, to name but a few - are required to solve problems and analyse data of varying complexity. Such generic, transferable skills are enhanced by application to material relevant to a specific subject area.

The work of ESECT has shown that 'good learning' and learning that fosters strong claims to employability are closely aligned. However, students and academics are not always fully aware of, or able to identify, the advances in employability they are developing during their programme. Hence this handbook aims to raise awareness in this respect.

We hope that academics devising new degree programmes and those reviewing or revising existing ones will use the information in

this handbook, not as a mechanical tick list, but as a source of ideas from other disciplines. Similarly, individual lecturers can use the insight from their own and other disciplines to inform their delivery.

2 Mapping the QAA subject benchmark statements against employability criteria

The 24 HEA Subject Centres have participated in compiling Student Employability Profiles (SEPs) for their subjects, with the support of the HEA, the Council for Industry and Higher Education (CIHE) and ESECT. Each profile identifies skills that can be developed through study of that discipline, based on subject benchmark statements developed by UK HE academic communities and copyrighted by QAA (see example in Section 2.2). These skills are then mapped against input from CIHE's employer membership regarding the competences, skills and attributes that are valued when recruiting (see example in Section 2.3 and glossary in Section 2.4). This enables the learning experiences to be translated into language helpful to employers.

Currently, the SEPs for 12 Subject Centres can be found on the CIHE website (<http://www.cihe-uk.com/SEP.php>). The project is now being extended to include the remaining 12 Subject Centres, and the full set should be published in mid-2006. After that it is intended to keep all the SEPs under review, revising and updating them where necessary.

An employers' version is also available (<http://www.cihe-uk.com/SEPemployer.php>) summarising the first 12 SEPs produced. It has been warmly received by a range of large companies:

'I think that the student employability profiles are an important step forwards in promoting better shared understanding of the content of different degree disciplines. As a graduate recruiter, I have already used the profiles to improve my knowledge of the skills sets and

experiences that a graduate might expect to gain from various degrees, helping me to cast the net wider when looking for new graduate talent for our company.'

Gary Argent, UK Graduate Recruitment Manager, LogicaCMG

'I have found the student profile project extremely useful to be able to really understand for the first time exactly what skills, qualities, attributes and employability competences we could expect to see from the graduates we recruit according to their subject of study.

To maximise the use of the profiles I have also rewritten my interviewing frameworks and questions to align to the profiles.'

Linsey Perry, Head of Graduate Recruitment, Network Rail

CIHE is currently investigating the publication of a student version.

Many of the profiles also include a set of reflective questions based on the CIHE employability competences (see example in Section 2.1). These questions are designed to help students to reflect on and evidence their achievements. Engaging in such an exercise enables students to:

- develop the ability to articulate their employability skills
- become familiar with competence-based interviewing and assessment
- enhance their CVs and progress files
- work on personal development planning (PDP).

2.1 Reflective employability questions for students: an example

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Analysis

Relates and compares data from different sources, identifying issues, securing relevant information and identifying relationships.

- When you have to analyse information and make a recommendation, what kind of thought process do you go through? What is your reasoning behind your decision?
- How do you ensure that you have captured the key information from written or oral information presented to you?
- What are your considerations when presenting a solution to a work issue?
- When presented with a problem, how do you go about finding a resolution?
- How do you deal with data from a variety of sources, to identify the key information?
- How would you identify appropriate data sources to inform your decisions?
- When presented with several points of view what do you do to ensure that you reach the most appropriate conclusion?
- How do you distinguish between different types of information provided to inform your conclusions?

2.2 List of employability skills in a SEP: an example

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The employability skills that can be gained by studying English, as identified by the QAA Subject benchmark statement for English, are:

- Advanced literacy and communication skills and the ability to apply these skills in appropriate contexts, including the ability to present sustained and persuasive written and oral arguments cogently and coherently.
- The capacity to analyse and critically examine diverse forms of discourse.
- The ability to adapt and transfer the critical methods of the discipline to a variety of working environments.
- The ability to acquire substantial quantities of complex information of diverse kinds in a structured and systematic way, involving the use of the distinctive interpretative skills of the subject.
- Competence in planning and executing essays, reports and project work.
- The capacity for independent thought and judgement, and skills in critical reasoning.
- The ability to comprehend and develop intricate concepts in an open-ended way which involves an understanding of aims and consequences.
- The ability to work with and in relation to others through the presentation of ideas and information and the collective negotiation of solutions.
- The ability to understand, interrogate and apply a variety of theoretical positions and weigh the importance of alternative perspectives.
- The ability to handle information and argument in a critical and self-reflective manner.

2.3 Mapping subject benchmark statements to CIHE competences from a SEP: an example

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To save space, the format has been altered slightly from the original in this example.

This example, from Business and Management, can be used as a template for other subjects. The template captures key behavioural indicators or criteria identified within the subject benchmark statements (copyright of QAA). It cross-references these with the employability competencies identified by members of the CIHE Employers Forum: ie the key attributes/qualities that they have observed in those individuals who can transform organisations and add value early in their careers (see further the report Graduates' Work, CRQ, University of Central England in Birmingham, 1997). The template illustrates the link between the subject's own selected employability skills and the list of employers' employability criteria.

BUSINESS AND MANAGEMENT: QAA subject benchmark statement referred to in the template that follows:

BM1 Able to demonstrate relevant knowledge and understanding of organisations, the external environment in which they operate and how they are managed. Demonstrate understanding and responding to change and the consideration of the future of organisations and the external environment in which they operate.

(QAA subject benchmark statement, 3.2)

BM2 Demonstrate cognitive skills of critical thinking, analysis and synthesis. This includes the capability to identify assumptions, to evaluate statements in terms of evidence, to detect false logic or reasoning, to identify implicit values, to define terms adequately and to generalise appropriately.

(QAA subject benchmark statement, 4.1(a))

BM3 Effective problem solving and decision making using appropriate quantitative and qualitative skills including identifying, formulating and solving business problems. The ability to create, evaluate and assess a range of options together with the capacity to apply ideas and knowledge to a range of situations.

(QAA subject benchmark statement, 4.1(b))

BM4 Effective communication, oral and in writing, using a range of media which are widely used in business: for example, the preparation and presentation of business reports.

(QAA subject benchmark statement, 4.1(c))

BM5 Numeracy and quantitative skills including data analysis, interpretation and extrapolation. The use of models of business problems and phenomena.

(QAA subject benchmark statement, 4.1(d))

BM6 Effective use of communication and information technology (CIT) for business applications.

(QAA subject benchmark statement, 4.1(e))

BM7 Effective self-management in terms of time, planning and behaviour, motivation, self-starting, individual initiative and enterprise.

(QAA subject benchmark statement, 4.1(f))

BM8 Learning to learn and developing an appetite for learning; reflective, adaptive and collaborative learning.

(QAA subject benchmark statement, 4.1(g))

BM9 Self-awareness, openness and sensitivity to diversity in terms of people, cultures, business and management issues.

(QAA subject benchmark statement, 4.1(h))

BM10 Effective performance within a team environment, including leadership, team building, influencing and project management skills.

(QAA subject benchmark statement, 4.1(i))

BM11 Interpersonal skills of effective listening, negotiating, persuasion and presentation.

(QAA subject benchmark statement, 4.1(j))

BM12 Abilities to conduct research into business and management issues, either individually or as part of a team, for projects/dissertations/presentations. This requires familiarity with a range of business data, research sources and appropriate methodologies and for such to inform the overall learning process.

(QAA subject benchmark statement, 4.1(k))

BM13 Address issues at the European and international levels. Where specific emphasis is placed upon this for example, in the programme title or in requiring study and/or work abroad, then appropriate foreign language capability and business and cultural understanding should normally be developed and demonstrated by graduates.

(QAA subject benchmark statement, 4.2)

Template based on Business and Management: generic employability competences

The skills headings are those used by the CIHE for its employability competences. The letter codes used in the template are explained in the glossary that follows (Section 2.4)

Subject benchmark indicators	Cognitive skills	Generic competences	Personal capabilities	Technical ability	Business and/or organisation awareness	Practical and professional elements
BM1		OS	AO		OU,CA,FA	
BM2	A,J,AD	WC, L, Q				
BM3	A,J,AD	OS	D,C		OU,CA,FA	
BM4		WC,L,Q				
BM5	A,J	PO,OS	D,C	TA	OU,CA,FA	
BM6				TA,TK		
BM7		PO	I,AO,A/F			
BM8		LLD	PDP			
BM9		IS,OS,TW				I
BM10		TW,L,Q	L,TS,C,I,AO			
BM11		I,L,Q,TW,OS	AO			I
BM12	A,J,AD	PO,WC,L,Q TW,S	L,TS,C,I,AO	TA	OU,CA,FA	PE,I
BM13		IS,OS,TW	C,I,A/F		OU,CA,FA	PE,I

2.4 Glossary of CIHE employability competences

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COGNITIVE SKILLS

The ability to identify and solve problems, work with information and handle a mass of diverse data, assess risk and draw conclusions.

- A: Analysis** Relates and compares data from different sources, identifying issues, securing relevant information and identifying relationships.
- J: Judgement** Determines the most appropriate course of action and draws conclusions that are based on logical assumptions that reflect factual information.
- AD: Attention to detail** Accomplishes tasks through a concern for all areas involved, no matter how small.

GENERIC COMPETENCES

High-level and transferable skills such as the ability to work with others in a team, communicate, influence and have interpersonal sensitivity.

- PO: Planning and organising** Establishes a course of action for self and/or others to accomplish a specific goal. Plans proper assignments and appropriate allocation of resources.
- I: Influencing** Influences others by expressing self effectively in a group and in one-to-one situations.
- WC: Written communication** Expresses ideas effectively and conveys information appropriately and accurately.
- Q: Questioning** Uses an appropriate approach to questioning in order to gain information from which to draw conclusions and/or assist in the making of decisions.

- L: Listening** Shows by a range of verbal and non-verbal signals that the information being received is understood.
- TW: Teamwork/working with others** Builds and develops appropriate relationships with academic staff, peers, colleagues, customers and suppliers at all levels within an organisation.
- IS: Interpersonal sensitivity** Recognises and respects different perspectives and appreciates the benefits of being open to the ideas and views of others.
- OS: Organisational sensitivity** Is sensitive to the effect of his or her actions on other parts of the organisation and adopts a mature, direct and up-front style in dealing with conflict.
- LLD: Lifelong learning and development** Develops the skills and competences of self, peers and colleagues through learning and development activities related to current and future roles.

PERSONAL CAPABILITIES

The ability and desire to learn for oneself and improve self-awareness, emotional intelligence and performance. To be a self-starter (creativity, decisiveness, initiative) and to finish the job (flexibility, adaptability, tolerance to stress).

- PDP: Personal development planning** Maintains an up-to-date personal development plan and takes action to ensure that personal development takes place.
- C: Creativity** Generates and/or recognises how best practice and imaginative ideas can be applied to different situations.
- D: Decisiveness** Makes decisions and takes action.
- I: Initiative** Identifies opportunities and is proactive in putting forward ideas and potential solutions.

A/F: Adaptability/flexibility Maintains effectiveness in a changing environment.

AO: Achievement orientation Maintains and inspires a results-driven approach, focuses on results and critical performance indicators.

TS: Tolerance for stress Maintains performance under pressure and/or opposition.

L: Leadership Takes responsibility for the directions and actions of a team.

TECHNICAL ABILITY

For example, having the knowledge and experience of working with relevant modern technology.

TK: Technical knowledge Develops and maintains a knowledge of key trends in technology.

TA: Technical application Has experience of using modern technology.

BUSINESS AND/OR ORGANISATIONAL AWARENESS

An appreciation of how businesses operate through having had (preferably relevant) work experience. Appreciation of organisational culture, policies and processes.

OU: Organisational understanding Understands the organisation's work environment, internal politics, business objectives and strategy.

CA: Commercial awareness Understands the economics of the business. Understands the business benefits and commercial realities from both the organisation's and the customer's perspectives.

FA: Financial awareness Understands basic financial terms used in organisations and is able to construct and maintain simple financial records.

OS: Organisational sensitivity Is sensitive to the effect of his or her actions on other parts of the organisation and adopts a mature, direct and up-front style in dealing with conflict.

PRACTICAL AND PROFESSIONAL ELEMENTS

Critical evaluation of the outcomes of professional practice, reflection on and review of own practice, participating in and reviewing quality control processes and risk management.

PE: Professional expertise Keeps up to date with developments in own areas of professional specialisation. Applies a breadth and/or depth of professional knowledge.

PO: Process operation Begins, controls and concludes a complete process or procedure.

I: Image Presents a strong, professional, positive image to others at all times, consistent with all people (colleagues, management and peers, customers).

The full student employability profiles, available from the HEA website (<http://www.heacademy.ac.uk/Employability.htm>), give fuller descriptions and explanations of each of these terms, together with indicators for recognising each of them in students.

2.5 Indicators for recognising the CIHE competences in students: an example

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Analysis

Relates and compares data from different sources, identifying issues, securing relevant information and identifying relationships.

Indicators:

- Understands the meaning of written and oral information.
- Sees several points of view and weighs up the alternatives accurately.
- Identifies potential problems, issues and risks.
- Seeks out and uses facts where available.
- Identifies the root cause of a problem.
- Breaks down complex data and identifies the key information.
- Relates and compares data from several sources.
- Distinguishes between facts and assumptions.

2.6 Comparing subject benchmark statements across disciplines

It is an interesting exercise to compare subject benchmark statements across different disciplines. We encourage readers to examine the one relating to their own subject area, then compare it with a closely related discipline. Having done that, it might be a good idea to look at a subject benchmark statement from a discipline very different from the first two.

Consider, for instance, the following extracts from QAA subject benchmark statements. Two of them are taken from the Subject benchmark statement for Dentistry, and two from the Subject benchmark statement for Philosophy:

'Exercise initiative and personal responsibility.' (Dentistry)

'Acquire research methods and skills in collection, evaluation and presentation of evidence.' (Dentistry)

'Listen attentively to complex presentations.' (Philosophy)

'Read carefully a variety of technical and non-technical material.' (Philosophy)

Clearly, we would wish philosophers to exercise initiative and personal responsibility as much as we would wish dentists to listen attentively to complex presentations. And while the following is taken from the Subject benchmark statement for Chemistry:

'Competence in the planning, design and execution of practical investigations, from the problem recognition stage through to the evaluation and appraisal of results.'

it might well apply to Philosophy, Architecture or Dentistry. Indeed, the Chemistry benchmarking is particularly interesting in squaring the circle. Take the following extract:

'Skills in the evaluation, interpretation and synthesis of chemical information and data.'

This is an example of the insertion of one keyword in an otherwise fairly generic benchmark indicator, showing how it is possible to focus on subject-specific issues while starting from a wider generic position. The desired attributes are grounded in the expectations of practitioners in the particular discipline, yet are still related to wider issues.

3 Employability and the SCQF

This section provides a model for mapping the employability-related benchmark indicators identified in the SEPs (as exemplified in Section 2) on to the SCQF. The model provides guidance on how to integrate academic frameworks in a meaningful way in order to:

- ensure progression in both subject-specific and generic skills and competences
- explicitly embed employability in the curriculum
- promote an approach to curriculum design that enables learners to acquire and recognise the skills and attributes that are valuable in the world of work
- take account of the aims of SCQF as the Scottish model for understanding the range and scope of different types of qualifications and how they can contribute to improving the skills of the workforce.

3.1 Developing the map

The focus of the model is SCQF levels 7 to 10, equivalent to four years' undergraduate study up to honours level. The SCQF provides a set of descriptors that identify the characteristic generic outcomes of each level under five broad headings:

- knowledge and understanding
- practice (applied knowledge and understanding)
- generic cognitive skills
- communication, numeracy and information and communications technology (ICT) skills
- autonomy, accountability and working with others.

These descriptors are intended to enable a general, shared understanding of each level, and to allow broad comparisons to be made between qualifications and learning at different levels. They are not intended to give precise or comprehensive statements, and

there is no expectation that every programme or qualification should have all of the characteristics. The descriptors should be used as a 'working guide', which is how they have been applied in this model.

SCQF levels describe ongoing development and a deepening of knowledge (or, in some programmes, specialisation) in the subject area, whereas QAA subject benchmark statements are intended to specify the skills that can be expected of a graduate in each subject. Hence the subject benchmark statements' benchmark indicators may seem less useful for describing employability skills at SCQF levels 7 and 8. However, in the following mapping model (Section 3.3) the indicators have been related to the skills that are introduced in the lower levels and subsequently built on, becoming fully developed in SCQF level 10. In this way, they can be usefully employed when planning the continuing pathways of development through the different levels of a programme. This results in some repetition of benchmark indicators within each subject area, as a particular indicator may apply to a developing outcome through more than one level.

As with any approach to curriculum design, the challenge is to select and combine aims and outcomes that will deliver an appropriate and coherent programme of study. In this model, benchmark indicators that have already been identified as having the potential to deliver employability skills have been selected from a range of disciplines and mapped against the characteristic generic outcomes of the SCQF descriptors at each level. No subject is mapped across all descriptors. Instead, for each of the five broad headings a different discipline has been selected and mapped against the descriptors through levels 7 to 10, to demonstrate progression in these particular skills and competences. The aim is to provide exemplification of a process that can be used to inform curriculum design and development in a number of ways:

- making explicit how subject-specific skills and competences develop through SCQF and link to employability

- providing a starting point for developing new programmes of study that takes account of the need to articulate these programmes with SCQF and embed employability in the design and delivery of the curriculum
- providing a tool that can be used to audit existing programmes of study for their compatibility with the above agendas
- supporting staff development in how to use and integrate academic frameworks
- promoting good practice in the quality and assurance of academic standards
- making clear that embedding the skills and attributes that help to develop employability in learners is compatible with 'core' academic values
- enhancing the experience of learners by helping them to be more aware of how what they have learned is valuable in the development of employability.

3.2 Using the map

The first challenge for curriculum designers is to consider what the intended learning outcomes are - not just in terms of the subject itself and the knowledge and understanding that go with it, but also the skills and attributes that learners will develop during the process. The aim is to make sure that programmes offer learners the opportunity to develop these skills and recognise that they have developed them.

A further challenge is to plan for this at both programme and modular level, to ensure that learners have the opportunity to develop a balanced range of skills. The map should be used to inform the planning process, not to prescribe curriculum design. This requires a dynamic process, bringing together subject expertise, course aims and the map, to find the best fit for what a module or programme is trying to achieve. The map could be used as part of this process to:

- provide a 'language' for articulating learning outcomes at modular level
- provide a checklist for the development of specific skills or knowledge through the levels of a programme
- audit a programme for its balance of employability skills both horizontally and vertically
- provide explicit reference points for learners that could inform PDP.

3.3 Mapping examples

The SCQF level descriptors describe learning outcomes under five broad headings against which every subject can be mapped. To provide a wider range of examples, a different subject area is mapped against each of these five broad headings, as follows:

Subject area	Mapped against:
Languages and Related Studies	Knowledge and understanding
Nursing	Practice (applied knowledge and understanding)
Biosciences	Generic cognitive skills
Business and Management	Communication, numeracy and ICT skills
Engineering	Autonomy, accountability and working with others

The numbering of benchmark indicators in these exemplars, where included, is based on numbering within the original QAA subject benchmark statements, and is given for ease of reference.

Knowledge and understanding	Employability within Languages and Related Studies
Taken from generic SCQF level descriptors	Taken from the QAA subject benchmark statement
SCQF level 7	
Demonstrate and/or work with: <ul style="list-style-type: none"> • a broad knowledge of the subject/discipline in general • knowledge that is embedded in the main theories, concepts and principles 	<p>1.5 Achieve an appropriate degree of fluency in a foreign language through devoting a great deal of time to seeking active exposure to the language and in practising it on a daily basis.</p> <p>1.8 Have awareness of all aspects of the cultures and societies in which the language is used.</p> <p>6.2.2 Demonstrate a detailed knowledge and effective understanding of the linguistic principles required to analyse the target language.</p>
<ul style="list-style-type: none"> • an awareness of the evolving/changing nature of knowledge and understanding • an understanding of the difference between explanations based in evidence and/or research and other forms of explanation, and of the importance of this difference. 	

SCQF level 8	
Demonstrate and/or work with: <ul style="list-style-type: none"> • a broad knowledge of the scope, defining features and main areas of a subject/discipline • detailed knowledge in some areas 	<p>1.4 Acquire practical competence in the use of a specific language by focusing on any or all of the main skills of reception (listening and reading), production (speaking and writing) and mediation between two or more languages (translation and interpreting).</p> <p>3.2 Develop knowledge of how language systems relate to one another and of the techniques which permit mediation between languages.</p>
<ul style="list-style-type: none"> • understanding of a limited range of core theories, principles and concepts 	<p>4.2 Make effective use of language reference materials, such as grammars, standard and specialised dictionaries and corpora, to refine knowledge and understanding of register, nuances of meaning and language use.</p>
<ul style="list-style-type: none"> • limited knowledge and understanding of some major current issues and specialisms 	<p>2.7 Focus on the cultures and the literatures, both historical and contemporary, of the societies of the language studied.</p>
<ul style="list-style-type: none"> • an outline knowledge and understanding of research and equivalent scholarly/academic processes. 	<p>3.3 Explore a variety of approaches to cultures, communities and societies by drawing on methodologies shared with other disciplines such as literary, cultural, media and film studies; critical</p>

	<p>theory; gender studies; history; geography; philosophy; politics; sociology; anthropology; religious studies.</p> <p>6.2.3 Demonstrate an ability critically to evaluate through appropriate methodologies one or more aspects of the literatures, cultures, linguistic contexts, history, politics, geography, social and economic structures of the societies of the country or countries of the target language(s).</p>
SCQF level 9	
<p>Demonstrate and/or work with:</p> <ul style="list-style-type: none"> • a broad and integrated knowledge and understanding of the scope, main areas and boundaries of a subject/discipline • a critical understanding of a selection of the principal theories, principles, concepts and terminology • knowledge that is detailed in some areas and/or knowledge of one or more specialisms that are informed by forefront developments. 	<p>1.7 Display knowledge and understanding both of the structure of the language itself and of the social, historical and cultural contexts in which it has been and/or is currently used.</p> <p>3.1 Acquire extensive knowledge and understanding of the cultures and societies where the language is spoken.</p> <p>4.1 Develop fluent and accurate target language skills in a wide range of personal, academic and other domains.</p> <p>4.4 Develop a critical understanding of a culture and practices other than one's own and an appreciation of the uniqueness of the other culture(s).</p>

SCQF level 10	
<p>Demonstrate and/or work with:</p> <ul style="list-style-type: none"> • knowledge that covers and integrates most of the principal areas, features, boundaries, terminology and conventions of a subject/discipline • a critical understanding of the principal theories, concepts and principles 	<p>1.5 Develop knowledge to a high level of accuracy and fluency in the target language.</p> <p>6.2.3 Develop knowledge and understanding of the literature and other cultural products of the target language society.</p> <p>6.2.2 Demonstrate a detailed knowledge and effective understanding of the structures, registers and, as appropriate, varieties of the target language(s).</p>
<ul style="list-style-type: none"> • detailed knowledge and understanding in one or more specialisms some of which is informed by or at the forefront of a subject/discipline • knowledge and understanding of the ways in which the subject/discipline is developed, including a range of established techniques of enquiry or research methodologies. 	<p>1.8 Develop knowledge and understanding that may pertain to subgroups of the society such as the business, legal, creative, technological or scientific communities by gaining first-hand access to those communities.</p> <p>1.8 Employ methodological approaches and techniques such as those of critical, literary, cultural or textual analysis.</p> <p>6.2.3 Demonstrate a broad knowledge and, using appropriate methodologies, a critical understanding of the cultures and societies of the country or countries of the target language(s)</p>

	gained through the study of the literatures and/or other cultural products of the target language(s).
Practice (applied knowledge and understanding) Taken from generic SCQF level descriptors	Employability within Nursing Taken from the QAA subject benchmark statement
SCQF level 7	
Use some of the basic and routine professional skills, techniques, practices and/or materials associated with a subject/discipline. Practise these in both routine and non-routine contexts.	A.5.7 Demonstrate knowledge of and ability in a range of clinical and practical skills, including the safe moving and handling of patients, basic life support, and those skills necessary to intervene in emergency and challenging situations. A.4.5 Understand and apply the values that underpin anti-discriminatory working practices. 2.8 Demonstrate a range of essential nursing skills, under the supervision of a registered nurse, to meet individuals' needs. B.4.8 Create and use opportunities to promote health and well-being of patient/clients. App. 1: B.3.1 conduct appropriate activities skilfully and in accordance with best evidence-based practice.

SCQF level 8	
Use a range of routine skills, techniques, practices and/or materials associated with a subject/discipline, a few of which are advanced or complex.	B.4.6 Apply evidence-based knowledge to inform nursing care decisions, and demonstrate safe clinical judgement across a range of situations. App. 1: B.3.1 conduct appropriate activities skilfully and in accordance with best evidence-based practice. B.4.8 Create and use opportunities to promote health and well-being of patient/clients.
Carry out routine lines of enquiry, development or investigation into professional-level problems and issues.	A.2.2 Relate elements of the life and human sciences to patient/client assessment, investigative procedures, therapeutic interventions and clinical nursing skills. B.2.1 Undertake a comprehensive systematic assessment using the tools/frameworks appropriate to the patient/client. B.4.6 Apply evidence-based knowledge to inform nursing care decisions, and demonstrate safe clinical judgement across a range of situations. B.2.2 Discern relevant information from patients/clients and carers to determine and prioritise care.

Adapt routine practices within accepted standards.	B.3.1 Plan nursing care in partnership with the patient and significant others. B.3.4 Use evidence-based options to facilitate patient/client choice and inform nursing interventions.
SCQF level 9	
Use a selection of the principal skills, techniques, practices and/or materials associated with a subject/discipline. Use a few skills, techniques, practices and/or materials that are specialised or advanced.	A.5.1 Apply nursing methods, protocols and care pathways to appropriate care situations. App. 1: B.3.1 conduct appropriate activities skilfully and in accordance with best evidence-based practice.
Practise routine methods of enquiry and/or research.	A.2.2 Relate elements of the life and human sciences to patient/client assessment, investigative procedures, therapeutic interventions and clinical nursing skills. B.4.6 Apply evidence-based knowledge to inform nursing care decisions, and demonstrate safe clinical judgement across a range of situations.
Practise in a range of professional-level contexts which include a degree of unpredictability.	2.7 Demonstrate evidence of a developing knowledge base that underpins safe nursing practice.

	2.6 Contribute to the implementation of a programme of nursing care, designed and supervised by registered practitioners. C.2.6 Transfer knowledge and skills to a variety of healthcare settings and unexpected situations.
SCQF level 10	
Use a range of the principal skills, practices and/or materials associated with a subject/discipline. Use a few skills, practices and/or materials which are specialised, advanced, or at the forefront of a subject/discipline.	B.4.1 Apply theories, concepts and principles of nursing to deliver patient-centred care for individuals, groups, families and communities. App. 1: B.3.1 conduct appropriate activities skilfully and in accordance with best evidence-based practice. A.5.1 Apply nursing methods, protocols and care pathways to appropriate care situations.
Execute a defined project of research, development or investigation and identify and implement relevant outcomes.	B.4.2 Provide safe and sensitive care through the use of clinical and practical skills, and knowledge of current best practice. B.4.7 Analyse and interpret relevant health education/promotion information and use this knowledge to promote the health and well-being of patients, clients and groups. A.2.3 Use knowledge of pathophysiology and its relation to nursing practice for particular health problems.

Practise in a range of professional-level contexts which include a degree of unpredictability and/or specialism.	C.3.5 Recognise and reflect upon the need for changes in practice from best available evidence. C.3.2 Engage in reflection upon own professional learning needs and take steps to meet these.
Generic cognitive skills Taken from generic SCQF level descriptors	Employability within Biosciences Taken from the QAA subject benchmark statement
SCQF level 7	
Present and evaluate arguments, information and ideas which are routine to the subject/discipline.	3.2(2) Engage with the essential facts, major concepts, principles and theories associated with the chosen discipline. 3.1 Engage in critical assessment and intellectual argument. 3.2(4) Develop familiarity with the terminology, nomenclature and classification systems as appropriate. 3.2(6) Demonstrate awareness of the contribution of the subject to the development of knowledge about the diversity of life and its evolution.
Use a range of approaches to addressing defined and/or routine problems and issues within familiar contexts.	2.5 Develop competence in comparing the merits of alternative hypotheses and receive guidance in terms of how to construct experiments or make observations to challenge them.

SCQF level 8	
Undertake critical analysis, evaluation and/or synthesis of ideas, concepts, information and issues which are within the common understandings of the subject/discipline.	3.5(2) Analyse, synthesise and summarise information critically, including published research or reports. 3.5(1) Recognise and apply subject-specific theories, paradigms, concepts or principles (for example, the relationship between genes and proteins, or the nature of essential nutrients in microbes, cells, plants and animals).
Use a range of approaches to formulate evidence-based solutions/responses to defined and/or routine problems/issues.	2.8 Understand multidisciplinary, an enquiring attitude and an appreciation of complexity. 3.5(3 & 4) Obtain and integrate several lines of subject-specific evidence to formulate and test hypotheses and apply subject knowledge and understanding to address familiar and unfamiliar problems.
Critically evaluate evidence-based solutions/responses to defined and/or routine problems/issues.	3.2(5) Display an understanding of methods of acquiring, interpreting and analysing biological information, with a critical understanding of the appropriate contexts for their use through the study of texts, original papers, reports and data sets.

SCQF level 9	
Undertake critical analysis, evaluation and/or synthesis of ideas, concepts, information and issues.	<p>3.3(1) Demonstrate an appreciation of the complexity and diversity of life processes through the study of organisms, their molecular, cellular and physiological processes, their genetics and evolution, and the interrelationships between them and their environment.</p> <p>2.8 Combine scientific rigour with an acceptance of diversity and variability.</p>
Identify and analyse routine professional problems and issues.	3.3(5) Demonstrate the ability to employ a variety of methods of study in investigating, recording and analysing material.
Draw on a range of sources in making judgements.	<p>3.3(2) Demonstrate the ability to read and use appropriate literature with a full and critical understanding, while addressing such questions as content, context, aims, objectives, quality of information, and its interpretation and application.</p> <p>3.2(1) Develop an interdisciplinary and (where appropriate) a multidisciplinary approach in advancing knowledge and understanding of the processes and mechanisms of life, from molecular to cellular, and from organism to community.</p>

SCQF level 10	
Critically identify, define, conceptualise and analyse complex/professional-level problems and issues.	3.3(4) Develop critical and analytical skills; recognise that statements should be tested and that evidence is subject to assessment and critical evaluation.
Offer professional-level insights, interpretations and solutions to problems and issues.	3.2(8) Engage with some of the current developments in the biosciences and their applications, and the philosophical and ethical issues involved.
Critically review and consolidate knowledge, skills and practices and thinking in a subject/discipline.	3.2(8) Display an awareness of the contribution of biosciences to debate and controversies, and how this knowledge and understanding forms the basis for informed concern about the quality and sustainability of life.
Demonstrate some originality and creativity in dealing with professional-level issues.	3.3(6) Think independently, set tasks and solve problems.
Make judgements where data/information is limited or comes from a range of sources.	<p>3.5(5) Recognise the moral and ethical issues of investigations and appreciate the need for ethical standards and professional codes of conduct.</p> <p>3.1 Confront some of the scientific, moral and ethical questions raised by the study discipline and consider other viewpoints.</p>

Communication, numeracy and ICT skills	Employability within General Business and Management
Taken from generic SCQF level descriptors	Taken from the QAA subject benchmark statement
SCQF level 7	
Convey complex ideas in well-structured and coherent form.	4.1.c Effective communication, oral and in writing, using a range of media which are widely used in business (for example, the preparation and presentation of business reports).
Use a range of forms of communication effectively in both familiar and new contexts.	4.1.c Effective communication, oral and in writing, using a range of media which are widely used in business (for example, the preparation and presentation of business reports). 3.7 The comprehension and use of relevant communication and information technologies (CIT) for application in business and management.
Use standard applications to process and obtain a variety of information and data.	4.1.e Effective use of CIT for business applications.
Use a range of numerical and graphical skills in combination.	4.1.d Numeracy and quantitative skills, including data analysis, interpretation and extrapolation. The use of models of business problems and phenomena. 3.7 The sources, uses and management of finance; the use of accounting and other information systems for managerial applications.

Use numerical and graphical data to measure progress and achieve goals/targets.	4.1.d Numeracy and quantitative skills, including data analysis, interpretation and extrapolation. The use of models of business problems and phenomena. 3.7 The sources, uses and management of finance; the use of accounting and other information systems for managerial applications.
SCQF level 8	
Convey complex information to a range of audiences and for a range of purposes.	4.1.c Effective communication, oral and in writing, using a range of media which are widely used in business (for example, the preparation and presentation of business reports).
Use a range of standard applications to process and obtain data.	4.1.e Effective use of CIT for business applications. 3.7 The development, management and exploitation of information systems and their impact on organisations.
Use and evaluate numerical and graphical data to measure progress and achieve goals/targets.	4.1.d Numeracy and quantitative skills, including data analysis, interpretation and extrapolation. The use of models of business problems and phenomena. 3.7 The sources, uses and management of finance; the use of accounting and other information systems for managerial applications.

SCQF level 9	
Make formal and informal presentations on standard/mainstream topics in the subject/discipline to a range of audiences.	4.1.c Effective communication, oral and in writing, using a range of media which are widely used in business (for example, the preparation and presentation of business reports).
Communicate with professional-level peers, senior colleagues and specialists.	4.1.j Interpersonal skills of effective listening, negotiating, persuasion and presentation. 4.1.h Self-awareness, openness and sensitivity to diversity in terms of people, cultures, business and management issues.
Use a range of software to support and enhance work at this level and specify refinements/improvements to software to increase effectiveness.	3.7 The development, management and exploitation of information systems and their impact on organisations. 3.7 The comprehension and use of relevant CIT for application in business and management.
Interpret, use and evaluate a wide range of numerical and graphical data to set and achieve goals/targets.	4.1.d Numeracy and quantitative skills, including data analysis, interpretation and extrapolation. The use of models of business problems and phenomena. 4.1.k Abilities to conduct research into business and management issues, either individually or as part of a team, for projects/dissertations/presentations. This requires familiarity with a range of business data, research sources and

	appropriate methodologies, and for such to inform the overall learning process.
Autonomy, accountability and working with others	Employability within Engineering
Taken from generic SCQF level descriptors	Taken from the QAA subject benchmark statement
SCQF level 7	
Exercise some initiative and independence in carrying out defined activities at a professional level.	Analyse and interpret data and, when necessary, design experiments to gain new data; design a system, component or process to meet a need.
Take supervision in less familiar areas of work.	Communicate effectively with colleagues and others, using both written and oral methods
Take some managerial responsibility for the work of others within a defined and supervised structure.	Work in a multidisciplinary team.
Manage limited resources within defined areas of work.	Manage resources and time.
Take the lead in implementing agreed plans in familiar or defined contexts.	Work in a multidisciplinary team.
Take account of own and others' roles and responsibilities in carrying out and evaluating tasks.	Work in a multidisciplinary team.

Work with others in support of current professional practice under guidance.	Communicate effectively with colleagues and others, using both written and oral methods. Work in a multidisciplinary team.
SCQF level 8	
Exercise autonomy and initiative in some activities at a professional level.	Analyse and interpret data and, when necessary, design experiments to gain new data; design a system, component or process to meet a need. Manage resources and time.
Take significant managerial or supervisory responsibility for the work of others in defined areas of work.	Work in a multidisciplinary team. Communicate effectively with colleagues and others, using both written and oral methods.
Manage resources within defined areas of work.	Manage resources and time.
Take the lead on planning in familiar or defined contexts.	Manage resources and time. Assess risks, and take appropriate steps to manage those risks.
Take continuing account of own and others' roles, responsibilities and contributions in carrying out and evaluating tasks.	Work in a multidisciplinary team. Manage resources and time.

Work in support of current professional practice under guidance.	Take a holistic approach, applying professional judgements, balancing costs, benefits, safety, quality, reliability, appearance and environmental impact.
SCQF level 9	
Exercise autonomy and initiative in some activities at a professional level.	Solve engineering problems, often on the basis of limited and possibly contradictory information. Analyse and interpret data and, when necessary, design experiments to gain new data; design a system, component or process to meet a need.
Take some responsibility for the work of others and for a range of resources.	Develop, promote and apply safe systems of work. Assess risks, and take appropriate steps to manage those risks. Manage resources and time.
Practise in ways which take account of own and others' roles and responsibilities.	
Work under guidance with qualified practitioners.	Communicate effectively with colleagues and others, using both written and oral methods.
Deal with ethical and professional issues in accordance with current professional and/or ethical codes or practices, seeking guidance where appropriate.	Develop, promote and apply safe systems of work. Assess risks, and take appropriate steps to manage those risks.

Work in support of current professional practice under guidance.	Take a holistic approach, applying professional judgements, balancing costs, benefits, safety, quality, reliability, appearance and environmental impact.
SCQF level 9	
Exercise autonomy and initiative in some activities at a professional level.	Solve engineering problems, often on the basis of limited and possibly contradictory information. Analyse and interpret data and, when necessary, design experiments to gain new data; design a system, component or process to meet a need.
Take some responsibility for the work of others and for a range of resources. Practise in ways which take account of own and others' roles and responsibilities.	Develop, promote and apply safe systems of work. Assess risks, and take appropriate steps to manage those risks. Manage resources and time.
Work under guidance with qualified practitioners.	Communicate effectively with colleagues and others, using both written and oral methods.
Deal with ethical and professional issues in accordance with current professional and/or ethical codes or practices, seeking guidance where appropriate.	Develop, promote and apply safe systems of work. Assess risks, and take appropriate steps to manage those risks.

SCQF level 10	
Exercise autonomy and initiative in professional/ equivalent activities.	Solve engineering problems, often on the basis of limited and possibly contradictory information. Analyse and interpret data and, when necessary, design experiments to gain new data; design a system, component or process to meet a need. Manage resources and time.
Take significant responsibility for the work of others and for a range of resources.	Manage resources and time.
Practise in ways which show a clear awareness of own and others' roles and responsibilities.	Assess risks, and take appropriate steps to manage those risks. Develop, promote and apply safe systems of work.
Work effectively under guidance in a peer relationship with qualified practitioners. Work with others to bring about change, development and/or new thinking.	Communicate effectively with colleagues and others, using both written and oral methods. Work in a multidisciplinary team.
Deal with complex ethical and professional issues in accordance with current professional and/or ethical codes or practices.	Develop, promote and apply safe systems of work.

Recognise the limits of these codes and seek guidance where appropriate.	Assess risks, and take appropriate steps to manage those risks. Take a holistic approach, applying professional judgements, balancing costs, benefits, safety, quality, reliability, appearance and environmental impact.
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4 Useful resources for course development teams and university lecturers

The following are a selection of the best current resources for course teams and lecturers looking for ideas to help them in enhancing the opportunities they provide for their students to develop, or become more aware of, their employability skills. The materials are coded in the margin as follows:

- S for ideas and materials to use in teaching and with students
- C for resources for course designers, reviewers and teams
- G for general interest.

4.1 Electronic resources

Links to websites are correct as at November 2005. The first link may provide up-to-date access to later links, and new links as they appear.

HEA pages on employability

- All 1 Index page:
<http://www.heacademy.ac.uk/Employability.htm>
- The index page currently includes HEA's on-line searchable directory of employability resources (articles, tools etc):
<http://www.heacademy.ac.uk/employability.asp>
- 2 You may find it easier to go directly to:

- C Employability audits, designed to help members of course teams to identify where their courses could better address employability issues:
<http://www.heacademy.ac.uk/1667.htm> (one Biosciences tool and one general tool).
- C/S Fuller subject-based employability profiles, including self-profiling check-lists for students: <http://www.cihe-uk.com/SEP.php>
- S Tools to use with students to develop employability:
<http://www.heacademy.ac.uk/3082.htm>
- S Directory of context case studies - activities to help in developing employability in students:
http://www.heacademy.ac.uk/employability.asp?process=search&project_area=pa12
- S/C Further tools (such as card sorts, quizzes, mapping templates) to use with students, plus ones for course teams and other staff: <http://www.heacademy.ac.uk/1440.htm>
- G 3 HEA also publishes a very useful series of booklets, for a range of different audiences, in the Learning and Employability series. They can be found online at <http://www.heacademy.ac.uk/1433.htm>, or hard copies obtained from HEA.

The series titles so far are:

- Employability in higher education: what it is, what it is not
- Employability: judging and communicating achievements
- Embedding employability into the curriculum
- Reflection and employability
- Widening participation and employability

- Entrepreneurship and higher education: an employability perspective
- Work-based learning and employability
- Pedagogy for employability
- Work-related learning in higher education
- Employability and doctoral research postgraduates
- Part-time students and employability
- Ethics and employability.

The Scottish angle

- 1 The QAA (Scotland) Employability Enhancement Theme web page contains Scottish case studies, presentations from Scottish workshops and conferences, Scottish publications and reports on employability, and more information about the Employability Enhancement Theme in Scotland. Go to <http://www.enhancementthemes.ac.uk/> then click on the Employability link. Resources that can be accessed by clicking further links are:
- S/C Case studies of activities from Scottish HEIs that develop students' employability, ranging from a suite of modules on a programme to assessment activities (choose Employability Activities, then Library of Employability-related case studies).
- G Presentation slides from Employability theme conferences (choose Employability Events).
- G Publications and reports on the Scottish angle (choose Employability Publications).
- C 2 <http://www.scqf.org.uk/> is the website of the SCQF. The link entitled 'The Framework', and its linked diagram, is probably most useful.

- G 3 www.sfc.ac.uk/publications/pubs_other_sfefcarchive/learning_to_work.pdf - Learning to Work - Enhancing Employability and Enterprise in Scottish Further and Higher Education is an excellent document produced by the SFC.
- C 4 Once it is live, the PDP/Effective Learning Framework website will be useful for linking employability to personal and professional development planning. Until then, see: <http://www.qaa.ac.uk/scotland/ELF/ELF%20Consultation%20Paper.doc>

Other UK links

- G 1 <http://www.graduate-employability.org.uk/> provides an 'alternative' view from a researcher.
- C 2 Links to the full employability profiles and to wider, career-oriented sites can be found at: [http://www.prospects.ac.uk/cms/ShowPage/Home_page/Student_employability/pl!efbLLca;\\$2C\\$3E\\$D](http://www.prospects.ac.uk/cms/ShowPage/Home_page/Student_employability/pl!efbLLca;$2C$3E$D)
- C 3 <http://www.universitiesuk.ac.uk/employability/> - Enhancing Employability: Recognising Diversity is a 2002 report from Universities UK which includes 16 case studies from across the UK. In this report, Universities UK and the Higher Education Careers Service Unit seek to inform employers, prospective students and the general public about graduate employment.
- G 4 <http://www.qualityresearchinternational.com/ese/relatedpapers.htm> is a useful bibliography from the web page of the 9th Quality in Higher Education International Seminar, January 2005, entitled 'Enhancing Student Employability'.
- G 5 http://www.qca.org.uk/14-19/11-16-schools/downloads/ks_for_developing.pdf - provides information on the school context in England.

- C/S 6 A Google search using 'employability' and/or 'skills' will bring up hundreds of hits, many of which are universities' web pages containing tools they provide for their own staff. One such page to look at for ideas, including a link to their page on 'mapping employability skills in modules', is: http://www.keele.ac.uk/depts/aa/landt/links/employability_skills.htm

International angles

- S 1 Australia and wider: <http://skillcity.iaaf.uwa.edu.au/> 'SkillCity is a website devoted to the dissemination of teaching materials on teamwork, group work, presentation skills, writing development, and the range of professional communication skills for university students.'
- G 2 USA: <http://www.nwrel.org/scpd/sirs/8/c015.html>
Provides a review of US activities
- G 3 Canada: <http://www.edu.gov.on.ca/eng/document/brochure/youjob/match.html#over2>

4.2 Publications

Books

Knight P (2003) *Assessment, Learning and Employability*, Maidenhead: Society for Research into Higher Education and Open University Press

Knight P (2004) *Learning, Curriculum and Employability in Higher Education*, London: Routledge.

Shaw M (ed) (2003) *Pioneering Employability in the HE Curriculum*, London: Staff and Educational Development Association, Staff and Educational Development Association (SEDA) Special, SS14

This SEDA Special focuses on the work and achievements of four projects on different but complementary elements of the current high-profile 'employability agenda': career

management skills; key, transferable skills; and work-based learning. It provides ideas, support and encouragement from the experience of others through examples of the benefits of collaborative project working. It also gives examples of how the work of limited-life projects can have impacts beyond their end date, to inform longer-term strategic developments within an institution and beyond. There is a flyer and an order form (in Word) on the SEDA website at: http://www.seda.ac.uk/pubs/seda_specials.htm

Yorke M, Pilkington R and Mason O'Connor K (eds) (2005) *Employability: A Rationale and Examples of Practice*, London: SEDA, SS18

This SEDA Special arose from a joint SEDA-ESECT event attended by representatives from over 30 HEIs. It is a must for all HEI institutional strategic planners, curriculum designers, academic staff, educational developers and careers advisers who are committed to promoting the employability of their graduates. Flyer and order form available from: <http://www.seda.ac.uk/publications.htm>

Journal articles

Knight P and Yorke M (2002) 'Employability through the Curriculum', *Tertiary Education and Management*, 8, 261-276

Knight P and Yorke M (2003) 'Employability and Good Learning in Higher Education', *Teaching in Higher Education*, 8, 1, 3-16

Reports

Harvey L, Moon S and Geall V, with Bower R (1997) *Graduates' Work: organisational change and students' attributes*, Birmingham: Centre for Research into Quality, University of Central England <http://www.uce.ac.uk/crq/publications/gw/gwovf.html> (also available by order from UCE)

HEA resources

Yorke M (2004) *Employability in higher education: what it is - what it is not*, Learning and Employability Series, No 1, York: Higher Education Academy, LTSN

5 Ten ideas for developing employability without major programme changes: Professor John Cowan

John Cowan started his academic life teaching structural engineering design, then became interested in researching student learning. He has now retired from his roles as Scottish Director and Professor of Learning Development at The Open University, but is still very active. He is currently a visiting professor at three universities, an auditor for QAA, and still teaches (part-time) and inspires undergraduates.

Ten ideas - which some of you no doubt use already

Employability is usually very much a personal and individual matter, so my 'evaluations' of it are mainly anecdotal and the sources of development are spread across my programmes.

1 Self-questioning

Restructure 'discuss' questions by providing a statement, in quotes, then:

- state if you agree or disagree (0 marks)
- list the points you would make in support of your view (6 marks)
- list the points you would expect to be made by someone of a contrary view (6 marks)
- respond to the points in the second list, without simply amplifying the points in the first list (8 marks).

Effect for my students: **wider and deeper thinking**. A student

reported: 'This format has become a habit. As a result, I run into less criticism and correction, in group work and at work. I anticipate in advance, and adjust accordingly.'

2 Challenging assumptions

In any suitable module which is assessed at least partly in sentences and paragraphs:

- present students with a comprehensible but unfamiliar paper, preferably on a new topic
- make the sole task: 'if you had access to the person who wrote that, what questions would you ask, and why are they worth asking?'
- award low marks for facile questions, as well as for inability to spot relevant ones.

Effect for my students: **a question-spotting and asking culture**. A student reported: 'I'm less inclined to take things for granted, more likely to check and challenge. They've noticed this at home, when we plan holidays. It's helped me in my other modules, and my boss at the supermarket has commented on it favourably.'

3 Knowledge of working practices and professional behaviour

Early in the programme, in groups of six:

- each student is allocated one type of source from which to find out what skills and attributes matter - for employers, junior and senior employees, professional bodies, journals, HEA subject centres, clients
- groups to 'wallpaper' a melded list of target skills and attributes, specifying what would be rated as 'valuable' under each heading
- sharp-thinking visitors invited to provide comment on the content of displays.

Effect for my students: **separating 'need to know' and 'nice to know'**.

Many students have reported: 'The most useful thing I learnt at Uni was to work out and build on the difference between 'need to know' and 'nice to know'. I always remember those assignments where I was telling myself 'Mr X wouldn't be very impressed with that, would he?'

4 Continuously improving performance

Take a module where skills matter and should be being developed:

- maintain the outline; change assessment, only 50% for project or whatever
- students lodge, and have peer-checked, a self-audit of relevant abilities at the beginning of the module
- allocate 50% of final marks for a substantiated self-assessment of their development of relevant skills while studying the module.

Effect for my students: **confident self-managed development**. A student claimed: 'I needed to improve my analyses. I was just summarising. Now I look for patterns and exceptions, think about these, and conclude accordingly. I get much higher marks and favourable comments, now, for that part of my work.'

5 Self-reliance

Task for students:

- 'Identify a desirable skill or attribute where you see scope for improvement outwith the present programme provision
- audit your present competence
- plan for your development
- implement your plan
- judge your progress
- take and consider comments on each step from another student (not mutually), without committing yourself to accept their views or advice.'

Effect for my students: **changes in self, or in career path**. An engineering student reported: 'I'm not scared of computers any more. I've decided I'm going to teach IT in schools.'

6 Identification of strengths and development needs

Preferably in a pair of consecutive modules, calling for similar skills:

- at the end of module 1, students assemble, from a self-assessment, advice to self about how to do better next time
- at the end of module 2, students review how much of that advice was followed (or not, and why not?), what worked and did not work, and what advice to themselves they would now offer
- stewardship of development then assessed.

Effect for my students: **prioritising goals of learning during study**. A student reported: 'I'm a multitasker. I used to sometimes try to juggle too many tasks at once, sometimes too few. Now I'm much nearer what is effective for me, and for my use of time.'

7 Learning to learn

- Mark a module out of 100 as usual.
- Allocate up to 15 additional marks where a student can demonstrate learning in the course of module studies (not prior learning). This to be in accordance with the module aims, but not listed as an intended learning outcome.
- Claim for the unintended outcome to be substantiated by data which will persuade an external who does not know the student or their other work.

Effect for my students: **some unexpected but highly relevant development**. A student reported: 'I got thoroughly hooked on Joinsson's stuff about communication in the virtual learning environment. It was a diversion, I know, but it's helped me (I believe) to make more effective choices between email, discussion boards, chat rooms, texting - and speaking on the phone.'

8 Logical argument, and critical evaluation

In a subject where students submit discursive assignments:

- 'Choose the most important issue, or difficult point, in this section of the module.'
- 'Write a dialogue, in which you explain this point and your views on it to your alter ego.'
- 'Try to ensure that you write deeply and sincerely, but that your alter ego gives you a hard time.'

Effect for my students: **arguments with clear reasoning**. A student reported: 'I've noticed that in meetings, here and in the Students Association, I think harder, think more, and say less - but seemingly more effectively. I win support more often than in the past.'

9 Communication - in a CV

- In October of the final year, find five co-operative employers, currently recruiting.
- Invite students to each choose one vacancy, and write a letter of application accompanied by a suitable CV.
- 'Interviewers' to skim read these and summarise in person or on intranet what they were and were not impressed by, and why.
- Group discussion boards then to summarise what they have learnt from this exercise.

Effect for my students: **awareness of the concerns of the employer**. A student reported: 'Now I'm much better at sussing out what they want to know. So I leave hooks in my CV and in my covering letter, on which they can hang questions I'm ready to answer - to my advantage.'

10 Creativity/self-reliance (unassessed)

- Devise and use a 'shoe-box' filing system, electronic or physical, from which to draw data to substantiate self-evaluation claims. Not a portfolio.
- Use it as if being called to an interview for an attractive short-term post - with focus questions declared.
- Students interview students and offer advice as well as judgements.
- Use system when preparing job applications and continuing professional development self-evaluations.

Effect for my students: **a time-effective system, which works to good effect**. Several students reported: 'In every interview, however it started, they were really interested in my employability skills. This system has helped me enormously, to have good examples fresh in my mind, when they ask specific questions.'