

Core Skills Past, Present and Future

Report to
Scottish Qualifications Authority

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1 Introduction

Project remit and methodology

This report was commissioned in January 2008 on behalf of SQA. The remit was to:

- ◆ provide a brief history of thinking behind the strategy and subsequent implementation of Core Skills up to the present day
- ◆ analyse the adoption and implementation of the Core Skills Framework in order to:
 - identify what lessons can be learned from past philosophies and actions in Scotland
 - identify current trends in how others are thinking about such educational developments and their place in the qualifications systems
 - identify any links to ongoing development of qualifications
- ◆ undertake a comparative analysis of the Core Skills and Curriculum for Excellence strategies which will:
 - identify any similarities/differences between Core Skills for the Future proposals and Curriculum for Excellence
 - identify any issues for the Core Skills Framework
 - identify any issues for the ongoing development of Curriculum for Excellence outcomes and related qualifications
 - suggest possible implications for educational strategy in Scotland
 - offer recommendations for our thinking ahead

In response to this research, SQA have developed an alternative option which further develops Option B: Refinement and Option C: Redevelopment, retaining the current status of Core Skills and emphasising the use of 'profiling' as a means to recognising skills achievement. This would allow SQA to support 'Skills for Learning, Skills for Life and Skills for Work' by offering a route for candidates to gather evidence towards the broad 'Essential Skills' outlined in the Skills Strategy, and the skills and attributes identified in Curriculum for Excellence for the development of the 'four capacities'.

The investigation involved researching and surveying relevant literature (Annex G) and arranging meetings and telephone discussions with key players (Annex F). Work on the history and current status of Core Skills showed that:

- a) there were a number of strands of thinking involved in the development of the existing Core Skills Framework and that these strands were very relevant to an understanding of the current situation and to planning for future action
- b) although the Core Skills Framework had not achieved all the aims with which it was developed, it is firmly linked to skills development in a number of areas of education and training and that the analyses required by the project would have to take account of these linkages

Since the Core Skills Framework was introduced in 2000, SQA officers, working with key stakeholders, have undertaken considerable work to ensure that it is relevant and user-friendly. Feedback from the most recent review showed that there were specific areas where change was desirable and being actioned. The issues which emerged in this review were more concerned with the status, purpose and scope of the Core Skills Framework than with the individual Core Skills it incorporates.

It quickly became apparent that there was a need to create a way of clarifying the references to core skills in this report. The term 'core skills' is of necessity used in a number of ways, sometimes to refer to core skills in general and sometimes to refer to a specific core skill set. For this reason, the term 'official Core Skills' has been adopted to distinguish the skills defined in the Core Skills Framework. Also the term 'skill cluster' is sometimes used to refer to a single core skill. This is because individual core skills listed by agencies with a stake in the development of generic skills are usually conceived of as clusters of related sub-skills (in the case of the official Core Skills — components) and also because differently named core skills may actually describe very similar clusters of sub-skills.

The Core Skills Framework

The current Core Skills Framework was developed as part of the Higher Still Development Programme. It was intended to be the national framework for the development and assessment of generic skills in all publicly funded education and training in Scotland, other than that leading to University qualifications. It operates at five SCQF levels — SCQF levels 2–6 (Access 2 to Higher) — and was the direct basis for large parts of the SCQF level descriptors at these levels, and the indirect basis for related parts of the level descriptors at levels 7–12. Like the SCQF, the Core Skills Framework is an instrument which links sectors and has a focus on progression within and between sectors.

The Core Skills Framework is a sophisticated instrument which has been refined over a decade of development work with users of core skills. It contains five core skills, divided at present into eleven sub-skills or 'components', each of which is further divided into 'specific skills'. For each component there is text elaborating the nature of the skills and giving examples of tasks in which the skill concerned might be demonstrated. Each skill is defined at each of the five levels.

Responsibility for the management of the framework was accepted by SQA in 1998. Ownership remains with the Scottish Government and no significant changes can be made to the framework without the approval of the relevant Scottish Government department(s). SQA was well placed to be given responsibility for the framework, since it was the non-governmental body with most direct links with the different sectors of education and training in Scotland at that time. In the decade since taking over the Core Skills Framework, SQA has worked with users and providers of the Core Skills Framework to ensure that the framework and the skills it contains:

- ◆ add value to all sectors of education and training in Scotland
- ◆ meet the needs of individuals, employers, and civil society
- ◆ contribute to the growth of a 'smart successful Scotland' and 'a Scotland where everyone matters'

The remit for this investigation and report starts with the following statement:

‘The Core Skills Framework houses the standards for the five Core Skills and their components. Together these provide Scotland’s agreed basis for development of lifelong learning, of active citizenship and of productive employment. Behind the framework of Core Skills is a full range of social development which emphasises the values on which Scotland’s social justice is based and upon which individuals will learn to think about their own perspectives. One benefit of a coherent system for Core Skills is that it should be understood by learners and understandable for those who use the framework to recognise and value the skills learners bring.’

However, in spite of the work which SQA and the Scottish Government have undertaken to sustain and develop the role of the Core Skills Framework in Scottish education and training, it is not clear from the documentation examined in developing this report what proportion of stakeholders would fully recognise or support the statement. References to ‘Core Skills’ and to specific skills from the Core Skills Framework appear in policy documents from different agencies, but seldom in a way which gives full and unequivocal support to the Core Skills Framework, and indeed the ownership of the framework and the Core Skills it incorporates is often attributed to SQA in what may be seen as a distancing way — ie references to the SQA Core Skills and the SQA Core Skills Framework rather than the national Core Skills Framework, etc. Also, where policy documents or consultation papers refer to core skills in relation to lifelong learning, active citizenship and productive employment, the phrase usually refers to a range of skills which may include, but often goes beyond, the contents of the Core Skills Framework (see Annex A for examples of this).

Challenges for the Core Skills Framework

An examination of the history of core skills (as in Annex B) shows that those engaged in work on core skills faced different challenges at each stage. The questions facing the developers of the first Core Skills Framework in the 1980s were about identifying generic vocational skills which were likely to be transferable¹ and could be acquired in a work context. The questions facing the developers of the second Core Skills Framework in the early 1990s were about identifying generic skills which could be acquired in a vocational context, assessed and certificated, and about how to differentiate between levels of achievement. The questions facing the developers of the third Core Skills Framework in the late 1990s were about how this vocational structure could be made more accessible to schools and more deliverable through subjects. But the questions which now have to be addressed go back to fundamentals, being concerned with the nature, purpose and scope of the Core Skills Framework in the light of issues raised about generic skills, the terms of the new national skills strategy, and what is emerging from Curriculum for Excellence.

¹ The issue of whether and how far the generic skills discussed in this report are transferable is a continuing issue. Some small-scale research was carried out by Edinburgh University’s Godfrey Thomson Unit in the run-up to the Howie Report, but no substantial work has been undertaken since. For that reason the issue is not addressed in this report, which uses the term ‘transferable’ in contexts where developers or policy makers used the term, but otherwise simply refers to ‘generic’ or ‘core’ skills.

In the eight years since it was launched, the Core Skills Framework has faced a number of new challenges. Almost immediately, there was a proposal from a national committee investigating modern language acquisition in our schools to include modern languages in the framework. This proposal was not adopted for both conceptual and practical reasons. Then there was the question of whether the Core Skills Framework would be adopted in the development of Scotland's Lifelong Learning Strategy — it was. Then the question of whether and how the official Core Skills might be used within programmes and qualifications other than new National Qualifications — specifically Modern Apprenticeships and revised Higher National Qualifications. Again the decision was to use the Core Skills Framework. There have also been issues arising from the relationship between the generic skills defined as 'core skills' and those defined as 'basic skills' and 'employability skills' — these are dealt with in further detail later in the report.

The next challenge for the Core Skills Framework comes with Curriculum for Excellence. At first sight this initiative might appear to be pursuing the same ends as the Core Skills Framework, but on a grander scale with its framework of capacities, abilities and attitudes. However, a closer consideration of the aims of Curriculum for Excellence points up the inherent differences of approach between curriculum developers and qualifications developers — in crude terms, the difference between a drive to synthesise learning and a need to analyse it. Thus, whilst the existing Core Skills Framework is designed to break down a small number of measurable generic skill clusters into outcomes which can be demonstrated and assessed for certification for all learners, the emphasis in Curriculum for Excellence is on developing more integrated approaches to generic skills, attributes, attitudes and behaviours, and more differentiated reporting.

The tension between these two approaches is not unique to Scotland, but it can be argued that they are particularly acute here because the analytic approach has held sway since the 1990s and dominated much of the Higher Still Development Programme — a curriculum reform which was focused on qualifications.

Because the changes proposed by the policy paper, *A Curriculum for Excellence*, are so different in intent from the thinking behind the Core Skills Framework, it is likely to be difficult — and may not be possible — for the existing Core Skills Framework to continue to claim the status and role which was envisaged by the White Paper, *Higher Still*. This is not to say that the official Core Skill standards which are incorporated in the framework — and possibly standards for other generic skills — will not have a role to play in upper secondary education in future. But a new role and/or a new definition may have to be defined for the Core Skills Framework itself.

At the same time as consideration has to be given to the effect of Curriculum for Excellence on thinking about core and other generic skills, account has to be taken of the other areas where the official Core Skills are well established. The origins of core skills lie in youth training and the official Core Skills are still playing a role in this important sphere. The official Core Skills are also well established in qualifications delivered in schools, colleges, community settings and workplaces. They have a formal role in many National Courses and a less formal role in Skills for Work Courses. They also have a significant place on the Scottish

Qualifications Certificate in the form of a Core Skills Profile awarded to all SQA candidates.

Structure of the report

The report considers all these issues and asks whether the time has come for a radical re-examination of the Core Skills Framework. It starts with an introductory section which considers very briefly how the Core Skills Framework came into being and the challenges which it faces. The next section considers key aspects of the origins of the Core Skills Framework and relates these to the current situation. A full account of the development of the Core Skills Profile is given in Annex B. A third section puts Core Skills in an international context and this is followed by two sections which examine other types of generic skill: employability skills and basic skills. The first of these looks at employers' perceptions of skills needs in relation to the official Core Skills. The second looks at the basic skills strategy in Scotland and the development of 'functional' skills south of the border. The next section is concerned with the relationship of core skills developed for assessment and certification, and the role of generic skills in curriculum development. It includes subsections on Higher Still, embedding Core Skills in school courses, and Curriculum for Excellence.

The issues which have arisen in the course of all these areas are then summarised and three options for future action are identified and discussed.

2 The background to the Core Skills Framework

The origins of core skills in the UK

The origins of core skills in the UK clearly lie in vocational education and training, with the earliest work on core skills leading to the influential 1985 report *Core Skills in YTS*. Investigations into core skills was part of the UK Employment Department's (Manpower Services Commission's) attempt to respond to the challenge of changing economic and technological conditions which were rapidly bringing about huge changes in the labour market and requiring millions of Britons to improve their skills, learn new skills, or change their occupations entirely. How could this be done in a way which could capitalise on existing skills and knowledge and provide a good basis for further requirements to up-skill and re-skill? One answer appeared to lie in identifying generic skills and using these as a focus for training.

This early work on core skills was not concerned with assessment and certification, and the first framework of core skills was intended for use in the design and validation of vocational training programmes — especially Youth Training Scheme (YTS) programmes. However, the issue of assessment and certification was soon raised in the form of two central concerns of YTS: how to quality assure the delivery of programmes and how to provide nationally-recognised certification of the achievements of participants in YTS.

A procedure for validating YTS programmes, which included scrutinising the elements which would lead to the development of generic/transferable skills, was established through a body called the YTS Certification Board, set up in 1986, the year after *Action Plan*. The requirement for the inclusion of core skills in YTS programmes in Scotland was met by the inclusion of modules in areas such as communication and personal and social development (PSD). Modules provided the MSC with a ready-made means of managing delivery and also gave a form of national recognition to YTS trainees.

The Technical and Vocational Education Initiative (TVEI) took core skills into schools, still with a vocational bias, and at the end of the 1980s, Kenneth Baker (then Secretary of State for Education) set in train a process to bring core skills into schools. These two trains of development were brought together in Scotland in 1992 with the introduction of General Scottish Vocational Qualifications (GSVQs) which incorporated a new framework of core skills. Fuller details of the history of core skills are given in Annex B.

The importance of generic skills in education and training has continued as a theme to the present day under different titles and as part of a range of initiatives. Whilst this has led to a relatively narrow definition of core skills by the awarding bodies (concerned to identify what can be assessed and quality assured for certification), other stakeholders in education and training have tended to take a wider view, often bundling up these official Core Skills (and Key Skills south of the border) with collections of attributes, attitudes and behaviours.

The development of the Core Skills Framework in Scotland

As indicated in the previous section, the history of the Core Skills Framework for Scotland extends over a period of more than twenty years — going back, in effect, to *Action Plan*.

The modules which were initially used to satisfy the requirements for core skills in YTS and TVEI programmes tended to be in hierarchical suites at three or four levels, but with no read-across between the levels and virtually no benchmarking against other qualifications (the notable exception being Communication 4). At this stage there was no serious proposal to regularise the modules concerned into a framework.

The first Scottish Core Skills Framework was created for use with GSVQs. Its development was influenced by thinking about generic skills which originated in the employers' organisation, the CBI. This framework contained core skills at four stages (levels). It brought the various PSD modules together in a Personal and Interpersonal Skills (PIPS) cluster and introduced modules in Numeracy, IT and Problem Solving. Compared to the modern Core Skills Framework it was quite sketchy, but some work was undertaken to plan for a fuller framework in a paper called *Core Skills by Design*.

The second Scottish Core Skills Framework was developed by the Scottish Consultative Council on the Curriculum (SCCC) as part of the Higher Still Development Programme. This regularised the existing provision, developed additional levels, converted PIPS into Working with Others and introduced core skills components. It also created a fuller, more user-friendly approach to the framework.

Since then, SQA has worked with key players to elaborate and refine the framework on the basis of feedback on its use with young learners, adult learners, initial trainees, workplace learners, and learners with special needs. The feedback has come from schools, colleges, private trainers, sector skills bodies, employers and others to the great advantage of all users.

Even this short account shows that the current Core Skills Framework has evolved as a result of a number of strands of thought and influence and in response to a number of related implementation issues. Some of the influences and operational factors have a UK-wide bearing, others directly affected England (or England and Wales and/or Northern Ireland) but had an important indirect influence on Scottish developments, and some have been specifically Scottish in origin or nature. Much of the drive behind core skills development has come from the supply side as represented by government departments and agencies. It is usually claimed that core skills represent a response to employer demands, but while this is true to an extent, this report will suggest that (a) the link between core skills and the stated requirements of employers is not consistently strong; and (b) that the attitudes of employers to core skills are not consistent. Both of these factors make a satisfactory evaluation of core skills as a basis for recommending a strategy for future action very problematic.

To understand the status of the official Core Skills today, and the forces which bear on their future, it is necessary to identify these strands and issues and see how they have influenced, or are continuing to influence, current thinking. These strands are about the relationship between the official Core Skills and:

- ◆ initial vocational education and training (VET) — effectively the origin of core skills — and workplace training
- ◆ employers' perceptions and employability skills
- ◆ basic skills and 'functional' skills
- ◆ the school curriculum and Curriculum for Excellence
- ◆ qualifications frameworks

The current situation in Scotland

SQA's Introduction to the Core Skills Framework starts as follows:

'Core Skills enable people to put their knowledge and understanding into action flexibly, adapting them to new situations. Core Skills apply to a wide range of contexts in education and training, in life, and in work. They underpin and promote the development of learning and study skills, and provide a foundation for lifelong learning and personal development.'

There is no simple definition of core skills on the SQA website or in the Core Skills Framework document, and this may be an issue; however, from these sources it can be inferred that the Core Skills are a set of generic skills which are thought of as being (at least to some extent) transferable. Further on in the document, and on the website, they are described as 'essential' skills² and it is clear that in Scotland the official Core Skills are intended to be as appropriate to the development of adults as of young people. This condition may in itself appear to be too limiting, since it tends to exclude generic skills which are essential for one group of learners but not applicable for others (eg study skills or customer care skills — although it can be argued that these are actually contextualised versions of the highly generic official Core Skills).

In the Core Skills Framework, the official Core Skills are specified as outcomes, with a focus on standards and assessment. There are NQ Core Skill Units and workplace-assessed Core Skill Units. Also in the Core Skills Framework, these generic skills are specified in a practical way and are intended to be developed in a wide range of situations. In formal education, they can be developed through a range of subjects or through dedicated programmes; in non-formal learning they can be developed in a range of environments. Core Skills are also commonly developed through informal learning and, in principle, informally learned core skills can be validated and accredited through a process for recognising prior learning in any centre approved by SQA for the delivery of the Core Skills in the framework.

In addition, the Core Skills in the Core Skills Framework are currently built in, formally, but in different ways, to:

- ◆ secondary school curriculum
- ◆ Modern Apprenticeships
- ◆ the Scottish Adult Literacy and Numeracy strategy
- ◆ Scottish Group Awards (SGAs)

² However, the term 'essential skills' is defined in *Skills for Scotland* in a way which includes the official Core Skills, but goes well beyond them.

- ◆ Higher National qualifications
- ◆ Scottish Vocational Qualifications (SVQs)

They are also included, less formally, in qualification development processes and the level descriptors of the SCQF. In addition, they are widely used by further education colleges as part of their non-advanced programmes.

An additional factor to be taken into consideration is the publication of *Skills for Scotland*, the Scottish Government's lifelong skills strategy. This paper makes a number of references to the official Core Skills, and lists them in place of defining them. It also includes them in a new category of skill — 'essential skills', which it defines as 'a broad term that includes literacy and numeracy, personal and learning skills, the five Core Skills, skills for employability and other transferable skills'. The strategy paper includes three recommendations for SQA and 'other awarding bodies' as follows:

- ◆ Involve employers in the development of qualifications through more active engagement with the sector skills councils.
- ◆ Work towards placing their qualifications in the SCQF and making links with other qualifications to open up opportunities for individuals.
- ◆ Continue to ensure that essential skills are visible in qualifications.

The third of these is ambiguous: is SQA to focus on the word 'continue' and interpret 'essential skills' in this context as referring only to the official Core Skills, or is SQA to focus on the term 'essential skills' and take a new approach to the certification of generic skills?

What is significant to this section of the report, however, is that there is no definition of core skills in *Skills for Scotland*, and, although there are references to the importance of various core and generic skills, there is no specific mention of the official Core Skills or of the Core Skills Framework in *Curriculum for Excellence*.

It is also worth noting at this point that developments in the UK tend not to have taken account of developments in other countries, usually because new ground was being broken. However, there has been continuing interest in generic/transferable skills, often referred to as transversal skills in other countries. Much of this is related to the curriculum and is not reflected in the qualification system, although work on the level descriptors of the European Qualifications Framework (EQF) has considered these skills in the context of outcomes and qualifications.

3 An international perspective

Core skills in other countries

Comparisons between UK systems — and especially the Scottish system of education — and systems in other countries are difficult because:

- ◆ many of the potential comparator countries either have separate vocational schools or distinct vocational lines which can be followed in schools
- ◆ most of them have systems where much of initial VET is delivered non-formally in the workplace
- ◆ the word 'qualification' seldom relates to the Scottish conception of a qualification
- ◆ the form of assessment used is not usually on the mastery model adopted with *Action Plan*

Thus, where a generic skill or core behaviour is said to be incorporated into qualifications, this is unlikely to imply a requirement for outcome-by-outcome assessment of the skill or behaviour to achieve the qualification.

Some accounts of other countries education systems have already been given in reports to SQA, notably SQA Research Bulletin Number 2, *Key Competencies — Some International Comparisons* and in appendices to Lilian Cameron's report *Core Skills — Investigation of the Need to Refresh Numeracy, Information Technology and Working with Others*. In what follows, the focus is on what can be established about types of approach. A detailed charting of what constitutes core skills in a selection of countries is included in the core skills grid in Annex A of this report.

In 2005, Cedefop (the European Agency to promote the development of vocational education and training in the European Union) commissioned the Centre for European Research on Employment and Human Resources at Toulouse Business School to develop a typology for knowledge skills and competences. A brief account of some of the findings in this Cedefop paper, which relate to practices in specific countries, is given in Annex C.

In a 2003 paper for the DfES group working on 14–19 reform, John West examines the systems in nine countries: Australia, Canada, Denmark, Finland, France, Germany, Netherlands, Sweden and the USA. In a section on key skills, he notes that:

'In most of our countries there has been concern of some sort or the other about the level of 'wider' skills within all forms of secondary education. In many cases, this concern emanates from employers, who consider that young people do not have the flexibility, appreciation of the conventions of working life or the personal qualities that will make them effective in modern business conditions. But some concerns go beyond this: that discipline-based academic subjects, or at least the way they are conventionally taught, do not foster the self-motivated learning and study skills that are needed in higher education; that too little is done to develop civic awareness; and that the spirit of enterprise should be developed.'

(14–19 Education and Training in Other Countries, p13)

He reports that in all these countries the main concerns about the range of student competences are tackled either by the inclusion of compulsory subjects (such as continuing mathematics and language) or by the inclusion of experiences likely to promote certain competences (such as work experience, project work and private study), but notes that he has found almost no direct use of generic competences for syllabus construction or for assessment.

However, research for this report, looking at a similar range of countries, found a number of apparent exceptions to Winterton's findings and these examples of countries which appear to be trying to use generic competences in developing syllabuses and in assessment are noted in Annex D.

The OECD and the European Union

In 2005, the OECD published the results of a project — the DeSeCo project — designed to develop a structure of key competences which could be used as part of the influential Programme for International Student Assessment (PISA) which has been running since 1997. The idea is that PISA can be extended into new domains of competency related to life and learning. DeSeCo identifies three broad categories of competence: functioning in socially heterogeneous groups; acting autonomously; and using tools interactively.

This work still seems to be at a high level of abstraction such that it would not be practicable to re-orientate the existing Core Skills Framework to take account of the three broad categories of competence without a radical re-adjustment.³ It appears that while the DeSeCo report will be taken account of in developing Curriculum for Excellence, it is unlikely to provide the detailed specifications which will be required. Similarly, while it would be possible to do some kind of rough matching of the official Core Skills against DeSeCo, it is not clear how this would assist SQA, since what DeSeCo offers (like Curriculum for Excellence) is a new approach to thinking about generic skills, rather than a checkable list.

In December 2006, the EU Parliament and Council recommended that Member States should develop the provision of key competences for all as part of their lifelong learning strategies, using the 'Key Competences for Lifelong Learning — A European Reference Framework' as a tool. This action should include initial education and training, offering all young people the means to develop the key competences to a level that will equip them for adult life and form a basis for further learning and working life. The national systems should also ensure that adults are able to develop and update their key competences throughout their lives in a way which recognises the differing needs and competences of adults.

The Reference Framework sets out eight key competences:

- ◆ communication in the mother tongue
- ◆ communication in foreign languages
- ◆ mathematical competence and basic competences in science and technology
- ◆ digital competence
- ◆ learning to learn

³ In her excellent and wide-ranging report on Core Skills for SQA (2006), Lilian Cameron did make a link between the core skills and the DeSeCo findings.

- ◆ social and civic competences
- ◆ sense of initiative and entrepreneurship
- ◆ cultural awareness and expression

The recommendation states that all of these key competences are considered important, but that many of the competences overlap, interlock and support each other. However, it goes on to make two elaborations:

- 1 that the fundamental basic skills of language, literacy, numeracy and information, and communication technologies (ICT) are more fundamental than the others
- 2 that critical thinking, creativity, initiative, problem solving, risk assessment, decision taking, and constructive management of feelings, pervade all eight key competences. Elsewhere (consultation paper, *Schools for the 21st century*), the European Commission makes the distinction between 'traditional' competences (numbers 1–4) and 'transverse' competences (numbers 5–8)

Further, the level descriptors for the European Qualifications Framework draw heavily on levels of problem solving, responsibility and autonomy in addition to knowledge, understanding and practical skills. This is a feature which it shares with the SCQF.

In most countries around the world where education and training has been under review, there has been some level of concern about the development of generic skills. In many cases, as in the UK, this arises from the views of employers that young people are not capable of taking on work roles: they lack an understanding of work, and do not have sufficient flexibility or other personal attitudes or aptitudes needed to contribute to a modern business. In most cases, this has been accompanied by a belief that the form of schooling is not encouraging self-motivated learning and study skills, civic awareness and enterprise.

4 Core skills and employability

Employers' perceptions

This thread in the development of the official Core Skills is probably best characterised by an enduring belief that initial education and training do not develop the skills which are required in the workplace, leaving employers to do more training than they should. Among the respondents to the Modern Apprenticeships consultation, for example, one comment made was that if the official Core Skills were achieved fully in schools there should be little need for them to be delivered as part of the Modern Apprenticeships for younger apprentices.

This finding seems to be at odds with the findings of Futureskills Scotland, cited above, that most employers are satisfied that most applicants for work are well prepared. Overall, employers are positive towards their recruits. In 2006, for example, 61% of workplaces which had recruited a school leaver as their first job reported that they were well prepared for work. The figures for college leavers and university graduates were 75% and 81% respectively. The Futureskills report notes, sensibly, that preparedness in terms of softer skills may be a function of age and maturity as well as the length or nature of the education processes concerned. These findings from Futureskills Scotland about generic and core skills has been repeated in each survey since the first in 2002.

This apparent contradiction is not surprising since employers' views are extremely difficult to gather. For example, the perceptions of big employers with well-developed induction and training programmes may be different from those of small employers who need recruits to be fully engaged and productive from the first day; also views on certain matters will vary — along with skills needs — between economic sectors.

Nonetheless, the negative view of the outcomes of education appears to drive much of the thinking on skills by policy-makers in Scotland. A common statement of employers' views is that they would be happy to train new employees in occupationally specific skills if the individuals have the generic skills which allow them to undertake training. For example, Futureskills Scotland reported in 2007 that employers are less concerned about school leavers' technical skills than about their soft skills and attitudes, and many say that they do not expect them to have technical skills:

'Provided young people had the correct attitude to work, they were generally able to develop these skills when in work. However in some cases this could take a very long time and difficulties around young people's abilities to generalise skills across tasks and upgrade their skills had been experienced.'

In fact, where employers consider that school leavers lack preparedness, this is most commonly associated with a lack of understanding of what working life entails and a poor attitude towards work, characterised by frequent absence, poor time-keeping, a perceived lack of responsibility to their employer, and a poor attitude to career development and training. These are not potential outcomes of assessable core skills. However, deficiencies in communication skills (cited by 64% of respondents — the highest level of agreement on deficiencies), organisational skills and team working were also felt by some employers to

contribute to a lack of preparedness among school leavers — and these are core skills.

In relation to skill shortages, employers reported that unsatisfactory applicants for jobs lack the skills of oral communication, customer handling and problem solving. Skill gaps are reported to be associated with weaknesses in the skills of planning and organising, customer handling, problem solving and team working. Since the Core Skills Framework has now been part of the secondary school curriculum since 2000, perceptions might have been expected to improve, but in fact more employers are reporting deficits in communication, problem solving and team working in 2006 than in the first Futureskills survey of 2002.

SQA's own commissioned research in 2005 (Research Bulletin 10) found that employers ranked eleven soft skills (suggested by the researchers) in this order: oral communication; customer handling; team working; strategic management; problem solving; planning; writing; advanced IT; basic IT; numeracy; and literacy. The researchers also found that communication skills of some kind were almost universally seen by employers as lacking in holders of SQA qualifications. What is significant about the ranking is that employers placed three skill sets which are not core skills in high positions — customer handling #2, strategic management #4 and planning #6 (although planning is arguably a feature of problem solving which came immediately above it in the list). Beside this, however, it must be noted that whilst between 40% and 50% of employers were reporting between 2002 and 2004 that school leavers were not well prepared for employment, in 2006 that figure had risen to 61% across the four years. Unfortunately, a question relating satisfaction directly to soft skills was only asked in 2002.

Other SQA commissioned research of the same year (Research Bulletin 13) showed that managers in four out of five occupational sectors studied — financial services, food manufacturing, hospitality and personal services — placed a high value on the core skills competence of their employees and used a variety of methods to estimate the core skills competence of applicants for jobs at different levels. Even in the fifth sector — construction — managers were attempting to estimate basic core skills competence from previous work experience and/or performance at interview. However, the complete picture was, as elsewhere, less clear than this might suggest, for little or no reference use was being made of applicants' Core Skill Profiles or of any workplace Core Skill Units which they had achieved. The researchers concluded that this was partly due to employers' lack of knowledge of Core Skill Profiles and workplace Units, and partly because they were distrustful of the value of official Core Skills gained in schools.

There is also continuing anecdotal evidence from SQA officers that when it comes to the design and delivery of qualifications or programmes such as Modern Apprenticeship frameworks, employers are more concerned with the delivery of the technical elements of the framework, than with the Core Skills from the framework. These apparent contradictions, suggest that the issues which underlie the collection of data are very complex and one of the complexities seems to lie in the use of language and this is picked up in the next section.

Core skills and youth training

At the same time as initial work on core skills was being undertaken by the UK Government in the 1980s, other work on training outcomes was under way which

would lead to the introduction of National Vocational Qualifications (NVQs) and SVQs. Occupational competences were to be derived for whole sectors by industry bodies, and qualifications at five defined levels were to be developed from these competences, creating a framework of VQs. A standardised methodology for identifying competences — functional analysis — was quickly adopted and this put the VQ development programme at odds with the further development of discrete core skills, since they were not functionally derived. However, work did continue to explore issues of generic competence and transferable skills. The tension between functionalism and core skills has continued as a factor right up to the present, usually being resolved by the process of signposting the opportunities for developing the official Core Skills within suites of competences. It is a moot point whether signposting the Core Skills would survive if it were not an accreditation requirement, although it is true that there are considerable differences in the attitude taken to the official Core Skills in different occupational sectors.

The different versions of youth training schemes up to and including Modern Apprenticeships (which were introduced in Scotland in 1996) have been among the most consistent users of the official Core Skills and appear to have engendered positive feelings about Core Skills from the framework, as is shown by two very focused investigations.

An online consultation undertaken by the Scottish Executive in 2006 found that the official Core Skills were seen as extremely important by most of the 70+ respondents. They were seen as ‘essential to employment and employability’ and the official Core Skills were reported to improve the performance of individuals in their existing job as well as helping them in other posts, not necessarily within the sector currently employing them. Core Skills were also thought to help employers ensure they had a skilled workforce. On the other hand, there was some feedback about the way the Core Skills Framework was applied to Modern Apprenticeship programmes, with a number of correspondents querying the level at which some of the official Core Skills were included or even whether all these Core Skills were always appropriate. (Numeracy and IT were the most common Core Skills from the framework cited as either inappropriate to the sector or set at too high a level.⁴)

However, there was almost unanimous support for embedding the official Core Skills within the VQ at the heart of Modern Apprenticeships, although support was given on the basis that the Core Skills should follow automatically if the appropriate VQ is incorporated — in other words, there should be no inclusion of Core Skills additional to what could be shown to be already covered in the VQ. Some respondents also commented that there was a need to ensure that the individuals could understand where the Core Skills were relevant to their job, which suggests an underlying reservation about embedding. Most respondents were reported as feeling that the mapping exercise for embedded core skills should be audited or checked, with most suggesting that SQA or another awarding body should carry out this function.

⁴ This is an issue which Scotvec previously had to address in relation to GSVQs, where a blanket and uniform requirement for core skills turned out to have unexpected and negative effects on the numbers of individuals qualifying in at least one previously well-established and stable area of training. It has been a continuing policy issue for SQA.

In its response to the consultation, SQA stated that embedding the official Core Skills within VQs can be an appropriate way of proceeding, providing that appropriate checks are made to ensure that the Core Skills are assessed in sufficient detail, and in a sufficiently general context. These are particularly important caveats.

An evaluation of Modern Apprenticeships and Skillseekers, commissioned by Scottish Enterprise, also in 2006, shows that trainees on Modern Apprenticeships perceived that participation in the Modern Apprenticeship programme has developed their core skills and that employers support that finding.

Trainees' perceptions of benefits to Core Skills

	Skillseekers	MA 16–24	Adult MA	Overall
Communication	84%	84%	72%	80%
Working With Others	84%	80%	62%	75%
Problem Solving	67%	64%	62%	64%
Numeracy	53%	47%	35%	44%
IT	64%	54%	52%	56%

Employers' perceptions of the impact on staff Core Skills

	Skillseekers	MA 16–24	Adult MA	Total
Communication	79%	79%	82%	79%
Working With Others	80%	80%	72%	79%
Problem Solving	66%	70%	74%	69%
Numeracy	47%	44%	35%	45%
IT	41%	41%	42%	41%

Whilst this is encouraging, it must be set beside a lack of evidence of employers using the Core Skills Framework for other purposes or finding any benefit in doing so. For example, research commissioned by SQA showed that, while soft skills were widely used in both recruitment adverts and job specifications, the official Core Skills and Core Skills levels did not feature widely.

Nonetheless, the evidence does seem to show that the skill clusters which make up the Core Skills Framework do have value to employers and employees — and this seems likely to be enhanced by the recent revisions agreed.

Employability skills

The idea of employability skills became current in the late 1990s with papers produced by CBI and CBI Scotland. The Confederation has been quite consistent in its use of the term 'employability', although it has been subject to some

refinement. In the early papers, the defined Key/Core Skills were explicitly referred to as an aspect of employability skills, as were basic skills. In the recent document known as the CBI manifesto (2006) neither core skills nor employability skills are referred to, but the following statement is made: 'It is not easy to anticipate specific requirements as Scottish businesses evolve, but there are skills that every business requires from every new employee, in particular:

- ◆ literacy and numeracy
- ◆ communication and team-working
- ◆ problem solving
- ◆ adaptability and flexibility
- ◆ awareness and understanding of enterprise'

The term 'employability skills' has come to be adopted to cover the generic skills required by employers and is seen by some as offering an alternative to core skills. The term seems to originate with CBI papers from the late 1990s, after the initial work on core skills, but parallel with work on the development of Core Skill Frameworks north and south of the border. The fact that this concept has continued to grow in influence in spite of core skills developments shows that the official Core Skills are certainly not the full answer to employers' needs. The idea of employability skills was either used or recognised by the individuals interviewed for this research. It is also defined in *Skills for Scotland*. However, widespread use does not always mean that there is a clear identification of or agreement about its meaning — unlike the official Core Skills.

Indeed, the definition of 'employability' changes over time and between users, although it should be noted that the CBI has been fairly consistent in its use of the term — refining, rather than changing, its conception. It also appears that CBI Scotland takes a slightly different approach to the technicalities, presumably because it is supportive — at least in principle — of the Core Skills Framework.

Viewed over the years, the following features of employability are notable:

- ◆ Sometimes the official Core Skills are taken to be included in the skill element of this definition, sometimes only some of the skills clusters are referred to.
- ◆ Basic skills, such as literacy and numeracy, have almost always been included.
- ◆ Customer care skills and practical vocational skills are sometimes included.
- ◆ Although team working and ITC are always included, it is not clear that they refer to the same skill clusters as the official Core Skills.

Employability skills are defined in terms not only of generic skills, but also of the attributes, attitudes and behaviours that are necessary for an individual to gain employment and function effectively in the workplace. Indeed, the non-skill elements of the concept sometimes seem to outweigh the skill element. The Core Skills Framework, on the other hand, is not primarily intended to include attributes, attitudes and behaviours since, although it may be possible to educate individuals towards certain attitudes and to train them to behave in certain ways in certain circumstances, these have not normally been seen as appropriate outcomes for assessment and certification. Reporting attributes, attitudes and

behaviours has more usually been seen as the role of the reference and the personal record, such as the National Record of Achievement and the Progress File. (Some areas of overlap do exist, however, and these are identified in Section 6 of this report.)

Thus, from an awarding body point of view, employability skills are too wide-ranging to be practicable for certification, while for many employers the official Core Skills are too narrow for their perceived needs. Indeed, the fact that the concept of employability skills came to prominence after the full implementation of Core Skills north and south of the border, and the fact that it has continued to grow in influence, can be seen as evidence that the official Core Skills do not provide the full answer to employers' needs.

In this context, however, it is worth noting that *Skills for Scotland* has defined 'skill' as follows:

'A 'skill', in its narrower sense, is an acquired capability that enables an individual to engage in particular activities. It is the ability, competency, proficiency or dexterity to carry out tasks that comes from education, training, practice or experience. It can enable the practical application of theoretical knowledge to particular tasks or situations. 'Skill' is also applied more broadly to include behaviours, attitudes and personal attributes that make individuals more effective in particular contexts such as education and training, employment and social engagement. 'Skills' in the narrower sense are generally assessable. In the broader sense they are not readily assessed.'

From the point of view of those engaged with the issue of whether and how to assess and certificate generic skills, this may be interpreted either as making a distinction which is supportive of the current national position on core skills, as represented by the Core Skills Framework; or as creating a definition of skills which is so broad that it potentially undermines that position. In either case, it appears to offer a prompt or opportunity to re-examine the nature and scope of the framework and the Core Skills it contains.

5 Basic skills and ‘functional’ skills

Basic skills

In its original form, the Core Skills Framework consciously excluded basic skills. In fact, being literate and numerate could have been seen as an entry requirement for any of the Core Skills modules.

The political importance of basic skills was raised by the Moser Report in 1999, and in 2001 the Scottish Executive’s Strategy for *Adult Literacy and Numeracy in Scotland* was published. The Moser Report related only to England and had a high profile in that country. It led to work being undertaken to establish new standards and qualifications for literacy and numeracy — the *Skills for Life* developed by the Qualifications and Curriculum Authority (QCA). It may be that the publication of the Moser Report was also a driver for action in Scotland which led to the *Adult Literacy and Numeracy in Scotland (ALNIS)* strategy, but in any case, the approach taken north of the border had a much lower profile. While Scotland undoubtedly has problems of basic literacy and numeracy to address, Scottish employers actually cite them less frequently than the Core Skills as areas of skill shortage (eg in Futureskills Scotland surveys).

By 2000, the Core Skills Framework had been extended by the Higher Still Development Programme to include Access levels so that when an adult literacy and numeracy curriculum framework for Scotland came to be developed, SQA was able to provide a mapping to the relevant official Core Skills standards to be incorporated into this guidance. This allowed learners’ progress to be measured and provided a route to certification where this was appropriate. This approach, which could also be described as relatively low profile, is important in that it overtly offered a particular education and training sector the possibility of using the Core Skills Framework in a variety of ways — for planning, for developing curricula, for diagnostic assessment and for formative assessment for its own sake. These are additional to the standard uses — ie for summative assessment and certification.

A review of adult literacy and numeracy in Scotland (ALNIS) is planned, and at the time of writing a consultation document is under development. It appears that the official Core Skills will continue to be cited as the way to gain accreditation (certification) for learning, thus confirming the present situation.

‘Functional’ skills

The concept of ‘functional’ skills was introduced in 2005 in the 14–19 Skills White Paper in England in response to continuing employer dissatisfaction with the skills of school leavers. The White Paper also featured Thinking and Learning Skills and Personal Skills, but the functional skills — in English, mathematics and ICT — were given prominence. In 2006, the Leitch Report called for reforms to GCSEs to improve functional literacy and numeracy. As a result, QCA is developing a single framework for personal, learning and thinking skills for all learners aged 11–19 and standards for ‘functional skills’ for learners of all ages. This will merge the basic skills (*Skills for Life* which they published in 2001) and key skills in the relevant areas and replace the core skills terminology of communication, literacy and numeracy with the more traditional academic terms

of English and mathematics. There will be a set of qualifications in these skills — as there are Key Skills qualifications at present — but the new skill standards will also underpin and support other programmes and qualifications, including GCSEs, specialised diplomas and apprenticeships. The new skills will be suitable for a wide range of candidates, including young people involved in GCSEs at school, and adults involved in learning programmes to prepare them for work.

The definition of ‘Functional Skills’ is that they give individuals the essential knowledge, skills and understanding to operate confidently, effectively and independently in life and work. They should enable individuals of any age to participate and progress in education, training and employment, and in addition, develop the attributes, attitudes and behaviours which will enable them to make a positive contribution to the communities in which they live and work.

At the time of writing, it is planned to introduce Functional Skills in England in 2010, following a two-year piloting process at entry level and levels 1 and 2 of the National Qualifications Framework.⁵ QCA is saying that assessment ‘will be based primarily on task-based scenario questions with a limited duration and delivered in a controlled environment.’ The assessments will use and reinforce skills-based, problem solving learning techniques. Functional skills will replace the Skills for Life and Key Skills qualifications; what will happen to the wider Key Skills is less clear.⁶

Clearly, this will have implications for NVQs and SVQs and for Modern Apprenticeships. The main issues for the Scottish Government appear to be: (i) how employers will react to the new situation; and (ii) how the interests of Scottish Modern Apprentices can be maintained. There is undoubtedly a question about whether employers will find the new situation — having to deal with ‘functional’ skills in England, Wales and Northern Ireland⁷ and the Core Skills in Scotland — more or less acceptable than the current situation — dealing with Core Skills and Key Skills. At present, there is some dissatisfaction about having to deal with two systems, and this has led to some cases where Scottish employers, or UK employers operating in Scotland, have opted to use English qualifications rather than Scottish ones. This has a direct effect on their employees — for example, they lose the advantages of Scottish cumulative certification; it also has the less direct effect of lowering the profile of Scottish qualifications. There are some employers who prefer Core Skills to Key Skills and have opted for Scottish qualifications as a result, but these do not offset the losses. Will the advent of ‘functional’ skills affect this, and if so, to whose advantage?

⁵ At the time of writing, neither the Welsh nor Irish authorities had decided whether to adopt these new skills. Wales, in particular, has an investment in the existing Key Skills, having built them into the Welsh Baccalaureate.

⁶ The DfES funded leaflet, *The Value of Wider Key Skills in Work-based Learning*, makes an interesting distinction between **threshold employability** (the skills needed to start a job and get on the first step of the ladder) and **sustainable employability** (the skills needed to perform really well in a job, remain in employment and progress through a career). It makes a number of vague references to future development and the place of the wider key skills, but appears to associate these skills with post-school, work-related training.

⁷ This assumes that Wales and Northern Ireland will adopt Functional Skills. If either or both of these jurisdictions were to choose to develop their own sets of generic skills, then the situation would be extremely challenging to employers’ sector skills councils and awarding bodies with a wide geographical spread.

QCA recognises some qualifications as proxies for Key Skills qualifications, allowing some candidates to avoid repeating learning and assessment. Equivalences between Core Skills and Key Skills were established in 2001, allowing Core Skills Units to be recognised as proxies for Key Skills. It is not clear at this stage whether QCA will establish proxies for 'functional' skills qualifications as they currently do for Key Skills qualifications or whether the relevant official Core Skills would be likely still to get proxy status. If the answer to either of these question were to be 'no', this would be likely to disadvantage some Scottish learners, such as Modern Apprentices and army cadets.⁸

⁸ An additional impetus for establishing equivalences between Core Skills and Key Skills was to assist UCAS in establishing points values for both Core Skills and Key Skills. This was successfully achieved, although there is no evidence of universities taking account of these points. UCAS is continuing to look for ways in which the development of generic skills can be drawn to the attention of admissions officers (see Annex A).

6 Core skills and the curriculum

Higher Still

Alongside the mainly VET-related core skill developments described so far in this report, there is a thread of development which relates to the school curriculum. This takes the form of recognition that there are outcomes of education beyond subject learning — variously called cross-curricular themes, transversal skills and knowledge, socially significant attributes, attitudes and behaviours, and so on. The key question for curriculum experts and policy makers is how to define and deliver these; a secondary question is whether they should be assessed and certificated; how this should be done may well be a third level question.

Before the publication of Higher Still, the distinction between curriculum and qualifications was well established. For example, in the 1970s two committees were set up to explore content and assessment in parallel — Munn and Dunning — leading to the introduction of Standard Grade Courses, and also to new curricular guidance for the senior years. Similarly, at that time, the Scottish Examinations Board (and its previous incarnations) had a narrower remit in relation to the development of syllabuses and course arrangements than SQA enjoys.

This was not the case with VET and Scotvec (and its predecessor bodies) had relatively extensive responsibilities for the content of the courses which led to certification and for the development of new provision. The success of Scotvec in managing the development of *Action Plan* and its direct and indirect spin-offs⁹ meant that the accepted model of curriculum change became biased towards reform which focused on qualifications.

Thus, when the Howie Committee was formed, its remit combined courses, assessment and certification, and when Higher Still was launched in 1994, it took the form of a qualifications reform with curricular implications.

Core skills were given a central place in the Higher Still policy document. The Scotvec Core Skills Framework was adopted and adapted by a team from the SCCC to turn it into a more symmetrical and school-friendly structure. PIPs became Working with Others, and Core Skills components were introduced, at least partly to make it easier for schools to manage the delivery and assessment of the Core Skills within subjects.¹⁰ This work was subject to two rounds of national consultation.

Initially the approach taken by the Higher Still Curriculum and Assessment Group (with members from a wide range of stakeholder organisations) was that the Core Skills were necessary because of the kind of perceived deficits in education outcomes which have been described above. In other words, the Core Skills were needed because they were not being delivered by schools. This was obviously controversial — apart from another consideration, it implied that Standard Grade and Higher English were not creating effective communicators and Standard

⁹ Particularly the SVQ Development Programme; the Advance Courses Development Programme; TVEI provision; GSVQs; and the Scottish Wider Access Programme (SWAP).

¹⁰ Scotvec previously distinguished between written and spoken communication at the basic stages — mainly to accommodate Adult Basic Education programmes, but otherwise worked on the basis of outcomes and units.

Grade and Higher Mathematics were not developing numerate individuals — at least in some common understanding of these terms.

‘Embedding’

Acting on feedback from a range of stakeholders (school inspectors, civil servants dealing with the school curriculum, and schools themselves) the Higher Still Development Programme changed its initial position and came to accept that the Core Skills were already being developed in the main school subjects. As a consequence, the programme moved to what came to be called the ‘embedded’ model. This title sounded as if the Core Skills were to be built into the new courses which were being developed, but in fact it was more of an auditing model aimed at bringing out the presence of the Core Skills in subjects. Subject expert groups, led by subject specialist HMI, were invited to make claims for their courses against the Core Skills Framework and these claims were validated by panels of Core Skill experts. Because it was assumed that there would be pressure on students to acquire core skills, subject specialists were concerned that the uptake of their subjects would be adversely affected if they could not claim high levels of embedded core skills. This process led to some compromises — ie changes to courses and changes to the Core Skills Framework — but also to some genuine embedding where the subject claims were not validated. Concerns raised at the time about the extent to which these ‘embedded’ Core Skills could be deemed transferable — and indeed about whether the approach actually adds value to the curriculum, have persisted to the present.

Automatic recording of Core Skills Profiles on Scottish Qualifications Certificates was introduced in 2000 and in the event it became apparent in a dramatic way that few, if any, candidates had been informed about embedded Core Skills and Core Skills Profiles by school or college staff. In the uproar about inaccurate certificates which occurred in that year, a number of interesting issues about Core Skills Profiles arose, but were possibly not given sufficient attention. For example, the situation where candidates were being certificated with the Core Skills they were unaware they had, might be seen as justifying the concerns about the transferability of embedded Core Skills. There were also issues about the value of a Core Skills Profile which might be more dependent on the subjects taken by a student than on his/her actual performance in the Core Skills which were being profiled.

Similar issues arose south of the border in relation to Key Skills and related school subjects. This led to the introduction of ‘proxy qualifications’ — ie qualifications deemed to carry key skills and therefore meeting any requirements for the relevant key skill achievements. The approach taken was less comprehensive and the process involved was less detailed than that instituted in Scotland and there were concerns among some of those who had been involved in the development of Key Skills that it also led to a weakening of the original intent. Scottish Core Skills Units and the main Courses which carried them were accepted as proxies some time later. In spite of all this, there is also anecdotal evidence that considerable scepticism about embedding has been, and continues to be, expressed by English bodies involved with Key Skills and Core Skills. However, there is no reason to believe that learners who use proxy qualifications to avoid taking Key Skill assessments have any greater understanding of Key

Skills than Scottish learners, who benefit from embedding, have about Core Skills.

Curriculum for Excellence

A continuing and related theme among curriculum experts — with a history at least as long as that of core skills — is the question whether curricula should continue to be subject-based as opposed to being based on transversal themes or capacities. In Scotland, this thinking is reflected in the policy paper *Curriculum for Excellence* with its aspiration to ‘enable all children to develop their capacities as successful learners, confident individuals, responsible citizens and effective contributors to society’. At first sight this might appear to be a move in the direction of a new Core Skills Framework. However, it also appears to be true that the thinking behind Curriculum for Excellence is less immediately concerned with assessment and qualifications than Higher Still. There will still be a need for measurement of achievement, but it seems that the strategic emphasis will be more on the experience of the learner and less on the kind of standardisation and measurement of outcomes which was the concern of Higher Still.

In articulating this vision, considerable emphasis is placed on the development of essential skills and capabilities, foundation skills, skills for work, skills for life, and the skills necessary to prosper in a changing society — and it is notable that the term ‘core skills’ is avoided. All of these skill clusters must come together in fostering the four capacities, making each student a successful learner, a confident individual, a responsible citizen, and an effective contributor. SQA formally shares this vision and sees it as important for all those engaged in learning — in communities, workplaces and colleges as well as schools — but the question remains how and where the Core Skills Framework figures in this.

At present, work on Curriculum for Excellence has been concentrated on the 3–15 stage, where the assessment and certification of core skills is not an issue; and the nature of the ‘curriculum architecture’ which will structure the senior stage is still unclear. It seems likely that there will continue to be an emphasis on subjects in this stage, but the delivery of these subjects will have to take account of the four capacities and whatever flows from them. It is clear that there will be no attempt to turn the capacities directly into measurable outcomes, although a number of abilities and attitudes have already been listed under each capacity.

It is not difficult to make an initial indicative mapping of the official Core Skills against each ability, estimating: (1) where it would be fully covered by the Core Skill; or (2) where it would be covered by the Core Skill at some levels (usually upper levels); where it should be covered (3) at all, or (4) at some levels if the Core Skill is delivered in a specific context; and where the Core Skill, (5) at all or (6) some levels, should at least contribute to the development of the ability or attitude. This initial mapping is set out in Annex E.

The best matches relate to the abilities associated with successful learners and those associated with effective contributors. As currently stated, the abilities associated with confident individuals are very general, while being a responsible citizen is framed largely in terms of knowledge and understanding, which makes a match with the official Core Skills difficult. It is harder, however, to see how the Core Skills can be usefully charted against most of the attitudes listed under the capacities, since these attitudes will contribute to, but may not determine, the

success or level of success in acquiring and demonstrating the Core Skills. Like learning in other areas, the conscious acquisition of core skills can — and should — result in improved motivation for learning, increased self-respect, a more enterprising attitude, and so on. The link is contingent in most areas, but there are component skills which rely on attributes, attitudes and behaviours associated with the exchange of ideas, involvement and collaboration, particularly Oral Communication, Reviewing and Evaluating and Working with Others.

Although there is no reason to believe that the analysis of the four capacities into abilities and attitudes will be the final one, it is probably fair to assume that it will inform future developments. It is important that dialogue should take place at an early stage between those concerned with curriculum development of the kind envisaged by the writers of Curriculum for Excellence and those with expertise in assessment and certification. The dialogue should include: (a) the range of abilities and attitudes which the curriculum will be expected to develop; (b) which of these could and should be subject to assessment and certification and what the nature of that assessment and certification should be if it is to be practicable and useful; and (c) how this relates to the future of a Core Skills Framework which has a role in most sectors of education and training in Scotland. This dialogue should be focused on the definition of Core Skills and the overriding purpose of the national Core Skills Framework — issues which are explored in the final two sections of this report.

7 Issues

The effectiveness of the Core Skills Framework

In a paper to its Advisory Council in 2006, SQA summarises research to date with an acknowledgement that the Core Skills Framework is not significantly affecting national performance in the official Core Skills or meeting the needs of employers. The paper links this to a failure to create an awareness of the Core Skills. SQA goes on to say, however, that there is also evidence of very effective practice in the delivery of the Core Skills in schools, colleges and the workplace.

This report has shown that the use of core skills as a basis for curriculum design is, in fact, internationally wide-spread and growing. What is unusual in Scotland is the focus on assessment and certification — in other words the existence of a Core Skills Framework which is focused on assessable outcomes.

One important feature of this Core Skills Framework, which is a legacy of Higher Still, is its role in providing a link between stages and sectors of learning and helping individuals to understand lifelong learning. A desire to improve access, progression, articulation and coherence is dominant in education and training policy in Scotland from the 1980s onwards and the Core Skills Framework was seen as an instrument which would help to bring about improvement in these areas. As noted in the introduction, SQA was a natural home for the Core Skills Framework in that it had direct dealings with every sector of education and training. And work which SQA has undertaken on the Core Skills Framework since Higher Still has always been undertaken with a consciousness of this aim.

The way the Core Skills Framework is elaborated and deployed should allow the differences between the sectors to be recognised and valued while maintaining a coherent approach to the development, recognition and use of the Core Skills it incorporates. In some ways it acts as a reference framework like the SCQF, the level descriptors of which incorporate most aspects of the official Core Skills.

The SCQF and the Core Skills Framework are both instruments which link sectors and have a focus on progression within and between sectors. It seems likely, therefore, that the Core Skills Framework could benefit from a closer association with the SCQF — and through it, with the European Qualifications Framework. The SCQF has a long way to go before it can be judged fully successful, but it is probably true to say that, while the SCQF is usually seen as independent, truly national and inclusive, the Core Skills Framework, if it is known at all, tends to be seen as SQA-owned and rather narrow. Some of the reasons for this are given in the next section.

Summary of user-level issues

Core skills are a requirement in some programmes, but although there is evidence of good practice in many centres, particularly further education colleges and in a number of subjects and sectors, there is also evidence that the requirement to ensure that the official Core Skills are covered in some way has also led to the latter approach in centres.

Whilst there is evidence that learners who understand the concept of core skills are supportive of it and feel that they have benefited from it, there is also

evidence that many learners who are certificated as having the Core Skills are unaware of this, or do not understand what the Core Skills Profile is intended to signify. This is a particular problem where the Core Skills are embedded. And where the Core Skills Profile is acknowledged as an issue in personal planning, there is anecdotal evidence that it has the potential to encourage the collection of Core Skills, like loyalty points, rather than the acquisition of the skills themselves. There is also an issue of equity, since the individual's profile will depend on the subject chosen and may not reflect his/her actual abilities in relation to these skills.

As far as value of the Core Skills Profile for progression is concerned, employers' use of the Core Skills Framework in recruitment is limited and inconsistent and there is no evidence of the use of the Core Skills Profile in higher education admissions processes. Further education colleges appear to be more likely to refer to the Core Skills Framework and/or the Core Skills Profile in guiding students and undertaking diagnostic or formative assessment at entry and exit points, but there appears to be no firm evidence as to how widely or well this is done.

Most of the support for the Core Skills Framework seems to come from the supply-side and there is some evidence that employers would not support the use of the Core Skills Framework in the design of programmes and qualifications if it were not required as a matter of policy. Nonetheless, SQA's research suggests that there is support for the skills which are currently included in the Core Skills Framework and that these are valued by employers who have engaged with them.

Summary of policy-level issues

While there appears to be a continuing, and perhaps growing, agreement among those concerned with education, training and economic development that generic skills are important in society and in work, there is no evidence of consistent thinking on generic skills at policy level.

Whilst most recent Scottish policy documents for curricula and skills development mention generic skills, and may even list some, or all, of the official Core Skills, they do not give the Core Skills Framework as such a central role. And most of the current thinking on generic skills includes skills or attributes, attitudes and behaviours which are not included in the Core Skills Framework.

There does not appear to be a simple nationally agreed definition of core skills as such, or of the Core Skills Framework. As noted previously, even *Skills for Scotland*, which devotes an extended annex to defining its terms, lists the official Core Skills, but does not attempt to define the concept of core skills. Similarly, it is not clear from the available literature what the prime function of the Core Skills Framework is. For example, is the overriding intention for the framework to have a broad effect, like identifying and defining all the generic skills which need to be addressed in education and training programmes, or does it have a more focused (and therefore narrower) purpose such as underpinning the quality assurance of the delivery and assessment of those Core Skills which are common to all education and training?

One reason for the lack of statements of definition and purpose could be that these are already taken for granted. The main reason for believing this to be the case would be the relative stability of the Scottish Core Skills Framework, which could be seen as demonstrating continuity based on consensus about core skills.¹¹ In fact, as this report has shown, the consensus seems mainly to centre on an overall perception that individuals need to develop core skills and that these should be formally recognised. This also appears to be supported by a general consensus on the definitions of the actual Core Skills which appear in the framework. However, there appears to be less agreement on what should be in the framework or how central it should be to education and training.

Similar issues arise about the clarity and purpose of the Core Skills Profile on the Scottish Qualifications Certificate. Is it intended to provide a positive and advantageous record of achievement in the official Core Skills for those seeking admission to further and higher education and those seeking employment, or is it meant to provide a link between provision at different stages and in different sectors, or is it simply part of a process related to the inclusion of core skills in education curricula and training programmes?

Three ways forward

Background to the options

The question posed to the consultants at the beginning of this project was about the relationship between official Core Skills and *Curriculum for Excellence*. Much of the report has been concerned not only with the Core Skills, however, but also with the framework in which they are placed and the key question which has emerged from the investigation is about the future of the Core Skills Framework — its role, scope and status.

The report has suggested that the Core Skills Framework and Curriculum for Excellence are based on different ways of thinking about generic skills and that this difference is found in many countries around the world. The issue facing those working on Curriculum for Excellence is put very succinctly by the New Zealand expert, Rosemary Hipkin, in the title of a recent paper: *Assessing Key Competencies — How Could We? Why Would We?* Those leading on the development of Curriculum for Excellence are still at the stage of asking these questions in relation to the senior stages of schooling, and they are asking them in relation to a wide set of skills, attributes, attitudes and behaviours — the as yet unknown generic outcomes of Curriculum for Excellence — and not simply the present contents of the Core Skills Framework.

This report has also tried to explain the approach to generic skills which must guide SQA as an awarding body with quality assurance responsibilities, and to show how this approach has been related over time to other approaches to generic skills in the context of the curriculum, workforce development and lifelong learning in Scotland and the UK. It has shown how Higher Still tried to bring these threads together, and it has drawn attention to evidence which shows that that this was not entirely successful.

¹¹ This is in marked contrast to the history of core skills south of the border, where it was felt necessary to change the name to 'Key Skills', to distinguish between *main* and *wider* Key Skills, and where there is now work to change again to combine the main Key Skills with basic skills.

Curriculum for Excellence is a radical development, seeking to clear itself from all the factors which inhibit the development of four capacities in young Scots — to be successful learners, confident individuals, responsible citizens and effective contributors to society. This means taking nothing in the existing system for granted, including current approaches to generic outcomes of learning.

This background leads the consultants to offer three possible strategies for the future development of the Core Skills Framework — retrenchment, refinement and re-development.

- A Retrenchment would involve redefining the status and purpose of the Core Skills Framework to align it more with its origins and its main users. Essentially the framework would be intended to underpin the quality assurance of the delivery of the existing Core Skills for assessment and the Core Skills themselves would primarily be orientated towards use in vocational contexts.
- B Refinement would involve maintaining the Core Skills Framework as a means of articulating the development and certification of generic skills across all publicly-funded education and training (other than in university qualifications) and seeking to extend its use and improve its impact. There would be an explicit link to the generic outcomes of Curriculum for Excellence, but only insofar as this did not threaten the use of the framework in other parts of the system.
- C Re-development would involve creating an advisory framework elaborating the revised level descriptors of the SCQF and incorporated all the skills, attributes, attitudes and behaviours defined in Skills for Scotland as 'essential skills'. It would include the content of the existing Core Skills Framework and the generic outcomes of Curriculum for Excellence.

Each strategy has advantages and disadvantages, and these are discussed below. Each would need to be agreed with the Scottish Government and would require account to be taken of the reactions of the main users of the existing framework.¹² None of these options preclude the continued use of the existing Core Skills Units, and in most cases the various approaches to delivering and assessing Core Skills — through dedicated units and carrier units — would continue. However, the nature and role of embedding, auditing and signposting would need to be re-considered to some extent in each option, and each option would require a review of the current Core Skills Profile.¹³

In order to make clear how these strategies differ from each other, these are set out below in relatively extreme terms, but it may be that a way forward can be found which lies between A and B or between B and C.

¹² At this point it is worth referring back to the recommendations to SQA in *Skills for Scotland* — especially the ambiguous third recommendation to 'continue to ensure that essential skills are visible on qualifications'. The consultants feel that, in view of the ambiguity of this injunction, any of the options could be considered as meeting the recommendations, but that option C is most clearly linked to the terms of the national skills strategy.

¹³ Cf recommendation 8.2 (Paragraph 4.23) in the report of the National Qualifications Review Group in 2001: '*Core Skills profiles should fully reflect the skills held by students. The Group recommends that SQA reviews the arrangements documents for Core Skills Units and, if necessary, amend these, in order that outside interests and activities can be considered when achievement evidence is gathered. However, the Group recognises that there may be practical issues associated with this and it may not be possible to implement this recommendation fully.*'

Option A: Retrenchment

In this option, the Core Skills Framework would be taken back to its origins and would be primarily vocational in function. The main purposes of the Core Skills Framework would be: (i) to incorporate the standards and levels for the Core Skills which SQA certifies; (ii) to provide information and support for the consistent assessment of the Core Skills in the framework; and (iii) to provide a basis for the discussion and sharing of good practice in delivery and assessment. The Scottish Government would be able to use the framework, as at present, to promote the acquisition of the official Core Skills as a basis for entry to the workforce and lifelong learning; and SQA would continue to use the framework as an instrument for securing the quality of certificated Core Skills outcomes.

The distinctive feature of this option is that the Core Skills Framework would be defined in very practical terms. Other uses of the framework would be possible, but they would only be pursued if they did not detract from the uses set out above. Changes would only be made where they improved the framework in relation to the key purposes.

A number of corollary actions would need to be considered in pursuit of the key purposes in this option. In each case the intention would be to simplify and give focus to the Core Skills Framework.

- ◆ One such action would be to remove all core skill requirements in qualifications and programmes which could not be shown to have a good basis in market requirements.
- ◆ Another would be to remove embedding and auditing as a means to certification, although certification through portfolios of evidence would continue. Signposting for delivery would be replaced by signposting for evidence gathering. Work would continue to assist centres and learners with this.
- ◆ The Core Skills Profile could be retained if it was thought to add value, but in the interests of fairness would probably have to be redesigned so that individual candidates would opt to have it recorded on their Scottish Qualifications Certificate.

Such changes would have to be carefully marketed and support would be needed for practitioners in areas where the official Core Skills are well established to ensure that this activity was not undermined or cut back.

This option assumes that there would continue to be support for the redefined framework from the Scottish Government and that resources would be found to promote the Core Skills and their value to learners. It need have no effect on the existing Core Skills Units, and indeed would open the way to develop other core skills and other units — eg in customer care — which might be used in specific programmes.

The advantages of this option centre on the fact that it makes the framework simple and practical in orientation.

- ◆ It removes the ambiguities of the present system and gives a clear focus for action.
- ◆ It makes the Core Skills in the framework more market-orientated.

- ◆ By requiring candidates to choose to have their core skills certificated in a profile, it should raise awareness and real use of Core Skills.
- ◆ It builds on the areas where the current framework is most successful and removes some of the arrangements which potentially weaken the impact of Core Skills achievement.
- ◆ It would create a very simple basis for comparisons to be made with the outcomes of Curriculum for Excellence for those learners for whom this is important.

The main disadvantages are related to the advantages.

- ◆ By making the framework more of an instrument of quality control, it further narrows what is already seen in some quarters as a restricted framework.
- ◆ It does not take full account of thinking on employability.
- ◆ The net effect might be to restrict the uptake of Core Skills to non-academic and less successful learners — in other words, there is a danger that, although Core Skills might become more visible, a Core Skills Profile would be seen as a sign of failure.
- ◆ It is likely that many colleges and schools would object to the narrow interpretation to Core Skills on the grounds that they currently achieve a level of good results in the personal development of their students through core skills which would be undermined by this narrower approach.
- ◆ The relationship between such a framework and Curriculum for Excellence is likely to be tangential, so that the advantage of the Core Skills Framework in linking school, college and workplace learning may be lost.

Option B: Refinement

In this option, the status of the Core Skills Framework as the national framework for assessable generic skills would be confirmed. The main purposes of the framework would be confirmed as those intended by Higher Still: (i) to provide a structure of standards and levels of nationally agreed Core Skills; (ii) to provide information and support for the assessment of these Core Skills; and (iii) to improve access, progression, articulation and coherence within and between qualifications and programmes. As with Option A, the Scottish Government would be able to use the framework to promote the acquisition of the official Core Skills as a basis for progression into the workforce and lifelong learning. The SQA would continue to use the framework as an instrument for securing the quality of certificated Core Skills outcomes.

The immediate emphasis of this option would be on creating links between the Core Skills in the Core Skills Framework and the assessable generic outcomes of Curriculum for Excellence. There would be a need to ensure that the Core Skills Framework could also support *Determined to Succeed* and *More Choices, More Chances* and no changes would be made to the framework which threatened the use of the official Core Skills in Skills for Work Courses, adult literacy and numeracy, Modern Apprenticeships, Higher National Qualifications and any other SQA qualifications which incorporate the official Core Skills.

Work would have to be undertaken to ensure that any claims made about the status and role of the framework¹⁴ could be fully substantiated and to promote the Core Skills Framework in the areas which have been highlighted in this report as requiring attention — eg active use in schools, use by HE in admissions and by employers in recruitment and selection and possibly in HR practices. These activities would depend on required activity to increase the awareness and understanding of the framework outside and inside SQA. In this context, a number of areas of research into long-term Core Skills issues should be pursued. These could include: the link between learner awareness and understanding of Core Skills and the effectiveness of their use of Core Skills; the extent to which learners transfer the skills between contexts of learning and application; the effect of embedding on learner's awareness and understanding of Core Skills; and the impact of automatic Core Skill profiling on the quality of outcomes and the fairness of certification.

This option assumes that the Scottish Government would be willing to make the use of a national framework of assessable generic skills an aspect of all publicly-funded education and training. This would include Curriculum for Excellence, *Determined to Succeed* and *More Choices, More Chances*, as well as ALNIS, Modern Apprenticeships, any other relevant youth and adult training schemes. Changes to the existing Core Skills Units might be required as the generic outcomes of Curriculum for Excellence become clearer and it would be possible to develop other core skills and other units in line with developments in any of the areas using the framework. However, changes would only be made if they could be shown to be usable within these areas.

The advantages of this option centre on the confirmation of national agreements of a set of generic skills which are common to, and at the heart of, all education and training — truly *core* skills.

- ◆ As with Option A, it removes the ambiguities of the present system and gives a clearer focus for action by focusing on assessment and the quality assurance of assessable generic outcomes of education and training.
- ◆ Option B should give a sound basis of common generic skills which should underpin lifelong learning from a formal school context, through informal learning and youth training to adult learning and continuing VET.
- ◆ This option gives a clear basis for the development of links to the generic outcomes of Curriculum for Excellence and ensures that only those outcomes which can be properly quality assured will be incorporated into the framework.
- ◆ It protects the areas where the current framework is most successful and calls for further consideration to be given to arrangements which potentially weaken the impact of Core Skills achievement.

¹⁴ Claims such as those from the remit for this investigation which are cited in Section 1 of this report.

The main disadvantages are related to the advantages.

- ◆ The option does not take full account of emerging thinking on the generic outcomes of the schools curriculum, employability and enterprise.
- ◆ The nature of the framework and the emphasis on commonality may mean that it cannot respond quickly or in innovative ways to developing policies on generic skills.
- ◆ The restrictions on changes to the framework in this option may limit the range of outcomes of Curriculum for Excellence which can be incorporated into the framework to a point which is unsatisfactory and damaging, either to Curriculum for Excellence or to the framework.
- ◆ There is nothing in the model which directly addresses the continuing issues of quality and fairness.

Option C: Re-development

This is the most radical proposal and the one which would require most negotiation and development work. This option proposes a new 'Essential' Skills Framework. The contents of the re-developed framework would be the essential skills listed in *Skills for Scotland* — ie skills, attributes, attitudes and behaviours. It would draw on the work of the CBI and incorporate the generic outcomes of Curriculum for Excellence and would go well beyond the current conception of core skills. The existing Core Skills Framework (possibly with some changes) would be nested within the new framework.

In this option, SQA would work with key partners to develop and maintain this new framework, the main purposes of which would be:

- ◆ to identify, codify and exemplify standards and levels for nationally agreed 'essential skills'
- ◆ to provide information and support for good practice in the use, and where appropriate, the assessment of these skills; and
- ◆ to provide a basis for the improvement of access, progression, articulation and coherence within and between qualifications and programmes

Anticipated outcomes of the re-designed framework would be an increase in the use of the skills, attributes, attitudes and behaviours in programme and qualification design, and more sharing of good practice in delivery and assessment. It would also be expected that the design of the new framework would help to raise the status, awareness and understanding of those 'essential skills' which were certificated. SQA and its centres would use the whole framework in the development and validation of programmes and qualifications — making essential skills 'more visible' as recommended in *Skills for Scotland* — and SQA would continue to use relevant sections of the framework to quality assure the certification of assessable generic outcomes (including the existing Core Skills).

As with Option A, core skill requirements in qualifications and programmes would be based on demand, not design, so the framework would be about opportunity rather than regulation. The main requirement as far as SQA is concerned would be that all qualifications seeking validation would have to show how they

addressed (or why they did not address) the listed skills, attitudes, attributes and behaviours. Embedding and signposting would both be possible where they could be justified. In other words, this framework would be more of a communication tool, or reference framework — as is the SCQF — and less of an instrument of regulation. In this option, the automatic certification of Core Skills Profiles should probably be discontinued on the grounds of fairness, although it would be possible to have an optional profile based on the existing official Core Skills. Again, the changes would have to be carefully planned, marketed and supported to ensure that existing activity and good practice were not undermined.

The home for the new framework would lie in the national skills strategy and the definitions of ‘skills’ and ‘essential skills’ given there. However, because of its nature and use, the new framework should be considered in relation to the SCQF. Once the SCQF Partnership has reviewed its level descriptors, the new Essential Skills Framework could be developed as an extension or elaboration of the SCQF — and linked, as it is to be hoped that the SCQF will be, to descriptors of the European Qualifications Framework, giving it a new international linkage.

This option assumes that there would be support for an Essential Skills Framework from the Scottish Government and that resources would be found to develop and promote it as part of the national skills strategy. It also assumes a high level of articulation between Curriculum for Excellence and other school and youth initiatives and the national skills strategy. The new framework need have no effect on the existing Core Skills Units, or the means by which core skills can be evidenced, but the place and nature of a Core Skills Profile would have to be considered.

The main advantages of this option are its link to *Skills for Scotland* and the SCQF and the fact that the proposed framework can contain the frameworks described in the other options.

- ◆ By tying the re-defined framework to the national skills strategy, Option C gives a new direction to the identification and description of generic skills and links them more firmly to the Government’s social and economic aims.
- ◆ By linking the re-defined framework to the SCQF, Option C increases the centrality of the framework and adds an international dimension to its contents.
- ◆ By ensuring that the framework can accommodate the generic outcomes of Curriculum for Excellence, Option C creates a framework which includes the needs of civic society.
- ◆ By opening up the framework to include employability skills, Option C creates a framework which is more clearly orientated towards the needs of employers and the economy.
- ◆ By incorporating the existing Core Skills, Option C ensures that good work in areas where the current framework is most successful can continue.

The main disadvantages are related to the breadth of the purposes and increased scope of the proposed framework.

- ◆ There is a danger that in tying the framework to such a comprehensive and wide-ranging strategy as that set out in *Skills for Scotland*, the identity and

purpose of the framework will be hard to explain and the framework will be difficult to manage and to market.

- ◆ Although there is a good case for elaborations of the SCQF being carried out by sectoral bodies — to show how the levels and descriptors should be interpreted in practical terms in specific sectoral contexts, it is less clear how an Essential Skills Framework would relate to the SCQF in practical terms. For example, what should the role of the SCQF partnership be in relation to the new framework?
- ◆ The number and range of skills, attributes, attitudes and behaviours to be included in the framework could be considerable (see Annex A) and there is no guarantee that key stakeholders would be satisfied by the contents.
- ◆ Similarly, the range of uses to which the framework could be put would be very diverse, possibly leading to confusion and dissatisfaction among stakeholders.
- ◆ Whilst the existing Core Skills could find a place in the proposed framework, there would be a danger that their impact would be further diminished.

Conclusion

The field of generic skills is complex — there are issues of identification, description, delivery, assessment and quality assurance, and these issues centre round the question whether to? As well as how to? Many of these issues have been acknowledged since the earliest work on generic skills but are not yet resolved. The matters and concerns associated with generic skills which are discussed in this report are not peculiar to Scotland, but must be considered and resolved in a Scottish context — this means taking account of Scottish policies, practices, institutions and the expectations of interested parties.

All of the options proposed in this report have enough advantages to be worth serious consideration, but all also have serious disadvantages. In the end, none of the options as they stand may be fully acceptable and some compromise option, based on the existing Core Skills Framework, but involving an element of retrenchment (as defined in Option A) or an element of redevelopment (as defined in Option C) may offer a way forward which satisfies most stakeholders.

Any choice between options will have to be made on the basis of answers to the following questions:

- ◆ How complete is the analysis of the issues which leads to the option?
- ◆ How realistic are the assumptions upon which the option is based?
- ◆ How complete are the lists of advantages and disadvantages and what is the balance of advantage over disadvantage for each option in terms of long-term social and economic gains for Scotland?

Annex A: Core skills grid

Programme	Skills											Attributes, attitudes & behaviours	
	Communication	Literacy	Teamwork	Problem solving	Numeracy	Personal/Interpersonal skills	Customer service	Critical thinking	ICT	Practical skills	Career management	Learning skills	Self-awareness; self-confidence; creativity; initiative; risk-taking; motivation, attendance, career aspirations; positive attitude to learning; self-directed learning; understanding the world of work; coping positively with change; values and integrity; adaptability and flexibility; awareness and understanding of enterprise; business and customer awareness; etc
NTI 1981	✓	✓			✓					✓			
Levy & Oates 1985	✓			✓	✓					✓			

TVEI requirements 1990s	✓		✓	✓	✓				✓				Understanding the world of work; coping positively with change
NCCC/NCVQ 1991*	✓			✓	✓	15			✓				+ Modern languages
Scotvec 1990s	✓			✓	✓	✓			✓				
Howie Committee	✓			✓	✓	✓			✓				+ Modern languages
SQA Core Skills	✓		✓	✓	✓				✓				
QCA Key Skills	✓		✓	✓	✓				✓			16	
QCA Functional Skills	✓	✓			✓				✓			17	
'Essential skills' Northern Ireland Govt.		✓			✓								
'Essential' skills, Skills for Scotland 2007	✓	✓	✓	✓	✓			✓	✓			✓	Motivation; self-confidence; attendance; career aspirations
'Soft' skills, Skills for Scotland 2007	✓		✓	✓		✓	✓						
CBI 1989	✓		✓	✓	✓	✓			✓				Values and integrity; understanding of work and the world; positive attitudes to change

¹⁵ Personal Skills/Personal Autonomy

¹⁶ Improving Own Performance

¹⁷ Improving Own Performance

CBI 1998/2000	✓	✓	✓	✓	✓		✓		✓	✓	✓		Values and attitudes compatible with work opportunities
CBI 2006	✓	✓	✓	✓	✓		✓		✓	✓			Adaptability and flexibility; awareness and understanding of enterprise
CBI 2007	✓	✓	✓	✓	✓				✓				Self-management; business and customer awareness
UCAS (2007)	✓	✓		✓	✓	✓		✓				✓	
EC Key competences (2006)	✓			✓	✓			✓	✓	18		✓	+ Modern languages Social and civic competence; sense of initiative and entrepreneurship; cultural awareness and expression; creativity, initiative, risk assessment, decision taking, and constructive management of feelings
USA–SCANS (1992)		✓		✓	✓	✓		✓	✓				Self-esteem, responsibility

¹⁸ Basic competences in science and technology

Canada — Conf Board (2000)	✓		✓	✓		✓		✓	✓			✓	Self-esteem and confidence; honesty, integrity and personal ethics; a positive attitude toward learning, growth and personal health; initiative, energy, and persistence to get the job done; accountability for actions taken; adaptability; a positive attitude toward change
Australia — Mayer (1992)	✓		✓	✓	✓	✓		✓	✓				
NZ — Key Competencies	✓	✓	✓	✓	✓	✓		✓	✓			✓	Enterprise, resourcefulness, reliability, resilience, active involvement in communities
Finland: upper 2ry VET objectives (1998)	✓		✓	✓								✓	Ethical and aesthetic skills; personal development; citizenship

Determined to Succeed	✓		✓	✓	✓				✓				Confidence, self-esteem, positive view of others (respect), self-motivation, willingness to take risks; determination to succeed, a sense of responsibility, self-reliance; self-management; individual and collaborative decision making; recognising need and opportunity; influencing and negotiating; using initiative; evaluating risk; creativity; knowledge of self: interests, strengths and weaknesses, opportunities; knowledge of the world of work: including types of careers/jobs available; business and wealth creation; principles of starting and running a business; health and safety; pay and taxation; customer services; rights and responsibilities; trade unionism
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Curriculum for Excellence	✓	✓	✓	✓	✓	✓		19	✓			✓	Self-awareness; self respect; respect for others; an enterprising attitude; resilience; self-reliance; enthusiasm and motivation for learning; determination to reach high standards of achievement; openness to new thinking and ideas; a sense of physical, mental and emotional wellbeing; secure values and beliefs; ambition; commitment to participate responsibly in political, economic, social and cultural life; develop knowledge and understanding of the world and Scotland's place in it; understand different beliefs and cultures; leadership
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¹⁹ Creative and independent thinking; assess risk and take informed decisions; evaluate environmental, scientific and technological issues; develop informed, ethical views of complex issues

Annex B: A historical account of the Core Skills Framework: 1985–2000

1980s — Economic issues, the New Training Initiative and the Youth Training Scheme

One possible starting point for considering the history of core skills is the publication, in 1981 of *A New Training Initiative: A Programme for Action* (known as NTI) by the Department of Employment. Thinking on training at this time emphasised the perceived need for a flexible workforce which would be capable of transferring themselves and their skills across jobs and occupations. This came from a growing understanding that economic and technological changes were going to bring about significant changes in the UK's workforce requirements. Then, as unemployment rose, the need to capitalise on previously acquired skills suddenly became a very practical issue. The NTI proposed the establishment of the Youth Training Scheme (YTS)²⁰ which would aim to ensure that basic skills would be acquired. These were to include 'numeracy and literacy; ... some practical competence in the use of tools and machinery and in some basic officer operations; and ... skills in communication'.

YTS was to be designed to ensure that young people were equipped 'not merely to do the immediate task required for the job, but with a basic competence and flexibility which they could build on as they changed jobs'.

1985 is an important date, seeing the publication of an important UK report on core skills, and the launch of the *Action Plan* in Scotland.

The report on core skills, by Margaret Levy and Tim Oates, *Core Skills in YTS*, followed the first phase of an eight year project, which was to run until 1990. The project was intended to identify skills which were common to a range of tasks and also essential for competence in those tasks. The context for the project and the findings was the workplace. The report identified 14 core skills in four areas, ie number, communication, problem-solving and practical. The 14 core skills were broken down to 103 outcomes. These were seen as providing the basis for skills transfer, which was very important in a time of economic change and high unemployment. This framework of core skills was seen as a form of checklist against which training programmes might be developed and evaluated or approved rather than as a basis for the development of specific identifiable skills for assessment and certification. They were not defined by level.

At the same time, other work was taking place on other concepts which would reinforce the idea that skills could be transferred — work on job families and on analytic processes which would lead to the functional approach to identifying competences. Thinking in the UK was very much influenced at this time by the work of McBer and company, an American consulting firm, and its leading

²⁰ YTS was brought into operation in 1983 as a one-year programme for 16–17 year-olds. It replaced the Youth Opportunity Programme (YOP), introduced in 1978. In 1986, it was made extendable to a second year. Accredited organisations were required to provide at least 13 weeks per year of training away from the job and include life-skills and social skills. A standardised form of certification was issued at the end of the training period. In 1989 the YTS was renamed Youth Training and placed under the management of the TECs.

thinkers on competence, David McClelland and Lyle Spencer who had developed a job competence assessment process in the 1970s.

Also in the mid-to-late 1980s, work was being undertaken on the development and approval of YTS programmes to help tackle youth unemployment. Those charged with approving YTS schemes in the different sectors had to ensure that all programmes developed:

- ◆ competence in a job and/or range of occupations
- ◆ competence in a range of transferable core skills
- ◆ the ability to transfer skills and knowledge in new situations
- ◆ personal effectiveness

In 1986, the YTS Certification Board was established to validate these programmes.

The volume of training and available funding represented by YTS and the political will behind it made these requirements hugely influential in education and training circles. These criteria were sometimes characterised as: having skills; understanding skills and being able to manage them; being able to transfer skills; and being willing to transfer skills — a framework for thinking about core skills which still seems worth exploring. The core skills referred to here were the skills identified by Levy and Oates.

1985–1995 The Scottish Action Plan

In Scotland in 1985, the *Action Plan for 16–18s in Scotland* was launched, leading to the modularisation of all further education provision. It was largely vocational in focus, but an important feature of the reform was the development of generic modules in communication, practical mathematics, and personal and social development (PSD). These modules were unusual (but not unique) in that they were designed in hierarchical suites — eg Communication 1–4. Although there were no group awards, local programmes of modules were developed and there were national ‘preferred programmes’ for YTS. These programmes all had communication, maths and PSD modules. Another important phenomenon was the uptake of these modules by schools, especially in creating programmes of modules for the growing number of young people who were staying on at school after Standard Grade but were not taking SCE Highers, and for young people following TVEI programmes.²¹

Action Plan was largely concerned with bringing about changes in teaching and learning in Scottish further education colleges. The programmes offered by these colleges were to be more informed by the needs of employers and the needs of learners. Delivery was to be more learner-centred, more flexible and more practical. The PSD modules could be seen as taking this to an extreme in that they focused as much on process and delivery as they did on the defined outcomes of modules (a key feature of the reforms) and this made them very

²¹ There was however a major issue about the recognition of these modules by colleges. This was very much against the spirit of *Action Plan*, but may well have been justified in many cases — either because the schools were not setting appropriate standards for their students, or because the way that colleges delivered the modules had added value which went beyond the assessed outcomes. In other cases, of course, the rejection was simply a matter of convenience or prejudice.

unpopular with the theoreticians of competence in the Employment Department, the Manpower Services Commission and later the Training Agency.

Mid-1980s to mid-1990s: Core skills in schools, colleges and universities

The Technical and Vocational Education Initiative (TVEI) was introduced in England and Wales in 1983, and in Scotland in 1984. This was based on a number of 'Focus Statements', the first of which was to relate school and college learning to the world of work. The fourth was: to enable young people to be effective, enterprising and capable of work through active and practical learning methods. TVEI programmes were expected to deliver generic skills and attitudes which prefigure both core skills and employability skills. These were:

- ◆ communicating effectively — where possible in more than one language
- ◆ interpreting numerical information
- ◆ the appropriate use of technology
- ◆ understanding the world of work
- ◆ developing effective personal and interpersonal skills
- ◆ problem solving
- ◆ working independently and in teams
- ◆ coping positively with change

In its 1998 evaluation of the TVEI extension, the Scottish Office noted that in schools:

'Departments began to examine more closely the processes involved in learning and began to identify transferable skills which would themselves be life skills beyond school or college. Part of this process was the encouragement of more investigative approaches involving independent study and TVEI supported these.'

They also found that the generic skills had been built into courses in all departments on the basis of work funded by TVEI.

In the opinion of the Scottish Office, the implementation of the fourth focus statement brought many teachers and managers to re-appraise their attitudes, approaches and methodologies and this was one of the more fundamental and lasting aspects of TVEI.

Meanwhile, the Review of Vocational Qualifications in England led to the establishment of NCVQ and the development of NVQs (and subsequently SVQs) based on occupational competences which were the outputs of learning derived by the process of functional analysis of an industry or business sector. NVQs were introduced in 1986 and the first award for an NVQ was made in 1988. SVQs, were introduced in 1989, with the first awards being made one or two years later.

At this stage, generic competences in communication, maths and PSD-type skills were seen by the Employment Department as 'input' to competence development and were not included in the new VQs.

In 1989, the then Secretary of State for Education, Kenneth Baker, set out a series of core skills which should be acquired by all young people post-16. These were published by the Department of Education and Science as *Further Education — a New Strategy*. They were: communication; numeracy; team-working and leadership; familiarity with technology (especially information technology); familiarity with work systems; and familiarity with changing work and social contexts. In an attempt to create articulation between schools and colleges or workplace training, the National Curriculum Council (NCC), together with the Secondary Examinations and Assessment Council (SEAC), the National Council for Vocational Qualifications (NCVQ) and the Further Education Unit (FEU) of the Department for Education and Science (DES) were requested by the Government in 1990 to undertake work on the development of a definition of core skills. In 1991, the NCC published *Core Skills 16–19 — a Response to the Secretary of State*, listing communication, problem solving, personal skills, numeracy, information technology, and modern languages. The NCVQ issued its own report with the same list, only replacing personal skills with personal autonomy — a more ‘vocational’ term. NCC suggested that the first three skill areas could be integrated into all A/AS levels and the second three should be promoted within the curriculum. On the basis of this, NCVQ started developing specifications for accrediting competence in these Core Skills. There was piloting over a number of years, resulting in the introduction of the Key Skills Qualifications in 2000.

The idea of generic/transferable skills was increasingly finding a place in curriculum thinking in Scotland. In 1989, the Scottish CCC published its *Curriculum Design for the Secondary Stages* and emphasised Key Skills and elements which should permeate all modes, courses and activities: communicating and learning skills (including language, numeracy and learning strategies); technological and creative thinking (including problem solving and designing); and key elements of personal and social development.

At the same time — starting from 1988 — Enterprise in Higher Education (EHE) was launched. In the context of EHE, ‘enterprise education’ meant that students should:

- ◆ obtain business/enterprise awareness
- ◆ acquire ‘transferable personal skills’
- ◆ complete a project within a working situation

The aim was to ensure that an identifiable part of each student’s degree would comprise an ‘enterprise unit’. The effect of this would be to improve the employability of graduates.

The wider aims of the EHE programme were analogous to those of the TVEI. This becomes particularly evident when the obscure phrase ‘transferable personal skills’ is clarified. The institutions participating in the EHE programme have taken these skills to include:

- ◆ the analysis and solution of complex real-world issues
- ◆ setting and attaining objectives for oneself and others
- ◆ teamwork, negotiating skills and self-confidence
- ◆ effective oral and written communication with lay and academic audiences

The intention is that these skills are to be learned either through formal training or while undertaking a project in a working situation.

1998 onwards: employability

In 1998, the CBI published a discussion paper, *In search of employability*, which was influential in England and Wales, but made little or no impact in Scotland. Employability was defined in a portmanteau way as qualities and competences required to meet the changing needs of employers and customers and thereby realise one's aspirations and potential. CBI viewed the skills as being about adding value to the business and highlighted the need for values and attitudes compatible with work opportunities, basic skills (ie literacy and basic numeracy), the defined Key/Core Skills, customer service skills, up-to-date job specific skills and knowledge, and career management skills.

However, it was *Towards a Skills Revolution — a Youth Charter*, published by CBI in 1989, which was most influential in the development of core skills. The general tendency of this document was also supported by a TUC publication, *Skills 2000*, but the CBI paper actually identified eight common learning outcomes which were the predecessors of both Core/Key Skills and employability skills. They were:

- ◆ values and integrity
- ◆ effective communication
- ◆ application of numeracy
- ◆ applications of technology (computers and other electronic equipment)
- ◆ understanding of work and the world
- ◆ personal and interpersonal skills
- ◆ problem-solving
- ◆ positive attitudes to change

Some of these were clearly not measurable, but five were to become the basis of the Scottish Core Skills Framework.

Mid-1990s: The Core Skills Frameworks

In Scotland at this time, the Howie Committee was considering the future for upper secondary education in Scotland. A group with representatives of Scotvec, the SCCC and SFEU was convened to consider the role of core skills and report to the Committee. The result was *Core Skills by Design* (1991). This proposed a Core Skills Framework of communication, personal and interpersonal skills, problem solving, numeracy and information technology. The report also included an initial analysis of core skill coverage in Highers and Standard Grades and an account of recent developments in England and Wales to date. The framework was adopted by the Howie Committee and cited in its report (*Upper Secondary Education in Scotland*, 1992) as representing 'a general consensus in industry, education and government ... [as being] very important for the future economic and social well-being of the country.' They proposed adding modern languages to this list. These skills were to be compulsory and subject to calibration which would allow comparability across the tracked awards proposed in the report.

However, the main stimulus for the establishment of a Core Skills Framework was the 1991 White Paper for Scotland *Access and Opportunity* and the parallel white paper for England and Wales *Education and Training for the 21st century*. These white papers, responded to the growing perception that SVQs and NVQs were too narrow for use in youth training. They led to the development — within one year — of GSVQs and GNVQs and core skills were developed to be a requirement in these new group awards. In developing their core skill frameworks, Scotvec and NCVQ adopted as many of the attributes listed in the CBI paper as possible. Scotvec also took a pragmatic approach, building on existing, well-tried provisions as far as possible and confirming the ‘four stage’ framework (avoiding the word ‘level’) of the widely used modules in communication. The core skills in this framework were communication, numeracy, information technology, personal and interpersonal skills (known as PIPS), and problem solving. This framework was influenced by its college/vocational origins. It was intended that it would sit beside, but be separate from, the GSVQ framework.

One significant issue was the certification of core skills. Profiles were proposed, but these were associated with qualifications, not the candidates: a standard profile, which was incorporated into the group award certificate would record the core skills and levels incorporated into the GSVQ and state that this profile had been identified as appropriate for entry into the relevant occupational area at the level implied by the qualification. Recruiters and selectors were directed to the candidate’s Record of Education and Training (RET) to find out his/her actual core skills achievements. The issue about the exact relationship of core skills and the school curriculum and specific school qualifications was shelved at this time.

NCVQ, meanwhile was working with the Secondary Education and Assessment Council (SEAC) and other bodies to develop new standards for six core skills²² at five levels for inclusion in GNVQs. In 1990, NCVQ produced a paper on core skills in A-levels and NVQs. These were, communication, problem solving; personal numeracy, IT and modern languages. They were to be assessed and certificated in isolation from specific courses.

Just before Higher Still was launched in 1994, a review of Higher National (HN) qualifications was initiated by Scotvec. This was driven mainly by the relative success experienced in gaining recognition of GSVQs by higher education, and the feeling that more recognition of Higher National qualifications could be achieved if they were more regular in design and that this could best be achieved by making them more like GSVQs. One feature of this reform was the intention to include the official Core Skills in HNs. This reform process would be stalled by Higher Still and would not be completed for nearly a decade. In the end, the idea of including a fixed Core Skill Profile requiring assessment in each HNC and HND was rejected by further education colleges in favour of a signposting approach.

²² These were renamed ‘Key Skills’ following the publication of Dearing’s *Review of Qualifications for 16–19 year-olds* in 1996. Dearing actually recommended the introduction of an A/S level in Key Skills.

1994–1998: Higher Still

In 1994, Higher Still was launched. The new Core Skills Framework was adopted and adapted, turning it into a more symmetrical and school-friendly structure. This work was led by a team from the SCCC. PIPS became Working with Others and Core Skill components were introduced with a view to making it easier for schools to manage delivery and/or assessment of the agreed Core Skills.²³

Initially the approach taken by the Higher Still Curriculum and Assessment Group (which was made up of representatives of a wide range of stakeholder organisations) was to accept the employer view, that core skills were necessary because of perceived deficits in education outcomes. In other words, core skills were needed because they were not being delivered by schools. This was obviously especially controversial in the case of communication and numeracy, since it implied in effect that Standard Grade and Higher English were not creating effective communicators and Standard Grade and Higher Mathematics were not developing numeracy — at least in some commonly understood meaning of these terms. The introduction of personal and interpersonal skills was controversial for other reasons, mainly there was doubt as to whether they could be taught and validly assessed, but also there was a question of whether they should be taught and assessed — wasn't this an unwarranted intrusion on the personal lives of school students?

The core skills work of the Higher Still Development Programme was subject to two rounds of consultation and the approach to core skills changed as the programme progressed. Acting on the feedback received from school inspectors, civil servants dealing with the school curriculum and schools themselves, it came to be accepted that core skills were already being developed in the main subjects, although no evidence of achievement was being gathered. In response to this, policy and processes were developed which were to start from whatever natural strengths subjects had in respect of core skills learning and to create subject specifications which would generate evidence that core skills had actually been achieved. Curriculum specialists were asked to do two things: first they were to look at the subject outcomes and ensure that all reasonable opportunities for core skills development were included — this could mean changing the curriculum to strengthen these opportunities; and second they were asked to audit the final draft specifications to determine what evidence of core skills achievement could be inferred with confidence from the proposed subject assessments — this also created the opportunity to modify assessment approaches to ensure that any such inferences were valid. A scrutiny process, operated by SCOTVEC and using panels of core skills experts, was instituted to validate these findings.

This was the so-called 'embedded' model — so-called because it was really an auditing model aimed at showing where core skills were already being delivered by subjects, rather than a model which called for core skills to be built into the new courses which were being developed as might be inferred from the term 'embedded'. The auditing process quickly became controversial and political, and led to some changes to the subject specifications where the subject claims were

²³ Scotvec previously distinguished between written and spoken communication at the basic stages — mainly to accommodate Adult Basic Education programmes, but otherwise worked on the basis of outcomes and units.

not validated and also to some actual embedding. Some changes were also made to the Core Skills Framework. Concerns raised at the time about the extent to which these 'embedded' core skills can be deemed transferable — and indeed about whether the approach actually adds value to the curriculum, have persisted.

Also at this time, a range of special interest groups were arguing for an extension of the framework to include themes or subjects — environmental, economic, or political education, modern languages, etc.

From the start core skills were not fully supported. On the one hand the curriculum body often ignored the national framework in its publications or described 'core' skills which do not appear in the framework; the universities showed a complete lack of interest in using core skills as entry qualifications in any form; and CBI continued to promote employability skills which went beyond the contents of the Core Skills Framework.

Automatic recording of Core Skills Profiles on Scottish Qualifications Certificates was introduced in 2000 and in the event it became apparent in a dramatic way that few if any candidates had been informed about embedded Core Skills and Core Skills Profiles by school or college staff. In the furore about inaccurate certificates which occurred in that year, a number of interesting issues about Core Skills Profiles arose, but were possibly not given sufficient attention. For example, the situation where candidates were being certificated with Core Skills they didn't know they had might be seen as justifying the concerns which had been expressed about transferability of embedded Core Skills.

Elsewhere in the UK, Key Skills qualifications were developed and in 2001 the Government decided that Key Skills programmes should be offered to all post-16 learners in schools and colleges, in apprenticeships and on other government-funded training schemes.

Annex C: Core skills in Europe

In his Cedefop report, *Typology of Knowledge, Skills and Competences — Clarification of the Concept and Prototype* (2005), Winterton reports on the approaches to core skills in eight countries — France, Germany, Austria, Finland, the Netherlands, Portugal, Spain and Norway. In most of these countries, the issue of generic skill or competence appears to be primarily or exclusively a VET issue.

In France, he reports that the competence movement has been influential in VET since the mid-80s, as in the UK and for similar economic reasons. There has been some work on standards in areas like literacy, but there are doubts about 'the Anglo-Saxon approach' which is seen as complex and over-analytic, particularly in relation to soft skills. The French approach is reported as generally more comprehensive, requiring training programmes to address *savoir* (knowledge), *savoir-faire* (functional or practical competences) and *savoir-être* (behavioural competences) as a matter of course.

A similar approach is being taken in Portugal, where the entire secondary education system has been revised by the Ministry of Education and curricula are being designed to achieve learning outcomes specified in terms of cognitive competences, functional competences and social competences. How the school reforms relate to assessment and certification is not stated.

Finland also adopted a competence-based approach in upper secondary vocational education in 1994 and since 1999 competence-based qualifications have been in use. Tests of wider competence have been added to their vocational qualifications (learning skills, problem solving skills, interaction and communication skills, co-operation, skills, ethical and aesthetic skills) and other behaviours have been used to shape the VET curriculum (capabilities for further education, development of personality, responsible dutiful citizens/member of working community). The typology of vocational competence distinguishes core competences common to all fields (such as learning, communication and ethical skills), and vocational competences relating to seven broad economic sectors.

The German dual system of VET is influential and is replicated in a number of countries. In this system, the main emphasis is on specifying the necessary learning inputs, rather than outcomes. Modularisation and generic competences are regarded with suspicion since these may damage the unity of the craft. To be qualified does not mean having a qualification in the SQA sense of the term. There are now key qualifications (*Schlüsselqualifikationen*), the programmes for which include such features as analytical skills for the interpretation of information and social-communicative competences together with the ability to act autonomously and to solve problems independently, flexibility, the ability to co-operate, and practical ethics. These are included in VET curricula and developed alongside other work skills, but again the means of assessing and reporting on these is not clear.

Annex D: Countries where generic skills are used to structure the curriculum

Australia

The Adelaide Declaration on National Goals for Schooling in the Twenty-First Century (Ministerial Council on Education, Employment, Training and Youth Affairs 1999) has provided a broad framework for curriculum development and led to work on generic skills designed to improve employability in schools in all states. This has superseded the work previously undertaken using the Mayer Key Competences described in the previous SQA publications cited above. The Mayer Key Competences were like the Scottish official Core Skills, limited in areas, at a number of levels and assessable. The National Goals incorporate Mayer, but added attitudes, attributes and behaviours.

Arrangements in Tasmania, building on the Adelaide Declaration on National Goals for Schooling in the Twenty-First Century, seem very similar to what is proposed in Scotland. The Essential Learnings Framework (ELF) in Tasmania is for all students from Kindergarten to Year 10 in the public education system, and the curriculum is designed around a set of five essential learnings intended to produce young people who are: Inquiring and Reflective Thinkers; Effective Communicators; Self-directed and Ethical People; Responsible Citizens; and World Contributors. There are outcomes and levels (standards) for each of the key elements of the five essential learnings, but these are not tied to age or grade. These form the basis of whole school and individual teacher planning, assessment, monitoring and reporting.

Canada and the USA

An influential not-for-profit organisation, called The Conference Board of Canada, has created a list of employability skills which is used in organising VET curricula in a number of provinces. These are clustered as follows: academic skills (communication, thinking and learning); personal management skills (attitudes, aptitudes and behaviours); and team-working skills. A similar situation pertains in the USA in relation to the Secretary's Commission on Achieving Necessary Skills (SCANS) which has developed a framework of workplace competencies (including handling resources, interpersonal skills, information handling, understanding of social and technological systems, and use of technology) and these have been used as an influence in curriculum design in a number of states.

New Zealand

There are five national key competencies, linked to the DeSeCo findings, but not the same as them either in name or number. The key competencies are using language, symbols and texts, managing self, relating to others, participating and contributing, and thinking. These have been related to five strands in early education and four key competencies in tertiary education (the three DeSeCo groups, plus thinking). Issues about assessment and progression are still under discussion.

In addition, the New Zealand Qualifications Authority (NZQA) already offers a National Certificate in Employment Skills (NCES). This is qualification at level 1 in

the National Qualifications Framework which attests to achievement in oral and written communication, numeracy, teamwork and problem solving, specific workplace skills, such as safety and timeliness, keyboard/computing,; employment responsibilities and rights, and self-management. It is at level 1 in the National Qualifications Framework and is available to young people and adults. NZQA also has standards in literacy and numeracy for adults which it links to the key competencies.

Annex E: Core Skills and Curriculum for Excellence

Curriculum for Excellence	Core Skills				
	Com	Num	ICT	PS	WVO
Successful learners — abilities					
Use literacy, communication and numeracy skills	1	1			
Use technology for learning			1		
Think creatively and independently	6			1	
Learn independently and as part of a group	3	3	3	3	1
Make reasoned evaluations	6			1	
Link and apply different kinds of learning in new situations	5	5	5	5	5
Confident individuals — abilities					
Relate to others and manage themselves					1
Pursue a healthy and active lifestyle	5				
Be self aware	6				2
Develop and communicate their own beliefs and view of the world	3				4
Live as independently as they can	5	4	4	4	4
Assess risk and take informed decisions				2	
Achieve success in different areas of activity	5	4	4	4	4
Responsible citizens — abilities					
Develop knowledge and understanding of the world and Scotland's place in it	3			3	
Understand different beliefs and cultures	3			3	
Make informed choices and decisions	5			1	1
Evaluate environmental, scientific and technological issues	5			4	4
Develop informed, ethical views of complex issues	5			4	4
Effective contributors — abilities					
Communicate in different ways and in different settings	1				1
Work in partnership and in teams					1
Take the initiative and lead					1

Curriculum for Excellence	Core Skills				
	Com	Num	ICT	PS	WWO
Apply critical thinking in new contexts	5			1	
Create and develop	4	4	4	4	4
Solve problems				1	
Successful learners — attitudes					
Enthusiasm and motivation for learning	9	9	9	9	9
Determination to reach high standards of achievement	9	9	9	9	9
Openness to new thinking and ideas	7	9	9	7	7
Confident individuals — attitudes					
Self respect	8	9	9	9	7
A sense of physical, mental and emotional wellbeing	9	9	9	9	8
Secure values and beliefs	8			9	8
Ambition	9	9	9	9	9
Responsible citizens — attitudes					
Respect for others	7		9	8	7
Commitment to participate responsibly in political, economic, social and cultural life	8		8	8	7
Effective contributors — attitudes					
An enterprising attitude	8	9	8	7	7
Resilience	8	9	9	8	7
Self-reliance	8	8	8	8	8

Key:

- 1 = Should be full coverage at all core skills levels
- 2 = Should be full coverage at some (upper) core skills levels
- 3 = Should be some coverage at all core skills levels in specific contexts
- 4 = Should be some coverage at some (upper) core skills levels in specific contexts
- 5 = Should be some matching at all core skills levels
- 6 = Should be some matching at some (upper) core skills levels
- 7 = The attitude is directly linked to some of the outcomes
- 8 = There is direct potential for this core skill to lead to this attitude
- 9 = This attitude may result from success in this core skill

Annex F: Contacts made

Meetings

Head of Accreditation, SQA

Policy Executive, CBI

Head of Assessment Branch, Scottish Government Education and Training Directorate

Business Manager, National Qualifications Product Development, SQA

Director, Sheila McCullough Associates (Skills and Information Consultancy)

Special Advisor, National Qualifications Team, Scottish Government Education and Training Directorate

Chief Professional Adviser, Curriculum for Excellence, LTS

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Telephone contacts

Programme Manager, Curriculum for Excellence, Scottish Government Education and Training Directorate

Head of National Qualifications Team, Scottish Government Education and Training Directorate

Head of Wider Achievement, Scottish Government Education and Training Directorate

Lifelong Learning, Adult Literacy and Numeracy in Scotland Team, Scottish Government Education and Training Directorate

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