

SQA information for OECD Independent Review of qualifications and assessment

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Abstract

This report reflects on the key factors that influenced the qualifications and assessments designed to support the senior phase of Curriculum for Excellence, and how the Scottish Qualifications Authority (SQA) responded to these during the qualification and assessment design and development phases. The report also reflects on the intended and unintended consequences of the qualification and assessment design that were identified during the implementation phase, including what mitigating actions SQA took to resolve these. Finally, the report explores the objectives, themes and approach of SQA's Assessment Futures work.

Findings indicate that SQA carried out extensive research, engagement and consultation with stakeholder groups, including practitioners, throughout the design and development of the new National Courses. All decisions relating to the design and development were made on a co-created basis with senior stakeholder groups closely governed by the Curriculum for Excellence Management Board. In this respect the new National Courses were the first senior phase qualifications to be developed in system wide co-creation.

The report concludes that the design and development phases of the new National Courses aligned with the aspirations of Curriculum for Excellence. The governance structure played a key role in ensuring this. However, issues at implementation specifically linked to teachers' and lecturers' understanding of the relationship between National 4 and 5, and the national standard at these levels, directly contributed to overassessment. Consequently, this may have resulted in assessment leading learning and teaching — an outcome that conflicted with the values, principles and purposes of the curriculum.

The revision of National Courses in 2016–19 sought to address issues of overassessment through the removal of unit assessment. SQA rationalised course materials to support greater understanding of the national standard. Although the revision of the National Courses is now complete, it is clear that there will be unintended consequences of the decision to remove units which are unlikely to be known fully for some time. However, what is clear is that the strong alignment of National Courses with Curriculum for Excellence has been somewhat weakened by subsequent issues and decisions.

SQA's Assessment Futures work continues to build on good practice within the senior phase qualifications and assessments whilst looking at to the future of qualification and assessment design with a view to influencing the next generation of National Courses.

Section 1: Background

1.1 Introduction

In May 2019, the Scottish Government announced its intention to carry out an independent review of the senior phase of Curriculum for Excellence (CfE) (Scottish Government, 2020). The Organisation for Economic Co-operation and Development (OECD) was commissioned to undertake this work. In January 2020, the Scottish Government extended this review to cover all of CfE including the broad general education (BGE), the senior phase, and the articulation between them. The intention was that by extending the review of CfE to include the senior phase, the CfE experience as a whole, from a student learning perspective, could be investigated.

The purpose of the independent review is to help the Scottish Government better understand how the curriculum is being implemented and experienced in schools, and identify areas for improvement across the country.

The scope of the review is to explore key issues including:

- ♦ centre level curriculum design
- depth and breadth of learning in the senior phase
- local flexibility versus increased prescription
- the transition from the BGE into senior phase
- vocational and academic learning and awards
- roles and responsibilities in relation to the curriculum

(Scottish Government, 2020)

In response to the 2020 results, the Deputy First Minister commissioned the OECD to expand on this work to include a deeper focus on the future of assessment and qualification approaches in the senior phase curriculum in Scotland. The aim of this work is to analyse Scotland's approach to assessment and qualifications, and produce options for how we could enhance our approach, informed by international good practice.

The purpose of this report is to contribute to the evidence available to the OECD's review of qualifications and assessment by reflecting on the key factors that influenced the design and development of senior phase qualifications and assessments, and how SQA responded to these. The intention of the report is not to provide opinion, it is to provide a timeline and account of activities. This input is key to ensuring the OECD's work is informed by a clear understanding of these factors. As SQA led this process, much of the relevant information is only held internally by SQA.

1.2 The purpose of this report

The purpose of this report is to reflect on the key factors that influenced the design and development of senior phase qualifications and assessments and how SQA responded. The report reflects on the intended and unintended consequences of the qualification and assessment design that were identified during the implementation phase, including the

mitigating actions taken by SQA. Finally, the report explores the objectives, themes and approach of SQA's Assessment Futures work.

As such, the report will:

- a. Critically analyse available literature to explore the key factors that influenced the direction of travel of the design and development of senior phase qualifications and assessments, and how SQA responded to these during the qualification and assessment design and development phases.
- Critically analyse the intended and unintended consequences of the qualification and assessment design and development phases that were identified during the implementation phase, and the mitigating actions taken by SQA.
- c. Explore the objectives, themes and approach of SQA's Assessment Futures work with a view to highlighting ongoing and future work.

1.3 Scope

The report focusses specifically on aspects of the senior phase qualifications and assessments.

It looks specifically at:

- National 1 to Advanced Higher courses design, development and implementation including:
 - literacy and numeracy
 - Core Skills and skills for learning, skills for life and skills for work

Exclusions

The report does not include an in-depth analysis of broader senior phase qualification provision, unless relevant to the design, development or implementation of National Courses or as part of discussion around SQA's wider portfolio, as follows:

- Personal Development qualifications
- Skills for Work courses and related vocational provision
- ♦ Awards
- ♦ More Choices and More Chances provision
- ♦ Scottish Baccalaureate

The report does not explore:

- the actions of stakeholder bodies unless directly impacting on senior phase qualifications and assessments
- aspects of curriculum design, within the BGE, unless they directly relate to the transition from the BGE to the senior phase
- SQA's approach to quality assurance, unless it directly affected the design and development of the qualifications and assessments

1.4 Methodology and resources

The following resources were reviewed to inform this report:

- SQA commissioned research
- ♦ SQA committee reports
- senior external committee reports that relate specifically to senior phase qualifications and assessments
- Scottish Government reports
- available academic literature

The work undertaken was desk based, with the production of a literature review. The literature review is split into five sub-sections.

Section 2.1: Pre-CfE (1977-2004)

The review briefly explores the landscape of Scottish education before the implementation of CfE and identifies the key issues that CfE was expected and anticipated to address. This section concludes with the publication of *A Curriculum for Excellence* (Curriculum Review Group, 2004).

Section 2.2: Design phase (2005–2014)

The review initially focuses on the design of the senior phase qualifications and assessments, in response to the requirements of the Assessment and Qualification Task Group and the Curriculum for Excellence Management Board. It explores the policy decisions that influenced the direction of travel for the senior phase qualifications and assessments, for example the *Building the Curriculum* series. In particular, this section focuses on 'the ask' made of SQA by CfE and how SQA responded to this during the design phase.

Section 2.3: Development phase (2008–2016)

The review then explores the development of the qualifications and assessments and the range of stakeholder involvement during that process. It outlines key decision points that influenced the direction of travel of the development of the qualifications and assessments. From a practical perspective, the review reflects on the effectiveness of the approach taken in meeting the intended political purposes and considers the social factors that influenced the resultant qualifications and assessments. It then considers the extent to which the qualifications and assessments produced met the original intention of CfE prior to implementation.

Section 2.4: Implementation phase (2012–present)

The review focuses on the intended and unintended consequences of the qualification and assessment design and development phases that were identified during implementation. This includes analysis of the planned overlap in design and implementation between the implementation of National 4 and National 5 in 2012 and the certification of Advanced Highers in August 2016. The review also focuses on the key factors that influenced the

redesign of the senior phase qualifications and assessments, and the potential effect of this redesign moving forward.

Section 2.5: The future

The review references the objectives, themes and approach of SQA's Assessment Futures work in order to outline work in this area.

Section 2: Literature review

The literature review considers:

- the key factors that influenced the senior phase qualifications and assessments and how SQA responded to these during the qualification and assessment design and development phases
- the intended and unintended consequences of the qualification design and assessments that were identified during the implementation phase including the mitigating actions taken by SQA to resolve these
- the objectives, themes and approach of SQA's Assessment Futures work

2.1 Pre-CfE (1977-2004)

2.1.1 Education reform in Scotland pre-CfE

The Scottish Government response to the recommendations made by the Howie Committee was published in 1994 under the banner 'Higher Still' with the tagline 'Opportunity for All'. This tagline could be applied to all of the reforms to Scottish education since the 1960s as they were characterised by the desire to extend qualifications and certification to more young people, and to provide them with greater flexibility in choosing their pathway to success.

In this period, two aspects of reform should be noted. Firstly, that control over the reforms was exercised by a small group of policy makers within the Scottish Office and secondly, that curriculum and assessment were developed as an integrated framework. The CfE reform broke the mould by starting with the National Debate to involve as many stakeholders as possible in the conversation — with Ministers keeping a firm hand on the tiller as education was a main plank of the new administration's policy objectives — and putting the focus on the curriculum as the vehicle to secure an education system that reflected the values and aspirations of society.

The timeline of changes in the period 1977–2004 is noted below and shows how curriculum and assessment reform proceeded together. It is worth noting that in this period there was no significant reform of the education system, with local authorities continuing to have responsibility for the implementation of these reforms within their schools. The McCrone report did however lead to restructuring within schools in the early 2000s with the introduction of faculty structures.

Timeline of education reforms and their stated purpose (1977–2004)

Source	Date	Description	Comment
SED	1977	Munn Committee	Proposals for refreshed S3 and S4 curriculum to
OLD	1377	report	meet needs of students of all abilities.
SED	1977	Dunning report	'Assessment for All' which led to the introduction
			of Standard Grade qualifications in 1984.
SED	1983	Action Plan 16-	Rationalisation of the vocational curriculum into
		18	modules.
SOED	1992	Howie report	Review of S5 and S6 that identified significant weaknesses that were a disadvantage to a range of candidates. This analysis was widely accepted. However, Howie's remedy was not (twin track system with ladders and bridges).
SOED	1994	Higher Still	A published framework of 'courses, qualifications and assessment' for S5 and S6 with concomitant adjustments in S1–S4. A unified curriculum bringing together SEB and SCOTVEC qualifications into a single framework. The key elements of HS were: unitised new national qualifications (NNQs); courses of 160 hours duration; assessment was a blend of internal and external; CSYS replaced by Advanced Higher — a 2-year course with possibility of by-passing Higher. Core skills recognised and embedded.
SOED	1995	Mechanisms for Higher Still implementation	Strategy Group and Task Groups; HS Development Unit (Moray House); National Development Officers; Specialist Advisory Groups.
SOED	1995	Higher Still Framework	Curriculum Guidelines and Core Skills Framework published (for consultation).
SOED	1996	Higher Still Frameworks	Framework of units, courses and National Certificates published (for consultation).
SOED	1996	Implementation delay	Implementation delayed by one year to 1998–99 session.
SOED	1996	Creation of SQA	Announcement that SEB and SCOTVEC would merge to ensure success of Higher Still.
SQA	1997	SQA	SQA assumes responsibility for Higher Still courses, units and assessment.
SQA	1998	Exam diet changes	Exam diet rescheduled to make room for more teaching time in S5 and S6 (160 hour course length).
SQA	1999	NNQs	New National Qualifications phased in from 1999 (dual running until 2001).
SE	2000	Policy	Standards in Scotland's Schools (Scotland) etc Act 2000 [National Improvement Plan].
SE	2000	Policy	A Teaching Profession for the 21st Century — McCrone report.

SQA	2000	First Higher Still exam diet	Diet 2000 — major problems, with impacts on SQA, schools, colleges and learners.
SEED	2000	Review	Deloitte and Touche review of Diet 2000 and
			recommendations for SQA systems reform.
SEED	2001	Review	Review of implementation of NNQs by National
0223			Qualifications Steering Group.
			Recommendations:
			Revision of assessment arrangements on a
			course by course basis, to reduce the
			complexity, variety and total volume of
			assessment. These reviews should: aim to
			minimise the amount of assessment (ideally
			to one assessment per unit); be completed
			as quickly as possible (ideally before the end
			of 2001); and be initially focused on the
			subjects with the largest uptake.
			Provision of advice and exemplification on
			assessment in order to establish a clearer
			understanding of the volume and type of
			assessment required.
			◆ A series of actions designed to establish
			better common understanding of standards.
			Clarification of the purpose of National
			Assessment Bank (NAB) items, to increase
			consistency across NABs, and improve
			quality assurance and availability.
SE	2001	Review	Enterprise in Education Review group set up.
SE	2002	Policy	National Debate on Education.
Scottish	2002	Enquiry	Education, Sport and Culture Committee enquiry
Parliament		,,,,	into the purposes of Scottish education.
SE	2003	Policy	SE response to the National Debate: Education
			for Excellence, Choice and Opportunity.
SE	2003	Review Group	Establish National Review of the 3–18
		'	curriculum.
Education	2003	Report	Schools replace some Standard Grades with
Scotland		-	NNQs (mixed economy of qualifications).
SE	2003	Policy	Determined to Succeed — SE response to
		-	Enterprise in Education review.
SQA	2003	Qualifications	New design rules for HN awards leading to
			revision of units and courses.
SE	2004	Policy	Publication of A Curriculum for Excellence.

Note: the source column indicates the changing of name of the education ministry as administrations changed.

It is clear that 1997–2004 was a period of intense scrutiny of curriculum and assessment in the senior phase. SQA, schools and colleges were implementing the reforms of Higher Still

while government was discussing further reforms of a far-reaching nature. In parallel with this was a significant volume of change in vocational qualifications and the development of a skills strategy that would change the focus from core skills to skills for learning, life and work. The current millennium started with schools delivering National Courses that were unitised, with both internal and external assessment, delivered in a 2+2+2 structure and leading to qualifications at Access level, Standard Grade, Higher and Advanced Higher. All of these activities served as an important back drop to the design phase of the new National Courses.

2.2 National Course design phase (2005–2014)

This section considers the key factors that influenced the design of the senior phase qualifications and assessments and how SQA responded to these. The section looks at the scoping activities that underpinned the design of the new National Courses and their assessments, and the development of the overarching National Course Design Principles.

2.2.1 Scoping the new National Courses

SQA's work on the design of the new National Courses began formally in 2005 with the implementation of its 'National Courses for the Future' project in response to the publication of *A Curriculum for Excellence* (Scottish Executive, 2004). The focus of SQA's 'National Courses for the Future' project was to consider the shape of National Courses over the next five to ten years with a view to building on successful practice while meeting the changing needs of young people within schools, colleges or other centres. The 'National Courses for the Future' project was an SQA-led, internal, National Course research and design project that served to provide senior external committees with key information to support decision making.

Work had already begun by SQA to support the aspirations of the revised curriculum with the design and development of Skills for Work (SfW) courses. SfW courses also contributed to the government's broader educational policy and lifelong learning agendas, with SfW positioned as a contributor to Learning for Life, one of the then five National Priorities in Education. SQA developed the first five courses for piloting in 2005–06. By the second year of the pilot SQA had developed an additional five courses, with around 60% of all secondary schools participating in partnership delivery.

The typical delivery model of SfW promoted partnership working between schools, colleges, business and training providers. The use of experiential learning within SfW helped learners understand the workplace and prepare for the transition from school to adulthood and the world of work. Positioning SfW within the National Course portfolio helped promote parity of esteem between vocational and academic provision.

These SfW courses therefore formed the first tangible output of *A Curriculum for Excellence*. In order to succeed, a candidate must pass all the units, which are internally assessed and awarded on a pass or fail basis. This represented the first National Course to be assessed in this way.

The primary focus of SQA's 'National Courses for the Future' project was to build on this work to inform potential changes in the design and assessment of the existing Standard Grade, Intermediate 1 and 2, Higher and Advanced Higher courses in relation to the

publication of the Scottish Executive's *A Curriculum for Excellence* (2004) and the pilot phase of The Assessment is for Learning programme.

Both of these programmes outlined a shift in focus towards:

- learner centred education
- a greater balance between formative and summative assessment
- higher order skills development
- broadening of literacy and numeracy
- development of core and softer skills
- personal skills development and vocational related learning

There was explicit recognition of the need to offer greater flexibility within qualifications to allow teachers and lecturers to extend their professional practice to new and more innovative learning experiences.

National Courses, since their inception, had made gains in relation to reducing the assessment load and encouraging flexible and innovative practice within the curriculum. Schools were increasingly making use of National Courses in S3 and S4 as a replacement for Standard Grade to enrich the curriculum, with a growing understanding of progression from Standard Grade to National Courses and progression between levels of National Courses.

There was growing evidence of the positive impact that the Assessment is for Learning programme was having in schools and the value of formative assessment on learning, particularly for low and middle attainers. Given the recognised strain between formative assessment and high stakes summative assessment (Harlen, 2007), consideration of how assessment for learning might interact with assessment of learning in the senior phase qualifications required significant investigation. The purpose of SQA's 'National Courses for the Future' project was to generate a body of evidence to evaluate the design, assessment and quality assurance of National Courses with a view to modelling a number of designs for consideration by senior external committees.

The work of the 'National Courses for the Future' project was divided into three broad areas:

- investigation of the external environment, including research on current practices in learning, assessment and grading, both within the rest of the UK and overseas
- investigation, review and evaluation of current practice in SQA and its centres
- scoping and evaluating new ideas and areas of work that were suggested during the project, or as part of A Curriculum for Excellence developments
- consideration of whether or not there needed to be greater flexibility in the timing of external assessment (for example, a second diet of examinations)

(SQA, 2005)

The primary focus was to usefully explore and gather an evidence base to understand the most appropriate way to embed the CfE principles of challenge and enjoyment, breadth,

progression, depth of learning, personalisation and choice, coherence, and relevance rigorously within the senior phase qualifications and assessments.

Between 2005 and 2007, SQA carried out extensive initial research, consultation and engagement in partnership with a wide variety of stakeholders to support initial thinking and to progress the senior phase design at senior committee level.

Many of the key questions that were raised during this evidence-gathering period required further investigation to determine whether they were issues of perception or reality. The key questions were divided into four broad themes:

- course design
- ♦ assessment
- impact of curriculum change on National Courses
- modernising National Courses

Detail of the key questions and the broader themes can be found in 'Appendix 1'.

In addition to this initial work, and under the governance of the Assessment and Qualifications Task Group: Working Group 1, SQA investigated the potential architecture of SCQF level 4 and 5 qualifications in partnership with Learning and Teaching Scotland (LTS), other key subject bodies and wider stakeholder groups, including practitioners. This investigation covered their structure, design, assessment, quality assurance and nomenclature, and involved SQA carrying out extensive research looking at UK and international comparisons, and engagement and consultation with stakeholders on the key questions raised between 2005 and 2007.

In November 2006, SQA presented the first of its major reports resulting from this work to the Assessment and Qualifications Task Group: Working Group 1 (SQA, 2007). The report highlighted the outcome of the first phase of substantial work to review National Qualifications (National Courses and Standard Grades) at SCQF levels 4 and 5. The first phase of work involved:

- reviewing the architecture of qualifications at SCQF 4 and 5, including the structure and safety nets
- developing options for the appropriate provision of assessment (teacher or lecturer-led and/or external) for the qualifications at SCQF 4 and 5 and grading
- options for a quality assurance system that allows responsibility for aspects of quality management to be devolved to a school or college, group of schools and/or colleges, or local authority
- considering options for the names of qualifications at SCQF 4 and 5

Findings across these four strands indicated that existing Standard Grade qualifications had some strengths that should be retained. These included: good coverage and assessment of broad skills, including core skills; use of a range of assessment types and methods; and a mixture of internal and external assessment, as appropriate to the task to allow for flexibility. Similarly, the existing system of National Units and Clusters at SCQF 2 had advantages as learning could be built up in small chunks, and timing of assessment could be flexible —

allowing assessment when the learner is ready, so that it confirms achievement and builds self-esteem (SQA, 2007).

However, it was considered that the structure of the qualifications at SCQF 4 and 5 was confusing and although there were signs that centres were beginning to use these qualifications flexibly, a rationalisation was required. This aligned with *A Curriculum for Excellence's* requirement (Scottish Executive, 2004) to 'de-clutter' the curriculum. In line with this, qualifications should be renamed to support a better understanding of these levels.

Findings from engagement with stakeholders indicated general satisfaction with the design and structure of National Courses at SCQF 6 and 7 — they were working well, and Highers and Advanced Highers had credibility with end users of the qualification.

However, evidence from engagement with stakeholders indicated a perception that there was too much external assessment. Conversely, there was some resistance to moving entirely to a teacher- or lecturer-led assessment approach (SQA, 2007). There was little appetite for a winter diet.

One approach that was suggested that might reduce the assessment load would be to delay external assessment until the exit point. However, as had been found in previous reforms, this raised concerns that should a candidate be unsuccessful at the end of a two-year course they would have nothing to show for this effort. This resulted in consideration of safety nets between levels and a broader discussion around recognising positive achievement.

It was also clear that to support flexibility in delivery and assessment there was a demand for some local flexibility in qualifications design (SQA, 2007). This led to consideration of how a revised quality assurance programme could be designed to support quality enhancement and promote effective learning and teaching without undue restriction. This would require a system that would allow responsibility for aspects of quality management to be devolved to a school or college, group of schools and/or colleges, or local authority, providing a greater degree of local autonomy and flexibility.

This early scoping work supported the early stages of thinking around how the values, purposes and principles of CfE could be woven, practically, through the senior phase qualifications. It involved considerable collaborative work across agencies and opportunities for stakeholder input, co-ordinated by the AQTG as the key national steering group. Had the term been in use at the time it may have been described as an example of co-creation.

The work of the 'National Courses for the Future' project, alongside the wider AQTG culminated in the publication of the Scottish Government's 'national consultation on the next generation of national qualifications in Scotland' that was published in June 2008 (Kidner, 2010).

The national consultation proposed new:

- qualifications at SCQF levels 4 and 5
- Literacy and Numeracy Awards at SCQF levels 3 to 5

It retained a significant number of features of the existing senior phase:

- retention of Access, Higher and Advanced Highers as points of stability within the system
- existing structure of courses and units was to remain, with units internally assessed
- the size and duration of the qualifications was to remain stable for coherence across levels
- awarding was to be based on successful attainment of both unit and course assessment (external examination)
- grading was to remain from A–D with the potential stretch to E grade
- compensatory arrangements, similar to those in place for Standard Grade, were to be put in place at SCQF 4 and 5

In line with what had been proposed for Higher Still, National Qualifications could be taken over one or two years. This flexibility would better meet the needs of young people. For example, a learner could start Higher courses in S4 and by-pass National 5 to provide more time for teaching and learning.

The national consultation also referred to a set of 'design principles'. In addition to the principles of CfE laid out in *A Curriculum for Excellence*, they also included a subset of achievements relating specifically to qualifications, that began to link more closely with the broader academic understanding of principles of assessment:

- ♦ fitness for purpose
- ♦ fairness
- credibility and reliability
- ♦ usefulness

Following this consultation and publication of the full experiences and outcomes for BGE (up to fourth level), in 2009 the Cabinet Secretary announced the new qualifications framework alongside timelines for implementation in stages. This was a landmark statement as it outlined firm arrangements for the structure of the final qualifications, alongside their implementation dates.

National 4 and 5 qualifications would be implemented in 2012 with their first examination diet in 2014 followed by the first Higher diet in 2015 and the first Advanced Higher diet in 2016. Considerable work was carried out by SQA and partners to agree high-level policy on design that led to the Ministerial announcement, and accompanying technical annex and questions and answers document, in June 2009.

Importantly, the decision to include grading at National 4 and National 5 was reconsidered, in light of feedback from the teaching community. In June 2009, the Cabinet Secretary for Education and Lifelong Learning highlighted in the Scottish Parliament, that 'as far as grading is concerned, the teaching profession produced some strong arguments for having no gradings at all at National 4 and National 5. I have taken the view that it is important that grades are provided, particularly for National 5, as that will help progression and will help employers to understand the qualifications. It will also help colleges and universities to identify the different levels that people have achieved. Having steered a route through this, we have determined that National 4 will be ungraded but that National 5 will be graded' (Scottish Government, 2009).

In September 2009 the Scottish Government published its *Assessment for Curriculum for Excellence: strategic vision and key principles* document (Scottish Government, 2009a) which outlined the key assessment principles that would underpin assessment from 3–18, and included a formal link between assessment practices and the new curriculum to give teachers and lecturers more autonomy; standards were to be skills based to support greater breadth and depth of learning supported by a new approach to quality enhancement, and the inclusion of a National Assessment Resource to help teachers' and lecturers' understanding of the national standards.

Building the Curriculum 4: skills for learning, skills for life and skills for work was also published at this time. This led to early SQA work on approaches to embedding skills for learning, skills for life and skills for work within the new National Courses and the relationship between these new skills and the existing Core Skills.

During this time, the 'National Courses for the Future' project had expanded to a full team of SQA staff involved in researching and consulting with stakeholders on a wide range of technical aspects relating to qualification and assessment design.

Following the Cabinet Secretary's announcement and the publication of the *Strategic vision* and key principles and Building the Curriculum 4, SQA was asked to develop the new qualifications at National 4 and National 5, revised National Courses at Access, Higher and Advanced Higher, and new National Literacy and Numeracy qualifications. The first stage of the qualification development programme was to develop and agree design principles for the qualifications.

2.2.2 National Course Design Principles

In October 2009, SQA's Qualifications Committee and CfE Management Board made considerable progress in discussing and agreeing issues around the design of new National Qualifications.

This progress included:

- a consensus that the qualifications should not be seen as the sole driver of learning programmes
- flexibility being built into the system to allow for National Courses to be taken across two years according to the needs of young people
- units remaining internally assessed and ungraded
- external assessments taking account of e-assessment where possible. Assessment support materials should be made available that avoid the use of mini-exams as was the case with some National Assessment Bank resources
- the new unit specifications were to be more flexible and open, with room for centre and learner choice

To achieve this, a decision was taken by the CfE Management Board, on advice from its Qualifications Governance Group, that new units would have fewer, broader outcomes, specified in a way that encouraged synoptic/holistic rather than 'atomised' assessment. Assessors would be expected to exercise more professional judgement about candidates'

work and attainment of outcomes in the round, rather than being required to gather evidence for a detailed list of criteria. Assessment criteria were previously more generic than at present, and there was to be less prescription of both content and assessment approaches (SQA, 2010).

To support the production of a set of National Course Design Principles, a Qualifications Governing Group (QGG) was convened in October 2009 with membership from Scotland's Colleges, the EIS, Associate Directors of Educational in Scotland, School Leaders Scotland, SQA, HMIE, the Scottish Government, and the Scottish Secondary Teachers' Association. This group's remit was to act as a sub-group to the CfE Management Board in order to agree:

- the process for signing off the design principles for the new qualifications
- the design principles, ensuring that these reflect the values, purposes and principles of CfE
- and monitor the process for ensuring that future qualifications meet those principles (The quality assurance process was developed and implemented under SQA governance structure)
- the process for ensuring that Management Board has assurance that development and delivery is on schedule

(SQA, 2009)

Working under the auspices of the QGG, an initial set of design principles was developed by SQA, drawing heavily on work carried out previously by the 'National Courses for the Future' project, the qualifications sub-group of the CfE Management Board. In addition, subject experts with experience of developing and implementing National Courses were involved in workshops and meetings to discuss how to translate the high-level policies into a set of working design principles for qualifications development teams.

SQA's lengthy consideration of the design principles included:

- consideration of how units could have broad outcomes to encourage synoptic
 assessment and get away from traditional criteria-based assessment. This allowed for
 relevant learning experiences, personalisation and choice, and flexibility in learning and
 teaching, while reducing atomised assessment that was viewed as a weakness of the
 system in place at the time
- SCQF credit and levels in relation to the size of the qualifications and setting national standards
- how the new courses would interact with other qualifications in SQA's portfolio to provide flexibility for alternative pathways and coherence across the curriculum
- the structure of the courses and the relationship between units and course assessments, with a view to preserving good practice in reducing the assessment load in the earlier incarnation of National Courses and supporting progression
- ensuring the courses met the required level of demand, in relation to maintaining standards over time, given the move from legacy to new qualifications
- transition between the BGE and the senior phase qualifications and progression across the suite of National Courses to ensure alignment with the aspirations of CfE. The purpose of this was to achieve alignment of CfE curriculum level 4 with National 4, in

terms of demand, and create hierarchies in the purpose, aims, skills, knowledge and understanding in National Courses to encourage coherence and depth of learning across levels. This was a key factor in offering flexibility in the system relating to allowing young people to take courses at their own pace of learning. Hierarchies would facilitate bi and multi-level delivery in centres and by-pass.

- the use of taxonomies in the development of outcomes as one route to developing higher order cognitive skills at all levels to encourage depth and application of learning through the acquisition of skills
- embedding skills for learning, life and work across all units as a means of developing these important skills
- defining breadth, and depth as the 'added value' of the courses (later to become breadth, challenge and application) from National 4 to Advanced Higher. Particular consideration was given to the role of the new National 4 and 5 qualifications and the relationship between coursework and the examination in creating a final mark at National 5. Concern was raised that the volume of assessment might create excessive assessment load, particularly where internal assessment was required. Consideration of the most appropriate method of assessment at these levels was of key importance
- considering appropriate assessment methods for the assessment of added value that would encourage personalisation and choice — leading to discussions around the balance between non-question paper components of course assessment and examinations
- how fallback could be introduced across levels and whether it should be introduced across all levels. This was latterly described as 'Recognising Positive Achievement' and was introduced for National 4 and 5
- the principles of controlled assessment and use of appropriate conditions of assessment, particularly for internally-assessed units as the basis for reliability and fairness
- optionality
- ♦ sampling within National Courses, this latterly becoming 'selecting' at National 4
- grading and differentiation
- how all of this could be implemented while ensuring, validity, reliability, practicability, equity and fairness

For National 4 and 5, QGG opted to focus on having a 'course unit assessment' as one of the requisite units. SQA was asked to include a specific definition of this element, later to become the 'added value' unit. The purpose of this unit would be to integrate or aggregate learning, assessing the application of knowledge and skills developed across the component units. In some areas, such as modern languages, it could comprise a collection of evidence. As such, this could provide evidence for achievement of the other units. After some debate the group agreed that the course unit assessment should not be graded, as this had the potential to promote 'teaching to the test' (SQA, 2009a).

QGG agreed that the overall grade for National 5 would therefore be determined by an external assessment (SQA, 2009a). This was in line with the Cabinet Secretary's earlier announcement in June 2009 around grading at National 5. The external assessment could comprise a range of different approaches including exams, projects, performances, practical tasks, investigations and work developed in the classroom. National 4 would have the same overall notional hours (160 hours) as National 5 to facilitate bi-level delivery but would

include an Added Value Unit that was internally assessed and ungraded in the place of an external course assessment.

This approach seemed to align, at least partially, with earlier feedback from the 2007 OECD review which highlighted that examinations at S4 created a barrier for parity of esteem within academic and vocational pathways within schools.

'by operating examinations at S4, Scotland retains a significant barrier to progression.' It argues that as most pupils stay on 'the examinations tend to enforce a terminal perspective or at least to reinforce a view about VET1 studies as being for students leaving school.' [...] 'The use of examinations for S3/S4 students does not appear compatible with a wider and more strategic use of vocational studies aimed at improving engagement and achievement.'

(OECD, 2007)

However, it was posited that an external assessment at National 5 would allow smoother progression to Higher and Advanced Higher and therefore external assessment would be retained at this level.

SQA carried out engagement events in early January 2010 to give practitioners and other stakeholders an opportunity to explore the possible implications of the proposed model for National 4 and 5. Delegates represented schools, colleges, local authorities, community-based learning and higher education. They included experienced subject practitioners already involved with SQA through Curriculum Area Review Groups, Assessment Panels and Examining Teams, as well as practitioners who had not previously worked directly with SQA. Members of SQA's Inclusion Group were also involved in the event, bringing a wider point of view about access and inclusion issues across the range of learners. Broadly, the proposed approaches were accepted with a particular enthusiasm for the concept of an 'Added Value' unit (SQA, 2010a).

A similar event was undertaken to engage with strategic stakeholders on the possible implications for Higher and Advanced Higher on 22 January 2010. Its purpose was to explore the potential impact of the proposed model for the design and assessment of National 4, National 5, and for National Courses at Higher and Advanced Higher.

Feedback indicated concerns around problems experienced in Advanced Higher courses caused by learners receiving unconditional offers on the basis of Higher results. This indicated a need to raise the status of Advanced Higher. Approaches to assessment should facilitate working across levels, not just National 4 and 5 but also National 5 to Higher, and Higher to Advanced Higher, to ensure Advanced Higher was not squeezed out of timetables.

It was agreed in these consultation events that the proposed models for internal assessment raised issues of teacher and lecturer confidence in standards. A need for continuing professional development (CPD) was identified, not merely the provision of training, but also time for teachers and lecturers to come together to discuss standards and prepare for moderation or verification (SQA, 2010b).

Quality assurance was identified as a major issue. The quality assurance system needed to ensure rigour, and this needed to be communicated/explained to the public to help ensure parity of esteem between internal and external assessment.

The feedback from the engagement with practitioners formed the basis of thinking around the final stages of the design principles, in particular the use of hierarchical assessment methods across levels, where appropriate. Further engagement was also carried out with HEIs to identify how flexible presentation models might be accommodated for university entry. This work continued with a large engagement event in 2014 and continued discussion with Universities Scotland. In addition, SQA carried out a series of events with local authorities and the teaching community in 2011 and 2012 to identify CPD needs in relation to assessment literacy. At this point work was ongoing around models of quality assurance and work was being carried out to support this in collaboration with stakeholder groups.

In the culmination of all of this work, the design principles for the next generation of National Courses were approved by Qualifications Committee in January 2010 and signed off by the Curriculum for Excellence Management Board in February 2010 (Figure 1), in line with the agreed governance mechanism (Appendix 3)

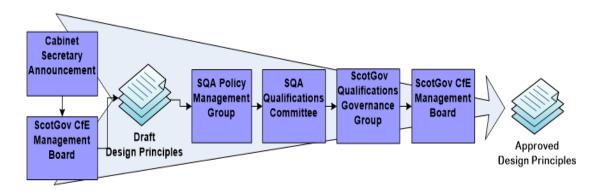


Figure 1

It was not until the Scottish Government published *Building the Curriculum 5: a framework for assessment* in January 2010 (Scottish Government, 2010) that final arrangements for the design and development of the senior phase qualifications were formally laid out for the sector. It is important to note at this stage that the SQA Design Principles for the new National Courses had already been approved by the CfE Management Board. SQA was already in the process of producing guidance for qualification development teams on the application of these principles.

Building the Curriculum 5: a framework for assessment promoted coherence between learning and teaching and the curriculum and assessment 'in order to gather good quality evidence of learners' progress through relevant experiences, staff will plan to use a range of approaches that reflect the breadth, challenge and application of learning and the wide range of skills being developed'. Assessment was to focus on knowledge and understanding, skills, attributes and capabilities (Scottish Government, 2010). This was the first time that the term 'breadth, challenge and application' was used formally within policy, although at this stage it was clearly linked to the BGE. Depth of learning, although included within the principles, did not feature heavily in the practical aspects of this report. This led to a reconsideration of the National Course Design Principles and the inclusion of 'breadth, challenge and application' as a key aspect of the added value of the courses to ensure progression from the BGE to all levels of the senior phase qualifications. At this point 'depth' was considered by SQA to be achieved through a combination of breadth, challenge and application and the development of higher order cognitive skills.

The BGE was to run up to and include the S3 year to allow a strong underpinning of understanding prior to embarking on the senior phase. Breadth of learning, challenge and the application of learning in different or unfamiliar contexts was to be assessed as an indication of achievement within and across levels. The National Course Design Principles had already accounted for these aspects, through introducing alignment of National 4 with curriculum level 4, in terms of demand, to support smooth transition from the BGE to the senior phase.

At this point, development of literacy and numeracy was the responsibility of all teachers and lecturers in Scotland. Assessment in the senior phase was to allow different approaches to assessment and a range of evidence, be fit for purpose, valid, reliable, practicable and fair, and encourage interdisciplinary learning.

2.2.3 Discussion of findings

The above timeline appears, at face value, to exemplify a seamless approach to the scoping and design of the new National Courses. What it actually represents is significant research, collaboration and engagement by SQA with partnership bodies and wider stakeholder groups, including practitioners, to ensure that the qualifications designed to recognise achievement in the senior phase of CfE successfully met the values, principles and purposes of CfE. It was also key that the design principles for the new National Courses were agreed with the wider system prior to being implemented.

The design of National Courses fully met the requirements of CfE by providing a suite of National Courses from SCQF 1–7 that provided curriculum planners with a rich set of choices, including a range of vocational provision. The National Courses provided:

- smooth transition between the knowledge and skills developed in the BGE and the senior phase through close alignment between National 4 and curriculum level 4
- progression routes both within National Courses, through the use of hierarchies, and from National Courses to alternative qualifications (National Qualification Group Awards, Awards, Skills for Work courses, Scottish Baccalaureates). This enabled flexibility of choice for a variety of learner pathways
- coherence across the senior phase qualifications, through the balance of academic and vocational qualifications and flexible routes to certification
- personalisation and choice in topics for learners through the use of non-question paper components of course assessment and in unit assessment to encourage challenge, enjoyment and relevance in their learning
- breadth, depth, challenge and application of learning, through the use of unfamiliar contexts and the acquisition of higher order skills

In order to embed the National Course design at qualification development stage, SQA had to consider the format and shape of the product architecture (for example specifications, support notes, assessment support, coursework assessment tasks), the training that should be made available to qualification staff to enable them to develop the new National Courses, and how SQA should engage and communicate changes in provision to stakeholder groups. This marked the start of the formal process of developing the new qualifications.

2.3 The development phase (2008–2016)

This section considers:

- the governance and development approach for the senior phase qualifications including the guidance and training provided to qualification developers
- the volume and scope of the engagement and consultation that SQA undertook with stakeholders around nuances in the National Course design
- how SQA incorporated feedback from stakeholders in the design
- the publication schedule for the course materials

2.3.1 Governance

SQA drew on its extensive experience of managing large-scale development of qualifications to put in place arrangements for the governance of this new development and the appointment and training of subject experts to work on the courses and units. In addition, SQA put in place the required internal controls to project manage the development effort across the full range of subjects, and a set of mechanisms to consult with its stakeholders at each stage and consider changes in response to this feedback.

SQA developed its systems of internal governance and quality assurance to support the CfE development programme. SQA's existing groups and committees including the Board of Management, Qualifications Committee and Advisory Council continued to provide internal governance, advice and support. In addition, SQA created several new groups to undertake and oversee the detailed development, testing and implementation work. The purpose of these was to ensure that key stakeholder bodies agreed with the development of the qualifications, including the content, approach to skills development and assessment approaches, and that qualification developers worked to these design principles.

SQA established processes and working groups to ensure developments were carried out efficiently, delivering products that were of high quality and adhering to the design principles.

There were two aspects to this:

- ensuring that all of the new and revised National Qualifications met the agreed design principals and guidance — this was carried out by the Review of Courses Co-ordination (ROCC) Group. There were two ROCC groups: an internal (to SQA) group (IROCC) to review the content and scope of the new National Courses, and an external group (led by SQA and involving stakeholders) (EROCC) to provide oversight of these decisions
- ensuring that SQA delivered and implemented the two new product types (new National Qualifications and the National Literacy and Numeracy qualifications) by having in place the appropriate operational and business systems — this was carried out by two internal SQA CfE Product Type Project Boards

Using the agreed design principles, the ROCC groups established more detailed Business Design Rules that would be used by the Product Type Project Boards to determine a clear set of business rules for each new product type.

The Business Design Rules were subsequently approved by SQA's CfE Programme Board and all development work was required to adhere to the Business Design Rules. Business rules were the system requirements that were devised internally to certificate the new qualifications.

Product Type Development Project Plans were developed including milestones, deliverables and risk logs, linked to the overall CfE Development Programme Plan. SQA's product type development process was then followed including:

- testing of the new product types
- approval of the new product types for delivery in line with Business Design Rules
- initial implementation and lessons learned

The detailed development of qualifications was carried out by the qualifications development teams and subject working groups in accordance with the design principles, Business Design Rules and SQA product development processes. The work in each curriculum area was overseen by Curriculum Area Review Groups (CARGs). At key points the work of each curriculum area was to be reviewed by the ROCC groups to ensure that the work adhered to the overall design principles. This happened at key milestones, including:

- production of the vision, principles and framework for each curriculum area
- production of rationale and arrangements documents
- production of unit specifications
- formal sign-off of completed qualifications

A Qualifications Development Project Plan was created for each curriculum area and subject, including milestones, deliverables and risk logs, and linking to the overall CfE Development Programme Plan.

Monitoring, escalation and review

Regular review of CfE Development Project Plans was undertaken to monitor progress and provide escalation routes for any issue that may arise:

- ◆ CfE Product Type Project Boards managed product type development and escalated issues to SQA's CfE Programme Board
- ROCC groups managed adherence to design principles and guidance and escalated issues to SQA's CfE Programme Board
- SQA's CfE Programme Board reviewed progress at a strategic level and managed and escalated risks through Qualifications Governance Group and SQA's Board of Management and Executive Team as appropriate
- all SQA product developments were governed by the Development Programme Group (DPG) and CfE developments were reviewed there regularly

Figure 2 represents the adherence to design principles with ROCC groups as the main escalation route through SQA's Programme Board, SQA's Qualifications Committee and Qualifications Governance Group and the CfE Management Board.

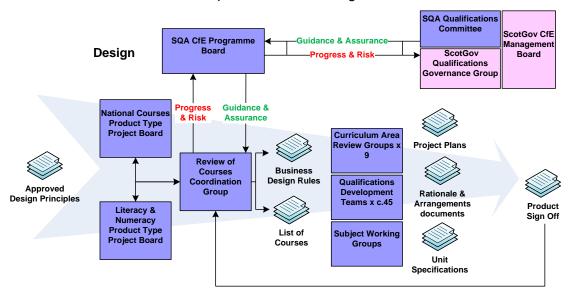


Figure 2

Figure 3 represents the relationships and escalation routes between Project Type Boards, Implementation Teams, SQA's CfE Programme Board, Executive Team and Board of Management; Qualifications Governance Group and the CfE Management Board.

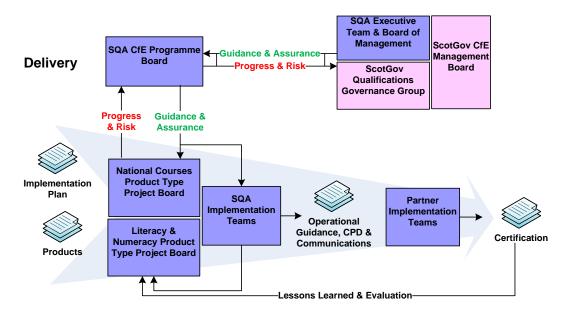


Figure 3

Figure 4 outlines the full SQA and Scottish Government governance structure for the development and approval of the qualifications.

SQA & ScotGov CfE Governance Structure

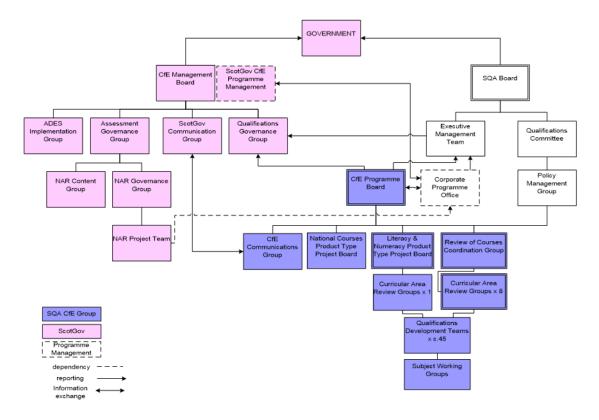


Figure 4

Once the governance of the project was established, qualification development team members were recruited to support the initial tranche of work.

2.3.2 CfE qualification development team

The new National Courses were to be implemented in stages. The new National 4 and 5 courses were due to be implemented in 2012 for first certification in 2014. Higher and Advanced Higher were to be implemented in 2013 and 2014, with first certification in 2015 and 2016 respectively.

The existing Standard Grades and National Courses were to continue to be delivered, assessed and certificated during the implementation phase, being phased out as the new qualifications were introduced. This created a period where the new and existing qualifications were subject to dual running.

Experience from the development of the Higher Still qualifications had indicated that, in practice, having a designated development team in place to develop the new qualifications would allow existing qualification development staff to run the existing qualification diet to ensure a smooth transition. This was important to ensure stability in the assessment cycle.

To support this, a new CfE development team was established in SQA in 2008. The intention was for this team to develop the new National Courses, in collaboration with the already identified working groups and then pass the new qualifications to the existing qualification teams to implement.

The initial stages of the development period involved recruiting new appointees to support the development period, for example members of the subject working groups and curriculum review groups. This was an extensive process with nominations being made by local authorities to support this work. New Principal Assessors and Depute Principal Assessors, to oversee the new courses when they were developed, were recruited. This was of key importance as the existing Principal Assessors remained heavily involved with the certification of the existing qualifications, as part of the dual running process.

The CfE development team then embarked on the initial stages of the development, working with their new appointees to scope the content of the new qualifications, in line with the experiences and outcomes for the CfE curriculum areas of:

- expressive arts
- health and wellbeing
- languages (including English, Gaidhlig, Gaelic learners and modern languages)
- mathematics
- religious and moral education
- sciences
- social studies
- ♦ technologies

The CfE development teams, working with their CARG, explored the content of the existing Standard Grade and National Courses with a view to refreshing where appropriate. They also engaged widely with professional associations and key stakeholder bodies on the shape and content of the new courses. This was particularly important given the need to reduce content heavy areas with a view to encouraging the application of skills-based learning.

Preliminary work in this area continued in 2009 with the publication, by Learning and Teaching Scotland (LTS), of the revised experiences and outcomes and how to ensure transition between the fourth level curriculum outcomes and National 4 qualifications. This was the key transition point from the BGE into the senior phase.

The key to effective transition from curriculum experiences and outcomes to qualifications lay in supporting appropriate continuity and coherence in knowledge, understanding and skills and in learning, teaching and assessment. This continuity needed to support transition to National 3, 4 and 5, as well as the transition to Higher and Advanced Higher. This transition was important to ensure a smooth gradient of learning.

However, there was still substantial disquiet in the system around the capacity and resources in schools to deliver the new National 4 and 5 courses with concerns around the vagueness of the experiences and outcomes at CfE curriculum level 4, and lack of teacher and lecturer understanding of how to assess levels of attainment within subjects.

It is important to note that the final design of the new National Courses was not finalised at this point and much of this development work was exploratory with a view to establishing preliminary content. However, there was an expectation that development of the new National 4 and 5 courses would form the initial phase of the qualification development programme. CfE development teams were required to publish draft course rationales and course summaries for National 4 and 5 courses by the end of January 2011.

2.3.3 Specifications, guidance and training for development staff

Although the design principles were approved by the CfE Management Board in early 2010, there was still significant work required to be undertaken by SQA to translate the high-level design principles into workable development models.

Further consideration had to be given to shape of the new course and unit specifications so that the national standard could be communicated clearly to the teaching community. This was of particular importance given the requirement that the new unit specifications should be more flexible and open than their predecessors with fewer, broader outcomes, and more generic assessment criteria that were less prescriptive in terms of both content and assessment approaches.

SQA carried out further engagement with schools and colleges in June 2010 on the new unit specifications. Feedback indicated that the teaching community welcomed having greater flexibility in assessment and were positive about the hierarchical structure of the units for use in bi-level delivery. There was a demand for greater prescription in terms of the knowledge, skills and understanding to be assessed, and a clearer definition of the standards in the units. However, it was judged that good assessment exemplification would assist this (SQA, 2010c).

At this point, it was considered important to get away from traditional criteria-based assessment and encourage relevant learning experiences, personalisation and choice and flexibility in learning and teaching. SQA had not intended to provide National Assessment Bank materials. In its place would be the National Assessment Resource (NAR) — a joint venture between LTS, SQA and Scottish Government. The NAR was conceived as an online resource providing examples of assessment approaches (ages 3–15) developed in conjunction with practitioners, moderated at school, local authority or cluster level, then quality assured at national level. This was intended to encourage teachers and lecturers to create and share their own approaches to assessment. However, in 2012 it was agreed that assessment support materials should be provided for implementation in October 2012 to further support teachers and lecturers to understand the national standard.

In September 2010, SQA produced course specifications which outlined the purpose and aims, skills, knowledge and understanding for the courses, but again these were light in nature to provide further opportunities for teachers and lecturers to exercise their professional judgement in relation to their approaches to learning.

A series of guidance notes and training were produced, by SQA, for the CFE qualification development teams between June 2010 and November 2010, including:

the principles of assessment (validity, reliability, practicability, equity and fairness)

- amplification of National Course Design Principles.
- quidance on writing unit specifications
- guidance on writing course specifications
- guidance on progression and hierarchies
- deriving units from a course
- progression and hierarchies
- transition from the experiences and outcomes at CfE curriculum level 4 (BGE)
- guidance on equalities including a toolkit and the equality review process
- guidance on course assessment, with particular focus on assessment methods for the assessment of added value
- skills for learning, skills for life and skills for work toolkit

This guidance focused specifically on the initial stages of qualification development.

SQA continued to engage with stakeholders on more technical areas of course design, such as fallback from National 5 to National 4, and the shape and role of the National 4 Added Value Specification.

It was not until the course assessment specification templates for National 5 to Advanced Higher courses and accompanying guidance were produced in May 2011 that mandatory course coverage could be prescribed into the specifications in line with the requirements of the course assessments.

Further work to support the introduction of controlled assessment into the arrangements for National 5 to Advanced Higher courses was implemented in August 2011 with similar controls for the setting, conducting and marking of assessments being implemented in the National 4 Added Value Unit in September 2011. The purpose of controlled assessment was to clearly lay out arrangements for the responsibility of these aspects either as SQA led, centre led or in combination.

In January 2012, Scottish Government announced a change of name from Access 1, 2 and 3 to National 1, 2 and 3 to better aid understanding of progression in national qualifications and remove the confusion arising from the use of different names for courses at the lower SCQF levels.

At this stage development of the new National Courses was firmly underway.

2.3.4 Engagement and consultation on the draft qualification structures

Between January and December 2011, SQA published its draft course rationales, course overview and summary documents. At the same time the SQA CfE website opened a comment area for practitioners to provide feedback on the draft course documents. Feedback from practitioners focused mainly on the design of individual subject content and the proposed assessment methods.

In January 2012, SQA opened up a web facility to offer stakeholders the opportunity to 'Have Your Say'. This facility remained open until 24 April 2012.

Just over 1100 messages were received from stakeholders via the 'Have Your Say' website. The feedback focused on the following key areas:

1. Exemplification of the national standard

Practitioners requesting exemplification and clear detail around the depth of assessment as judging evidence was regarded to be a challenging issue. This broadly related to a lack of understanding of the national standard. Further requests for off-the-shelf assessments similar to National Assessment Bank materials were made.

2. National 4

Practitioner concerns around the lack of grading at this level and the lack of an external assessment. Particular concern over the value of an ungraded qualification. Also concern about the relationship with National 5 and the volume of work required in bi-level delivery.

3. National 5

Concern that National 5 is more difficult than the previous credit qualification, giving rise to concern about borderline candidates and the drop from National 5 to National 4. Concern that parents and guardians might pressurise teachers and lecturers to enter candidates at National 5 even if success is unlikely, because National 4 will be seen as a poorer level qualification. Fallback arrangements should be put in place to support this in a similar way to Standard Grade and avoid overassessment.

In response to feedback from the 'Have your Say' website, SQA embarked on the production of assessment support packs. The intention was that these packs would provide exemplification of combined assessment (approaches to assess the combination of outcomes within and across units); unit by unit assessment exemplars; and portfolio assessments. These assessment packs were non-mandatory and provided with a view to providing teachers and lecturers with exemplification of how assessments could be devised to support personalisation and choice.

2.3.5 Publication of materials

The final course materials for National 2 to 5 and Higher were published by SQA in April 2012. These were followed by assessment support packs and additional course materials between October and December 2012. In February 2013, the National 5 and Higher specimen question papers were published with Advanced Higher materials following in April 2013.

2.3.6 Discussion of findings

From the launch of CfE in 2004, SQA prepared for new and revised qualifications in the senior phase. SQA understood that the underpinning philosophy of CfE would bring sweeping changes to the structure, content and assessment of its qualifications. In its early work to prepare for the main development phase, SQA engaged in research and consultation around key themes such as accessibility, internal assessment, quality assurance and hierarchical course structures.

There was a further challenge in that there was to be dual running of old and new qualifications in the transition period, requiring SQA to look beyond its existing cadre of experienced appointees to find practitioners and subject experts to recruit to the extensive development work. SQA recognised the importance of consultation with a wide range of stakeholders, based on its most recent implementation of a major curriculum reform (Higher Still), and at all stages of the development of its courses and units along with their assessment arrangements, it sought to engage school managers and teachers and lecturers through workshops and consultation events.

As well as SQA's internal governance and quality assurance systems to ensure adherence to its business processes, there was a further line of accountability to the CfE Management Board and its Qualifications Governing Group. This helped ensure that CfE principles for the curriculum, and guidance on assessment, were given sufficient place in the development work.

The path of this development was not smooth, with late publication by the CfE Management Board of some key documents (for example BTC5) and changes in direction for the literacy and numeracy qualifications. There were considerable tensions around the first tranche of qualifications — National 4 and 5 — where concerns of equity and fairness placed competing demands on the development teams. On the one hand the lack of external assessment at National 4 was seen to diminish the value of the qualification, while on the other there was no appetite for external assessment at that level. The decision to introduce the Added Value unit also created new challenges for the development teams.

The timescale between the publication of the revised national qualification framework in 2009, to the complete set of course structures, assessment arrangements, arrangements documents and support notes, was a short 24 months. Over 180 courses were designed and their documentation published on SQA's website. In that time there were several consultations with a wide range of stakeholders on key aspects of the development and changes of direction.

2.4 The implementation phase (2012–present)

This section will focus on the implementation phase of the new National Courses. It will explore the factors that influenced the changes to the design and content of the qualifications during the implementation phase, and actions SQA undertook to mitigate concerns. This section will also explore the intended and unintended consequences of these actions.

2.4.1 National 4 and National 5

The new National 4 and 5 courses were implemented in 2012 for first certification in 2014. It is important to note that within SQA at this stage, the National 4 and 5 courses had moved from the remit of the CfE development team to existing qualification teams for implementation as per the development and implementation model. For the purpose of this report these teams will be known as implementation teams.

At the time of implementation, Standard Grade was still being dual run, with last certification in 2013. Immediately, comparisons were made between these legacy qualifications and the new National Courses at these levels. In particular, practitioners were concerned about how timetabling would allow for eight subjects to be undertaken in a single year (S4), where

previously Standard Grade was delivered across two years. This comparison was compounded by the fact that the size of the qualifications, at 160 hours notional delivery time, remained the same as Standard Grade. Despite the fact the design of the qualifications was intended to allow flexibility in presentation strategies, schools increasingly viewed the new National 4 and 5 qualifications structures as the same as Standard Grades and continued to timetable according to their existing arrangements.

During the design and development phases, SQA worked in partnership with the wider system to ensure that learning within curriculum level 3 and 4 provided the underpinning knowledge and skills to allow a smooth progression to the senior phase qualifications and to avoid a 'two-term dash' that was prevalent at Higher. It was intended that the BGE would provide substantial 'overlap' (Kidner, 2013) with curriculum level 4 broadly equating in content and demand to National 4. In addition, there was a clear expectation that learners should only be presented for National 5 when they were 'secure' in their learning at curriculum level 4.

However, practitioners appeared to be unclear about how the curriculum levels supported the senior phase qualifications and concerns were raised about the relationship between the National 4 and National 5 courses and the assessment burden of delivering these courses in bi-level classes.

In 2015, SQA carried out independent research that looked at how schools were presenting candidates for National 4 courses (Axiom, 2015). Forty interviews were conducted from a sample of 46 teaching professionals — a response rate of 87%.

Findings indicated that decisions about presenting learners for National 4 or 5 courses were made at departmental level and final presentation was decided as late as possible in the year with a view to offering learners the opportunity to maximise their potential. This was particularly true of 'borderline' learners. However, presentation strategies were often heavily influenced by parents and guardians who believed that the National 4 qualification lacked worth, with concerns expressed around the reliability of teacher and lecturer assessment and the lack of grading. This had the effect of teachers and lecturers becoming 'risk averse' (Axiom, 2015 p 12) with two thirds of respondents indicating that their learners were undertaking both the National 5 courses and the National 4 Added Value Unit to ensure fallback. This was particularly true for those candidates who were leaving school at the end of S4. This indicated an early lack of understanding of the purpose of the National 4 Added Value Unit with early perception of the National 4 qualification as compensatory, representing a compensatory award for a failed National 5 attempt.

The intention of the senior phase qualifications was to provide flexibility to support continuous learning experience from S3 to S6 led by learning and teaching with assessment and certification at appropriate points in a learner's journey. The one-year delivery model that was adopted by a significant number of schools had the unintended consequence of squeezing what was now a large amount of work into a very short timescale.

To further compound this, concerns were also raised about the lack of prescription within the unit specifications, and teachers and lecturers were not confident that they understood the national standard. The design of units was based on the requirement, in line with the decision made by the QGG, to move away from criteria-based (atomised) delivery and assessment towards units of learning that could be delivered flexibly by teachers and

lecturers. The specifications were intended to be high level to allow room for teacher and lecturer professional judgement, and were content free to encourage contextualised delivery. The unintended consequence was that teachers and lecturers were unsure what to teach and the level at which to assess performance.

Teachers' and lecturers' lack of confidence in the national standard was of particular concern at National 4. The National 4 Added Value Unit, like other units within the National Courses was non-prescriptive but it also acted in a similar way to an ungraded course assessment. Teachers and lecturers were increasingly unsure of what a 'pass' looked like at this level. Consequently, SQA introduced Judging Evidence Tables (JETs) into the National 4 Added Value Unit to support teachers' and lecturers' understanding of the national standard. The unintentional consequence of this was that teachers and lecturers stopped using their professional judgement and focused entirely on the requirements held within the JET tables, with continued calls for further prescription.

Teachers and lecturers criticised the design of the course materials provided by SQA. The legacy Standard Grade and National Course materials were held within one set of 'arrangements documents' that laid out the course in full. The new National Course materials supplied by SQA were multiple, with unit specifications, course specifications, separate course and unit support notes at National 4 to Advanced Higher, and course assessment specifications at National 5 to Advanced Higher. The intention of these different documents was to separate out the aspects of the course that were mandatory from those that were optional. This approach was designed to better support practitioners differentiate between mandatory and optional content and set out the national standard. This approach was in direct response to previous criticism of the Standard Grade arrangements documents that were perceived as doing this ineffectively.

The volume of documentation appeared to create confusion for practitioners who repeatedly requested clarification from SQA about which aspects of the course materials were mandatory and which were not. Particular criticism was received around duplication of references to the CfE values, purpose and principles which were seen as repetition across the course documents.

At the same time revision work was also being undertaken by the implementation teams in response to strong feedback from the teaching community about the detail provided within the course materials. Support notes were improved and small changes were undertaken to course materials in order to clarify content in particular subjects. This led to a continuous stream of changing course materials and, because teachers and lecturers tended to print off their materials, different versions being circulated within schools.

Against this background teachers and lecturers were also expected to carry out similar processes for moderation and internal verification for the internally-assessed elements of the new National Courses. SQA developed its Understanding Standards programme to illustrate the requirements of the new units and courses and deliver a series of events for teachers. The Understanding Standards support was well received by practitioners and continues to the present.

One of the issues raised in the consultation phase was the concern that internal assessment would not have parity of esteem with external assessment. SQA published its Internal Verification toolkit to help schools understand SQA requirements, along with information to

explain the quality assurance processes that would enable SQA and centres to exercise shared responsibility for internally-assessed elements of the National Qualifications. The arrangements were as follows:

- production of materials for the Understanding Standards programme and events for teachers and lecturers
- production of the Internal Verification (IV) toolkit
- prior verification service for assessments created by schools
- external verification rounds (initially three, later reduced to two), comprising:
 - the SCQF levels to be examined in a round
 - the date for uplift of centre evidence for consideration at a central IV event
 - the dates during which there would be visiting verification for centres chosen by SQA
- post-qualification verification
- publication of Key Messages for each subject to guide future assessment and further build understanding of standards

This verification effort was conducted by teams of subject verifiers, each with a team leader reporting to a Principal Verifier, supported by a Depute Principal Verifier.

This arrangement (selecting and retaining candidate evidence and creating documentation) proved onerous for schools. It was alleviated somewhat by reducing the number of rounds of verification to two, and then more significantly reduced with the development of unit assessment support packs by SQA (from 2016).

In August 2014, the CfE Management Board produced its report of the first year of the new National Qualifications (Curriculum for Excellence Management Board, 2014). Among a variety of wider stakeholder actions, SQA was tasked to work with Education Scotland (previously LTS) to support schools to develop assessment practice with a view to helping teachers and lecturers to understand how to build up robust assessment evidence. SQA was also asked to provide clear exemplification of 'combined assessment' to reduce the assessment load and to clearly indicate how learning in the BGE supported transition to the senior phase qualifications. Further guidance was required on the relationship between the unit and course assessments including approaches to streamline unit assessment and clarify re-assessment requirements. In addition, SQA was asked to clearly signal where the latest version of updated course materials were held to ensure that teachers and lecturers could easily locate and work with the correct versions.

SQA undertook significant work to address concerns by reviewing its approach to verification with a view to targeting centres that were struggling as opposed to the broad approach taken in the initial verification rounds. Verification rounds were reduced from three to two. A series of Understanding Standards events were carried out to further support practitioners' understanding of the national standards. Understanding Standards still forms a significant aspect of SQA's work to support teacher and lecturer continuing professional practice to this day.

Further work was carried out in 2014–15 to the unit assessment support packs and course materials to highlight opportunities for combined assessment, clarify the national standards and reduce the assessment load.

Over sessions 2015–16 and 2016–17 SQA carried out fieldwork with schools and colleges to identify their perceptions of the new National Courses (SQA, 2016, 2017).

Interviews with teachers and lecturers and students were undertaken to identify key issues around transition from the BGE to the senior phase, assessment, personalisation and choice, and documentation. Teachers and lecturers identified that National 4 students believed they were not as capable as their National 5 counterparts, particularly where both levels were taught within the same classroom. This was compounded by the fact that they were not permitted study leave and found themselves with very little to focus on during the study leave period. Teachers and lecturers also expressed concern about the volume of unit assessment required during bi-level delivery and the jump from National 4 to National 5 and Higher in terms of standard. They also highlighted a need for stability and that the constant stream of changing documents were not allowing them to bed in teaching practice, and that the documentation generally was excessive and repetitive. However, many of the learners interviewed were positive about National 4, expressing the view that having a qualification that did not have an exam at the end relieved the pressure, particularly when they were studying for National 5 examinations.

To further support bi-level delivery and to reduce teacher and lecturer assessment load, SQA introduced thresholds and/or cut-off scores to National 4 and 5 units in early 2016. The intention was to outline the volume of key evidence that was required to meet the assessment standards within units. The unintended consequence of this, in relation to the CfE values, principles and purposes, was to atomise assessment, with teachers and lecturers focusing even more tightly on what candidates had to do in order to achieve a pass at unit level — in effect this was a return to assessment leading learning and teaching.

During this period concerns were still being raised around the transition from the BGE into the senior phase. In 2016, Education Scotland released its CfE benchmarks that sought to clarify the standards at each curriculum level. The intention was that the benchmarks would further support teachers' and lecturers' understanding of the national standard within and between curriculum levels. These benchmarks were introduced four years after the initial implementation of National 4 and 5 courses. Given that the fourth level curriculum was designed to align with National 4 and 5 as a key transition point from the BGE to the senior phase, it was important that this alignment was retained. However, SQA's involvement in the design and content of the curriculum level 4 benchmarks varied from subject to subject, with some subject managers not being asked to contribute at all. The unintended consequence of this was that some National 4 courses no longer provided a smooth transition from the BGE to the senior phase, in some subjects, as the standards were no longer aligned.

This had a further unintended consequence for some National Courses because to adjust National 4 and National 5 to meet the curriculum level 4 benchmarks meant adjusting Higher and Advanced Higher for purposes of progression. This led to a series of multi-level reviews some of which are still ongoing.

It took some time for partnerships with colleges or other providers to develop in support of vocational provision. This aspect of provision was given much greater prominence through the implementation of the Scottish Government's youth employment strategy: *Developing the Young Workforce* (DYW). This 7-year strategy, begun in 2014, built on the CfE entitlements for young people as set out in *Building the Curriculum 4: skills for learning, skills for life and skills for work*. A significant enabler of this strategy was the extensive suite of National Progression Awards developed by SQA to provide awards at SCQF levels 4, 5 and 6 that

had a vocational bearing. There are around 190 such courses in the SQA catalogue, constructed around National Certificate vocational units and covering topics that are highly relevant to career opportunities — such as cybersecurity, health and social care, animal care, accounting and hospitality.

Despite this heightened vocational offering, presentation strategies in 2014–15 identified that candidates, in the most part, were being entered for both National 5 and the National 4 Added Value Unit as the default position and vocational provision was not widely offered. However, with widening access to school and college partnerships by 2017, the proportion of school leavers obtaining one or more vocational qualifications at SCQF level 5 or above increased from a base of 7.3% in 2014 to 14.8% in 2018. This highlights that this system change, in terms of partnership working between schools and colleges, provided schools with more confidence to offer a wider variety of courses to better suit the needs of young people, rather than offering National 4 and 5 as a matter of course.

In the first two years of implementation, SQA was asked to undertake a significant amount of work to support practitioner understanding of the National 4 and 5 courses. Calls for greater prescription, further exemplification and assessment support were met through engagement events with practitioners, partnership working with key stakeholder bodies and extensive communication. However, issues concerning presentation strategies and teacher and lecturer workload continued to persist during the implementation of Higher and Advanced Higher.

2.4.2 Higher and Advanced Higher

Highers were first implemented in 2013 for first certification in 2015. Advanced Highers followed in 2014 for first certification in 2016. The intention was that Higher and Advanced Higher courses would remain relatively static in comparison with the change to design at SCQF 4 and 5 to maintain some stability within the system. This was of key importance as Highers are the key currency used by Higher Education in its recruitment process.

Again, post implementation work was undertaken by the existing qualification development teams to clarify content and support notes. As indicated, work was still ongoing to further support teachers' and lecturers' understanding of standards at National 4 and 5. When the new Highers were introduced, work continued to ensure that any changes made at National 4 and 5 were reflected at the higher levels to ensure hierarchies were maintained for the purpose of progression.

The implementation of the new Highers created comparatively little feedback at the time, possibly as teachers and lecturers were still focusing on unravelling the requirements of National 4 and 5. However, concerns were raised that the intended flexible nature of the new National Courses could cause difficultly for candidates entering Higher Education Institutions (HEIs) as many HEIs continued to demand that Highers (usually five) should be obtained in a single sitting as a key aspect of their entry requirements. The narrowing of subject choice in S4 subsequently resulted in a large number of students taking 'crash Highers' in S5 to gather enough Highers in one sitting. Again, this created a situation where assessment began to lead learning and teaching, contrary to the original aims of the curriculum reform.

SQA carried out extensive liaison with HEIs throughout the design and development phases of the senior phase courses to support the implementation of Highers. A direct consequence of this was relaxation in the entry requirements for some universities, in collaboration with Universities Scotland.

By the time Advanced Higher was implemented in 2014, significant engagement and CPD had been undertaken with the wider system to facilitate understanding of the national standard, the relationship between unit and course assessments, and how to reduce the assessment load. Centres appeared to feel more comfortable at this level. This is likely to be due to fewer candidates, more autonomous learning and hence a reduced teacher and lecturer workload. However, re-assessment within units continued to be an issue as unit assessment continued to be approached in an atomised way, with assessment standards increasingly being viewed as criterion based, which was not their intended purpose.

2.4.3 Revised National Courses

In January 2016, in response to threatened industrial action by teachers and lecturers, the Scottish Government set up a Review of Assessment Working Group to consider ways forward that would address over-assessment in National Courses. In September 2016, the CfE Management Board accepted the recommendations of this group to remove the requirement for units from National 5 to Advanced Higher, and agreed that units would no longer feature as a mandatory requirement in National 5 to Advanced Higher courses. National Courses at these levels were to move from a modular to linear format, with end point assessment — with first certification of the revised National 5 assessments in August 2017. This approach was designed to reduce over assessment that had risen through teachers' and lecturers' lack of confidence in their understanding of the national standards.

It is important to note that this change in approach happened shortly after the first certification of Advanced Higher courses. SQA had to immediately undertake significant development activity, within a very short timescale, to support the implementation of the Revised National Qualifications in line with the CfE Management Board's decision. The key aspects of these changes are highlighted below along with the consequences of these actions:

1. Revised qualifications design and assessment

In terms of qualifications design and assessment, the main implications of the approved proposal were the removal of summative assessment (and associated certification) for component units, and strengthening of the remaining course assessment to ensure all aspects of the course were assessed. In practice, this led to increased sampling of the course content in the question paper component(s) with relatively few modifications to coursework components. Recognising Positive Achievement 'fallback' from National 5 to National 4 was removed. The band for grade D was extended from a notional 45–49% to a notional 40–49% to bring it in line with the range available at grades B and C, and to recognise the achievement of a wider group of candidates.

Work began to develop an assessment strategy for the Revised National Qualifications. This would eventually inform subject-by-subject reviews of the qualifications to ensure their continued integrity in terms of the validity, reliability, practicability and accessibility of the

course assessment, and how these needed to be strengthened and/or modified. However, the aims, rationale, and content of the courses were, on the whole, not to be changed.

The impact of the decision to remove units from National 5 to Advanced Higher courses has far-reaching consequences in line with assessment practice. The following outlines a few of the key consequences of this, although this list is not exhaustive.

The units within National Courses were outcome based, with outcomes underpinned by educational taxonomies to help support the development of higher order cognitive skills and secure constructive alignment. This was a key aspect of the design of the National Courses intended to develop higher order skills that were embedded and developed through learning and not just added within the course assessment. The revised National 5, Higher and Advanced Higher courses had to address this loss by ensuring that content was further clarified so that practitioners knew what needed to be taught and learned and how that learning could be demonstrated in course assessment. Command words were defined more clearly to support skills acquisition during learning. This was a difficult situation because teachers and lecturers were increasingly becoming concerned about what they should be teaching.

Hierarchies that were built across levels for the purpose of progression became less clear. Although the content of the Revised National Courses still provided the same progression routes, they were less easy to recognise with the removal of learning outcomes as part of the unit structure. This made bi-level delivery more difficult than it was before as teachers and lecturers now have to identify points of progression within the course specifications, rather than having it clearly communicated at unit level. This is particularly relevant for National 4 and 5 classes where National 4 remains unitised and National 5 is now linear. In addition, the removal of Recognising Positive Achievement or 'fallback' meant that borderline candidates were now having to be entered for all of the units, including the Added Value Unit at National 4 and the National 5 course assessment, in effect doubling their workload.

Although no longer required for certification, many teachers and lecturers continued to use the unit specifications as part of their lesson planning. However, when the units were removed from National 5 to Advanced Higher courses they were rebadged as 'SCQF' units and became entirely disassociated from the National Courses. The original design of the National Units supported broader outcomes with very little prescription. This change meant that practitioners found it difficult to deliver these units in stand-alone mode without that broader guidance that existed in the course specification. However, the clarification of content within the Revised National Courses meant that many of the legacy National Units no longer aligned with the revised course specifications, meaning that teachers and lecturers who used the National Units as a foundation for classroom practice were not covering all of the required content.

Practical courses had to introduce theoretical components to assess the aspects of theory taught in the units. This meant the introduction of question papers in courses that had been traditionally 100% practical. The relatively small amount of theoretical knowledge required in these courses meant these question papers could quickly become predictable, undermining their validity.

The course assessment and the National 4 Added Value Unit described breadth, challenge and application as the 'added value' of the course. When the units were removed from

National 5 to Advanced Higher, the term 'added value' became meaningless. National Courses at these levels had to redefine added value simply as breadth, challenge and application across all documentation and in all communications to centres to ensure understanding.

2. SCQF credit and level

All new and revised National Courses must meet requirements to attract SCQF levels and credit points (and at some levels, UCAS points). Each qualification should carry a credit rating and level within SCQF to enable learners to make further progress within the qualifications framework in a straightforward way. Course specifications describe the size of a qualification in terms of SCQF credit points. It may to be useful to note that 1 SCQF credit point equates to a notional 10 hours of learning.

Credit values and notional learning time remained unchanged during the revision of the National Courses. However, in order to support teachers and lecturers with subject planning, SQA expressed notional learning time as directed learning (160 hours). The removal of units did not change the overall notional learning time for these National Courses, however the credit points were attached to broad learning outcomes, as opposed to the previously unitised content (figure 5).

Despite detailed communications, practitioners remained unclear how the removal of units could equate to the same notional learning hours and how to structure learning in the new courses. This is likely to be a result of existing teaching plans being aligned with unit delivery, and concern that without this structure, teaching was going to be more time consuming.

Model and credit values for the 2017 Revised National Courses

Level	Total credit	Credit value	Notional learning
Advanced Higher	32 credit points	32 credit points for preparation for external assessment	160 hours directed learning/160 hours self-directed learning. Notionally 320 hours of learning
Higher	24 credit points	24 credit points for preparation for external assessment	160 hours directed learning/80 hours self-directed learning. Notionally 240 hours of learning
National 5	24 credit points	24 credit points for preparation for external assessment	160 hours directed learning/80 hours self-directed learning. Notionally 240 hours of learning
National 4	24 credit points	3 x 6 SCQF credit units + 1 Added Value Unit at 6 SCQF credits	160 hours directed learning/80 hours self-directed learning. Notionally 240 hours of learning
National 3	18 credit points	3 x 6 SCQF credit units	180 hours of directed learning

National 2	18 credit	3 x 6 SCQF	180 hours of directed learning
	points	credit units	

Figure 5

3. Internal policy implications

Revised design principles were drafted. These were published in two sets: *Design Principles for Graded National Courses* and *Design Principles for Ungraded National Courses*' Additionally, the development of CfE underpinned a variety of SQA policies and approaches and had implications for other SQA product types. This required careful evaluation to ensure that no unintended consequences arose from the removal of internal unit assessment in other SQA product types, for example National Progression Awards and National Certificates.

Equality Review Forms were reviewed to ensure they remained fit for purpose. Additionally, if assessable elements contained within the units in some subjects were to be assessed in the context of an external assessment then some students (for example because of additional support needs) may be unable to achieve, whereas they were able to achieve in the more inherently flexible unit assessments.

4. External policy implications

National Qualifications attract both Scottish Government Insight tariff points and UCAS tariff points. Discussions had to begin quickly to identify the implications of the approved changes, particularly around the extension of grade D.

5. Product specification and support

The CfE development introduced new ways of specifying assessment standards and documentation to support the development of current National Courses. This had to be revisited to reflect the changes to National Courses and provide more streamlined material, given the concerns of practitioners. This included how SQA specified the qualifications in terms of their SCQF credit points. This resulted in a rationalisation of course specifications and support notes at all levels so that the documents more closely reflected the arrangements documents used at Standard Grade and in the legacy National Courses. Indepth references to CfE values, purposes and principles were removed in line with feedback from practitioners who felt that this was unnecessary repetition, although the links with the ethos of CfE remained implicit. Coursework assessment tasks were updated and marking instructions for coursework that had previously been held on the secure website were put into coursework assessment tasks or course specifications so that both practitioners and learners could better understand the national standard. Only annual release tasks and marking instructions remained on the secure site. This work involved a huge amount of input from different areas of SQA and a large volume of work for SQA's editorial team.

6. Operational requirements

Concern was raised that the removal of internal unit assessments in National 5, Higher and Advanced Higher, and the introduction of extended, and possibly additional, question papers may place increased demands on markers (appointees). However, it was recognised that the requirement to undertake verification associated with these qualifications was reduced. Despite this a huge volume of work had to be undertaken to establish the additional burden to be placed on appointees with the extension of the course assessments.

2.4.4 Summary of discussion

SQA designed and developed the National Courses in line with the requirements of CfE, in collaboration with stakeholders and under the governance of a wide range of stakeholder bodies, including the Scottish Government. Checks and balances were put in place at each stage of the process to ensure that the National Courses met the original purposes and aims of the curriculum, and SQA engaged and communicated regularly with centres around the arrangements for the implementation of the new courses. This resulted in a suite of National Courses that were fully aligned with the aspirations of CFE.

However, when the National Courses were implemented, they were met with a barrage of criticism. Centres appeared to be unclear about the structure and flexibility afforded by the qualification suite and continued to timetable using existing arrangements for Standard Grades and legacy National Courses. This resulted in courses in S4 being delivered in a single year in many centres. This contributed to a narrowing of the curriculum and young people being pigeon-holed early on in their learning. To redress the balance and provide wider opportunity for learners who wished to enter HEIs, crash Highers were undertaken in S5. This resulted in assessment leading learning and teaching.

National 4 Added Value Units were delivered alongside National 5 courses as a fallback position, further adding to teacher and lecturer workload. Assessment standards within the new units were assessed with criteria-based diligence even though they were designed to avoid this approach. This led to huge swathes of re-assessment, further adding to teacher and lecturer workload.

During the revision of the National Courses, the removal of unit assessment at National 5, Higher and Advanced Higher was designed to redress this balance and remove some of the assessment load. However, such a striking change in approach caused further unease in a system that was crying out for stability. Although the revision of the National Courses is now complete, it is clear that there will be unintended consequences of the decision made to unravel a qualification system so quickly, the consequences of which are unlikely to be known for some time. However, what is clear is that the strong alignment of National Courses with Curriculum for Excellence has been somewhat weakened by subsequent issues and decisions.

As of the date of this report, the disruption to education through Covid-19 has resulted in the Revised Advanced Higher awaiting implementation.

2.5 Assessment Futures

The Assessment Futures workstream of SQA's Change Programme was initiated in March 2017 to:

...develop a vision of the ways in which, over the medium to long term (5 years plus), SQA will develop and make use of new and innovative approaches to assessment in support of the objectives of the Business Change Programme and SQA's wider corporate objectives.

This outcome was to be achieved by answering the following question:

What are the most appropriate ways and contexts for learners to demonstrate their competence in a way that provides SQA with the information it needs to certificate their ability?

SQA appointed a dedicated, full time Head of Service to this area of work as part of the wider Change Programme.

2.5.1 Review of progress — September 2019

Following the appointment of SQA's new Chief Executive, progress with Assessment Futures was reviewed by SQA's Qualifications Committee in September 2019.

This review noted that the approach to the workstream has been informed by three models:

- 1. Open innovation, defined by Chesbrough (2006) as: '...the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively.'
- **2. Service design**, with the Design Council's 'Double Diamond' used as an organising framework. This framework identifies four closely-linked phases of activity.
- 3. Change through conversation, and the principle, advocated by Emeritus Prof David Nichol of Strathclyde University, that: '......if you want to change an organisation all you have to do is change the conversations that people are having....... Once people begin to talk in a different way they will also act in different ways and will reinforce the actions of each other.'

These models helped to inform activities used to gather insights to help answer the question at the heart of the workstream. Included among these activities was an Assessment Expert Group convened by SQA to consider the question noted above. SQA, working with Young Scot, also engaged with a group of young people to seek their views on the future of assessment. This resulted in the publication of a report summarising the young people's views. Further details of this work and a link to the report are provided below.

Findings

The findings arising from the Assessment Futures work to date were grouped under the four stages of the Design Council's 'Double Diamond' which, as noted above, was used as an organising framework. These findings are summarised below.

Phase 1: Discovery: insight to the problem

It quickly became clear that the key influence over the future of the workplace, employment, skills and society, and therefore also of education and assessment, is the so-called 'Fourth Industrial Revolution'.

The World Economic Forum predicts this will '...fundamentally alter the way we live, work, and relate to one another. In its scale, scope, and complexity, the transformation will be unlike anything humankind has experienced before.' A key question for education and training globally is how it needs to change to respond to this new environment.

While it remains to be seen whether the implications of these changes will be as far-reaching as this quote suggests, there is a growing consensus that they will have an impact in a number of areas including on the:

- types of industries that that exist
- ♦ job roles they require
- skills needed among existing and prospective employees
- ♦ basis on which employers make recruitment decisions
- regularity with which employees need to update their skills

In the face of the scale, nature and degree of changes in SQA's external environment predicted to result from this 'Fourth Industrial Revolution', it seems implausible that:

- only assessing the same things we have always assessed in the way we have always assessed them will continue to meet users' needs over the medium to long term future
- these future needs can be met by small refinements to existing approaches to assessment

This creates opportunity for SQA to put in place innovative and novel methods of assessment that will meet future needs.

As part of this discovery phase SQA commissioned Young Scot to gather the views of young people on the question at the heart of Assessment Futures. Their views were summarised in the <u>#SQAFutures report</u>, published by Young Scot in October 2018. At the same time SQA published a formal response, committing us to a number of specific actions. Over the past year SQA has undertaken further work on some of the themes raised in the report.

Phase 2: Define the areas to focus on

Against this background and across the activities undertaken by SQA to collect insights on the future of assessment, a number of common high-level themes emerged. These themes are set out below.

- 1. The growing importance of '21st century skills' and new possibilities offered by emerging technologies to assess and recognise them. There seems to be an increasingly strongly-held view, in particular from employers and young people, that current qualifications do not cover all of the things that are valued by employers. In this view the predicted pace of change in the workplace makes it likely that employers will place increasingly high value on meta-skills that, for example, indicate an individual's resilience, adaptability and ability to learn.
- 2. **Greater use of technologies as part of our current assessment approaches,** reflecting the fact that while other aspects of society are increasingly being transformed by technology, much of assessment remains largely unchanged. Greater use of technology to deliver current assessments may help to highlight ways in which we can and should approach the assessment of new areas including the '21st century skills' described above.
- 3. Understanding and better managing the impact of assessment on learners' dispositions towards learning and developing new assessment models that are designed to encourage 'positive epistemic dispositions' such as resilience. There is

- growing research evidence that the development of these dispositions is a key predictor of success in later life. This suggests that we need to better understand how current approaches to assessment impact on these dispositions and how, in future, we can assess, track or evidence them in ways that give them currency.
- 4. Finding ways of increasing the involvement of teachers and lecturers, and potentially others, in making assessment decisions while also protecting the accuracy and credibility of the results. It is widely recognised that teachers and lecturers have a unique and distinctive contribution to make to assessment judgements. This is balanced by the perverse incentives that a high stakes accountability framework gives teachers and lecturers to influence learner outcomes for their own benefit. How can assessments of the future most effectively include judgements made by teachers and lecturers and potentially others, for example peers?
- 5. Involving learners in the design of assessments and assessment systems. Under the 1989 United Nations Convention on the Rights of the Child organisations have a legal responsibility to involve learners in decisions which will impact on their futures. Changes in society over the past ten years, in particular those resulting from mobile digital technologies also mean that young people have a different world view from that of previous generations. This makes their involvement in decisions about issues affecting them a sound moral and ethical choice. From these perspectives learners' views should in future be an inherent part of any assessment design and development process.
- 6. The need to rethink our approach to vocational assessment, combining expertise in assessment and technology to develop curricula that engage, motivate and challenge learners to think more deeply about their learning. In this view a particular issue is the misinterpretation of Bloom's Taxonomy of Educational Objectives which has led to approaches which equate complexity with difficulty, and then difficulty with levels of a qualifications framework. This results, for example, in framing lower level qualifications with assessments solely involving knowledge and basic application with no analysis, evaluation or research.
- 7. The potential of 'Big Data' and data analytics to deliver greater value from existing assessment approaches as well as supporting new models and approaches. 'Big Data' is seen as having the potential to transform many areas of life and work. Reflecting this, the data that will be generated by any assessment is increasingly seen as a key consideration at its design stage. Greater availability of data from our digital interactions in learning and in other walks of life also offers new opportunities, for example to assess skills including collaborative problem solving and process skills.

Phase 3: Develop potential solutions

Work under this phase has fallen into two related areas:

- involvement of SQA in small-scale projects and activities that allow us to build understanding of and evaluate assessment approaches that reflect one or more of the themes
- identification of some new and emerging approaches to assessment SQA could explore that address one or more of the themes above

SQA's involvement in the small-scale projects currently underway has been opportunistic and has resulted from awareness on the part of our partners of our interest in exploring new

approaches to assessment. Each project involves partners, one a national body, the others two of our key customers. Two are externally funded.

The findings from these projects, along with other findings from Assessment Futures, will help to inform the final phase, delivery of solutions that work — new approaches to assessment that reflect the environment, challenges and opportunities created by the 'Fourth Industrial Revolution' and that contribute to the achievement of SQA's corporate objectives.

It is proposed that future activity should focus on four main areas:

- Continuing to undertake active and focused environmental scanning of the type and on the key themes that have generated the analysis reflected in the Qualifications Committee paper.
- 2. Based on this research, continuing to engage with the debate about the future of assessment in order to understand likely future directions, help make the case for change among our own stakeholders, and to fully understand their emerging needs.
- 3. Continuing to participate in a small number of carefully-selected 'beacon' projects to inform our future approaches.
- 4. Ensuring the work of Assessment Futures is informed by, and contributes clearly to, our overall strategic direction including our new corporate vision, mission and goals, and the wider Enabling Consumers Programme, and in particular our work on Product Portfolio Futures.

In addition to endorsing these proposals, the Qualifications Committee recommended that future work should:

- be based on a clear plan describing what we are aiming for and by when
- link more closely to the plans and aspirations of our stakeholders, for example as defined in the College Sector Statement of Ambition 2018–2030 document
- link to and support stakeholders' plans and aspirations to make a difference to the whole system, not just to current assessments
- understand where we can make the greatest impact in future and what is required to achieve that impact
- continue to reflect young peoples' views as these often offered an important alternative perspective
- avoid gimmicks doing things just because we can
- continue to apply validity, reliability, practicability and equity as key tests for all we do
- maintain a focus on assessing what we value, in particular where we do not currently do this
- ensure the focus of Assessment Futures remains on transformation, not just on modernising current approaches
- use Assessment Futures as an opportunity to demonstrate thought leadership, warming stakeholders up to possible future changes

Qualifications Committee also endorsed a draft plan of work to deliver the above objectives. In summary the plan proposed four stages of work supported by ongoing environmental scanning and external engagement. The four stages were:

- 1. gather and collate information on stakeholders' ambitions for teaching, learning, assessment and qualifications
- 2. identify new and innovative approaches that can help to deliver aspirations captured in stage 1 above
- 3. trial new approaches identified in stage 2, working with centres and other key stakeholders
- 4. scale up approaches that have been trialled successfully

2.5.2 Proposed senior phase workshop, May 2020

Following the review noted above, one of the key specific activities planned for Assessment Futures for 2020 was a workshop focused on exploring how assessment in the senior phase needs to change over the medium to long term to ensure it continues to meet the changing needs of learners, the economy and wider society.

It was planned that the workshop would involve a cross-section of stakeholders with perspectives on these questions based on their experience, with members of the Curriculum and Assessment Board forming the core of the group.

The workshop would be hosted and chaired by SQA and would consider a number of factors including:

- a. the changes underway in the external environment and their likely continued direction and pace
- b. the implications of these changes for the skills and knowledge needed by young people and how we develop, measure and recognise these skills and knowledge
- c. the strengths and limitations of our current approaches to assessment in the senior phase against this background
- d. key principles of assessment, in particular validity, reliability, practicability and equity

Consideration of these issues should have allowed identification of and agreement on:

- strengths of our current approaches to assessment in the senior phase
- areas where further action is required to ensure its fitness for purpose over the medium to long term
- specific actions we need to take over the short to medium and long term

Invitations to the workshop, scheduled for May 2020 had been sent and accepted when the impact of the Coronavirus pandemic hit. Since this time the resources within SQA that were focused on this workshop and Assessment Futures generally, and the time and attention of all key stakeholders has been fully committed to managing and mitigating the immediate impact of the pandemic.

As part of its longer term, strategic response to the pandemic, SQA is now in the process of creating more capacity to return to work on the future of qualifications and assessment. This will allow us to work with stakeholders to consider the implications of the events of the last year and of other developments including the OECD reviews on the future of qualifications

and assessment in Scotland for the senior phase and across the full breadth of SQA's portfolio.

2.6 Conclusion

The process of designing a suite of qualifications is long, complex and arduous. It requires systematic planning, careful management of processes and rigorous scrutiny of the resultant quality of the products developed. Stakeholder engagement is vital to ensure qualifications are fit for purpose and can successfully be adopted into practice. But above all, such developments require a strong and clear policy steer — what purpose do these qualifications serve, for whom are they intended, and how do they contribute to Scotland's aspirations of a successful and equitable nation?

Each of these requirements takes on added significance when faced with the single largest curriculum reform ever undertaken in Scotland — the objective to revitalise the education experience of every child and young person aged 3 to 18. To this challenge SQA brought decades of experience of responding to earlier significant reforms including Standard Grade, 16 plus Action Plan and Higher Still. SQA applied this experience to the planning and management of the required development of new National Qualifications. It recognised early on the significant challenge that it would face in devising courses and qualifications that would be in harmony with the ideals that CfE espoused for the reformed curriculum.

By putting in place a programme of research into aspects of the coming development, SQA prepared to address issues of flexibility and choice, internal assessment, accessibility and equity. Careful preparation and extended consultation with stakeholders, along with a review of existing qualifications and their structure, led to the creation of tentative design principles for the new and revised qualifications — placing SQA in a strong position to respond formally to the publication of definitive design rules by the CfE Management Board in 2009. SQA recast these design principles into a more operational form and provided guidance and training for its development teams on their implementation.

When there was clear sight of the formal requirement for the new qualifications, SQA put in place governance arrangements to ensure successful and timely completion of this work. Project Boards had oversight of the development efforts of the expert subject groups, under the direction of Curriculum Area Groups. Engagement with stakeholders focused on the key issues identified by the various *Building the Curriculum* publications from the Scottish Government, such as the importance of breadth, challenge and application.

By 2010 SQA had modified and agreed a set of design principles for the new qualifications in line with *Building the Curriculum 5: a framework for assessment*. This established they would be unitised courses, with internal assessment of units and external assessment of courses at National 5 and above. These were communicated to stakeholders to garner feedback from practitioners. SQA then embarked on the work of developing the required unit and course rationale and aims, specifications and assessment arrangements for each unit and course. While initially this work focused on the new qualifications for National 4 and 5, and the literacy and numeracy qualifications, the total development effort was to encompass over 180 new courses from National 1 to Advanced Higher, comprising over 500 individual units.

In this development phase, SQA assigned an internal qualifications development team to ensure that subject teams adhered to the design rules and remained true to the aspirations for breadth, challenge and application. It also acted as a conduit to convey any policy changes (of which there were several) to the subject teams. At each stage there was governance oversight by both SQA and by the external CfE Qualifications Governing Group. As well as policy changes, such as the decision to introduce the added value unit for National 4, the development teams encountered changes occurring in the Expectations and Outcomes of the CfE level four curriculum, presenting further challenges in establishing the standard for National 4 and 5. Another feature of this phase was SQA's continued engagement with its wider stakeholders — such as its 'Have Your Say' online forum for practitioners. All of this detailed work resulted in a suite of National Courses that were closely aligned with the aspirations of CFE.

Some important decisions were made at this point that impacted the initial implementation of National 4 and 5 in the 2013–14 session. One was that no assessment exemplars would be provided by SQA, such as the National Assessment Bank. This was in line with the CfE principle of encouraging teachers and lecturers to shape their own assessments based on their chosen approaches to learning and teaching. In its place was the National Assessment Resource (NAR) — an online resource where teachers and lecturers could share validated assessments. Another decision was to learn from the difficulties encountered in using the portmanteau course arrangements document from Higher Still and instead separate out the specifications and guidance for units and courses in terms of content and assessment to make them more accessible. The SQA verification process to quality assure internally-set assessments for units required centres to have assessments pre-validated by SQA followed by three rounds of candidate evidence verification.

These issues proved to be troublesome aspects of implementation, compounded by schools and local authorities adopting curriculum structures that were not always consistent with the purposes of CfE in this initial phase. This led to many complaints from the teacher unions about excessive workload, and precipitated changes to National Course structures in 2016 that were a radical departure from the original intent of CfE. While there were some subjects where the initial implementation phase revealed weaknesses in design and/or progression (such as in the sciences), in the main National Courses had proved their worth in providing breadth, challenge and flexibility to learners.

However, in response to ministerial decision, the revision of the National Courses in 2016 pivoted on the removal of unit assessment, with a view to reducing teacher workload. The removal of units meant many years of design and development work required rapid adjustment that was not in line with the original design principles. It remains to be seen the effect that this will have in the future. However, what is clear is that the strong alignment of National Courses with Curriculum for Excellence has been somewhat weakened by subsequent issues and decisions.

In the meantime, SQA undertakes reviews of its qualifications provision as matter of course to ensure they remain current and fit for purpose.

SQA's Assessment Futures work, in collaboration with key stakeholders, is key to informing a future vision of qualifications and assessment. This important work has highlighted a need for a greater focus on '21st century skills' and emerging technologies and the importance of understanding the impact of assessment on young people, with a view to supporting

teachers and lecturers to have more active involvement in the assessment process. SQA's Assessment Futures work will continue to inform SQA's overall strategic direction, with a view to supporting the next generation of SQA qualifications.

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Section 4: Appendices

Appendix 1: issues affecting the initial design of the new National Courses

The tables below were intended to spark discussion and generation of ideas and were discussed at SQA's Qualification Management Team in August 2005 (SQA, 2005a). They are not presented as a definitive analysis of the issues. Many of the issues required further investigation and/or research to determine whether they were a matter of perception or reality.

Table 1: course design issues

Key question	Important factors to consider	
Do we need to review the design and assessment of National Courses?	 The existing relationship between unit and course assessment has never been adequately conceptualised, confuses centres, candidates and Course Design Teams, and leads to duplication of assessment. 	
	 The relationship between unit and course assessment can result in units that do not work particularly well as freestanding units. 	
	◆ There is a huge gap between unit attainment and course attainment — this is a not unexpected feature of the current design — but is it well-understood? Simplistic interpretations of the reasons for this could result in misunderstandings and criticism of standards setting.	
	 Design rules introduced as part of the NQ Review have simplified the system, but when applied mechanically, can result in units and courses that are not wholly fit for purpose 	
What are the positive and	 Initial research suggests that the 'stepping-stones' to progression are not working for all learners. 	
negative aspects of National Courses (for the range of abilities of	 Some research has been done on the effects of unit and course assessment on different groups of learners (for example different effect on boys and girls) — this needs to be explored further. 	
candidates)?	 Arguments about whether unit assessment motivates candidates, or pressurises them, need further exploration. 	
	◆ There appears to be a perception among some groups that the design of National Courses forces teachers to teach to the exams, and undermines effective teaching and learning. We need to counter this perception, but also to be open about exploring the reasons why this perception has grown, and addressing any issues.	
	◆ Slower/disaffected/disenfranchised learners are considered at the start of developments, then their needs are left behind as the development programme gains momentum (arguably, this happened with Standard Grade, with the Higher Still Development Programme, and is happening again with Skills for Work courses, where no sector seems to want a course at SCQF Level 3) — each development programme results in	

Key question	Important factors to consider
	better provision for the middle–high attainers, who were already quite well catered-for.
Should we have the same models of National Courses at all levels?	◆ There is increasing evidence that the existing course design is not working well at Intermediate 1, and growing support for getting rid of course/external assessment at that level — this needs to be investigated to see if the issue relates to all types of Course assessment, or only to exams.
	♦ Within the same overall design as other courses, most Advanced Highers differ slightly in the composition of units and course assessment. SQA is currently working to identify the 'unique selling point' of Advanced Highers in order to market them effectively — it would be worth investigating whether some 'unique selling points' should be explicitly built into the design (for example emphasis on independent learning skills, use of project/dissertation as course assessment component). Advanced Highers also overlap with a range of other qualifications at SCQF level 7, and arguably, should share more design features with those qualifications than with courses at levels 2–6.
What are the implications of the decision to have courses (with no graded course assessment) at	 This relates to the point about Intermediate 1 courses, above. We need a clear rationale for why we don't have course assessment at the lower levels — and that rationale must not undermine the perceived value of these courses for candidates working at that level. This decision potentially opens the way for courses without
SCQF levels 2 and 3?	grading at other levels — again, we need a clear rationale for why we sometimes have grading and sometimes not.
What are the implications of the decision to have a mixture of courses with graded	◆ Currently, the only courses without grading at SCQF levels 4–6 are Skills for Work courses, but attempts to define when a course should have grading, and when it should be a Skills for Work course, have not proved fruitful — decisions are currently being taken on an ad hoc basis.
assessment, and without graded assessment at SCQF levels 4–6?	◆ One suggestion has been that Skills for Work courses provide progression to employment, and graded courses are for those who intend to progress to further study — but using this rationale is likely to result in Skills for Work courses being perceived as of lower value/status. Also, Skills for Work courses exist because of perceived learner needs, not employer needs, otherwise Scottish Progression Awards would have done the job, and so any rationale must be based on the needs of the learner, not solely the end-user. It is also reductive of graded National Courses to suggest that their only/main purpose is for progression to HE — this rationale would result in courses being designed for specialists, which has caused us enormous problems in the past. Neither definition takes account of the fact that both graded courses and Skills for Work courses tend to be

Key question	Important factors to consider
	 taken as part of a suite of courses — no candidate's progression is going to be based on achievement of a single course. There are particular issues defining the purpose of Skills for Work courses at Higher — for example what is the relationship between a graded course in Accounting at Higher, and a Skills for Work course in Financial Services? There has been no evidence to date that employers expect schools (or even colleges and universities) to provide them with entrants who have direct job-related skills and knowledge — research to date suggests employers are looking for entrants with the right general grounding and the attitude/aptitude that will help them learn on the job. Skills for Work courses are more than the sum of the component units because of the generic course rationale, which stresses development of general employability skills and use of experiential learning — if this is the rationale for having them, then we/centres, would only need a few different titles to provide an element of candidate choice.
	♦ We need to beware of every sector deciding they want a Skills for Work course just because it is possible to have one — cf the lessons learned from the Higher Still Development Programme, for example in Engineering and Construction, where several courses which were deemed to be 'needed' have proved to have no/low uptake.
	◆ There are courses that currently exist as graded courses where the graded assessment doesn't seem to serve much purpose, but which wouldn't necessarily fit the Skills for Work model or title (for example Practical Cookery, Practical Craft Skills, SVS/PSE, possibly Administration and Home Economics) — current design principles give us no way to address this situation.
	◆ The range of different types of courses can produce a confusing array — for example in Early Years Care there are currently Skills for Work courses, traditional graded courses, and PBNCs (all new/recently revised) — would SQA be able to justify this if challenged?
What are the implications of the decision to remove the distinction between project-based National Courses and other courses?	 We need clear policy and guidance on the design of project assessment, and procedures for setting, vetting and distribution.

Table 2: assessment issues

Key question	Important factors to consider
How can we develop stronger links between learning and assessment?	 Current thinking distinguishes between assessment for learning, assessment as learning, and assessment of learning — SQA has been seen as only concerned with the last of these, at the expense of the first two — we need to work to challenge this view, and re-position ourselves. ACE documents to date suggest use of a mixture of traditional assessment methods, self-assessment, and recording evidence of performance — SQA knowledge and practice would need to evolve to take account of this. SQA tends to distinguish between quality-assured assessment and assessment that is not quality assured — there have always been others who have seen the distinction as unnecessary. Questioning our own assumptions might allow us to strengthen the links between learning and assessment, and allow us to provide ways to assess less formal aspects of the curriculum and the individual's experience.
What can we learn from the Assessment is for Learning Programme, Standard Grade, practices in other countries?	Assessment is for learning ◆ Recent research in assessment, used in the AifL programme, suggests that the kind of assessment most likely to raise attainment focuses particularly on assessment as an integral part of learning and teaching. It involves learners in monitoring their own progress, knowing what is to be learned and what is expected of them; in thinking about what needs to be done to improve learning, and how to go about it; and in knowing when to seek further help, and from whom. Perception is that this approach is not encouraged by current National Course design. Even without changing the design of National Courses, an initial step in the right direction would be to produce documents aimed at the learner — almost all existing SQA assessment and course planning information is aimed at the teacher.
	 ◆ The AifL programme draws heavily on research by King's College, London (also cited in research summaries for ACE). This defines ten key principles for assessment for learning. We need to investigate these further and come to conclusions about how they should influence SQA assessments: — Assessment for learning should be part of effective planning of teaching and learning. — Assessment for learning should focus on how students learn. — Assessment for learning should be recognised as central to classroom practice. — Assessment for learning should be regarded as a key professional skill for teachers.

Key question	Important factors to consider
	— Assessment for learning should be sensitive and constructive because any assessment has an emotional impact.
	 Assessment should take account of the importance of learner motivation.
	 Assessment for learning should promote commitment to learning goals and a shared understanding of the criteria by which they are assessed.
	 Learners should receive constructive guidance about how to improve.
	 Assessment for learning develops learners' capacity for self-assessment so that they can become reflective and self-managing.
	 Assessment for learning should recognise the full range of achievements of all learners.
	◆ The AifL programme, and experience of the strengths of 5–14 approaches to assessment, also suggests that it is vital that assessment is very flexible in timing — when the learner is ready — summative assessment should be used to confirm teacher judgement — the teacher's professional judgement of learners s/he knows well is at the heart of good assessment.
	 AifL stresses that quality assurance is a continuum, beginning from quality assurance of the assessment instruments, through supporting teachers to quality assure their own assessment practices, to internal moderation at a school or local level, and finally involving local authorities, HMIE and the SQA.
	Standard Grade ◆ Broad courses, not over-focused on the end point — assess broad skills as well as subject knowledge — better coverage of core skills than any other qualification — we need to investigate the reasons for this.
	 Use a range of assessment types and methods and mixture of internal and external assessment — as fit for purpose and aligned to course rationale and aims.
	 Grading provided for all aspects of the course — motivating, and means that all aspects of the course are valued.
	Other countries ◆ Some preliminary work is being done which might help to illuminate these issues, but further research is likely to be needed.
	 The assessment model used for GCEs and A levels in England differs from that of National Courses — for example

Key question	Important factors to consider	
	modules which contribute to the course are all graded — needs further investigation of the detail.	
Do we need to revisit the use, balance and amount of formative, summative internal and external assessment?	 There is strong evidence that formative assessment raises standards for all but in particular low achievers — how can we encourage formative assessment with National Courses to improve attainment? The distinction between internal and external assessment is not necessarily a helpful one — and not always clear — we need to lead the profession away from using this language. Formative and summative assessment are themselves pretty broad-brush terms — we need to get up to speed on current assessment thinking. A more flexible curriculum, with less emphasis on end-point assessment, would blur the distinction between formative and summative assessment — profiling rather than certification — each SQC is a snap shot — a broad description rather than a calibrated judgement. 	
	 But graded external assessment is reliable — transparent, robust, portable (not needed unless the candidate is exiting the institution?). 	
Is the design of the units right?	 It is commonly reported that candidates would prefer to be graded on units — otherwise, they feel that they have worked hard and gained little. 	
	The existing unit specification is highly prescriptive and over- focused on the assessment task. The need to specify the national standard as precisely as possible works against the possibility of assessing broad skills.	
	 The unit specification allows unit writers to try to prescribe coverage of content by specifying this in the unit — what should be units of assessment have become units of learning. 	
	 Recent growth of highly specific evidence requirements means that the unit is being used to specify the nature of the assessment task — the current unit specification was not designed to be used that way. Again, this tends to lead to highly specific units. 	
	◆ The existing system of unit assessment, record-keeping and results reporting is seen as overly bureaucratic by teachers.	

Table 3: impact of curriculum change on National Courses

Key question	Important factors to consider
How can we develop ACE purposes effectively through National Courses?	 ACE sets out principles of curriculum design, and defines four capacities which the new curriculum is supposed to develop in young people. These suggest a greater emphasis on development of the individual, work/life skills, literacy and numeracy, and opportunities for in-depth activities which extend beyond individual subjects. Existing National Course design is perceived as quite poor at encouraging opportunities for development of such capacities and skills. No-one has yet found a timetabling model which easily allows certificated achievement of activities outside individual subjects, and the design of National Courses is seen as reinforcing this. Design and assessment criteria introduced as part of the NQ Review have reduced coverage of broader skills and core skills in National Courses.
How can National Courses be structured and designed to ensure that they make an effective contribution	◆ ACE documentation suggest a less crowded curriculum, with learners taking fewer subjects, and subjects placing less emphasis on content/knowledge acquisition. The curriculum should be organised around broad, key outcomes and the contribution of each subject to the defined key outcomes should be clearly identified.
to the delivery of the new curriculum?	 If the new curriculum is intended to be broader and less cluttered, then arguably, National Courses should be broader. We need to question the existing emphasis on knowledge, and assessment of defined content.
	◆ The shape of the curriculum will have an impact on the number/spread of National Courses which are needed/can be used, and we need experts in this area who can anticipate possible patterns and issues.
	◆ Course design, content, assessment, and setting of national standards, will need to take account of the possibility of courses being delivered to mixed age classes — not only those in S4–S6, but presumably curriculum flexibility will continue, and some schools will continue to want to offer high stakes qualifications to at least some of their younger pupils.
If ACE proposals result in the re- organisation of the curriculum into two broad blocks, instead of the current three, how will this affect delivery of National Courses, and what will this mean for their design?	 No matter what the shape of assessment, recording and reporting at S1–S3, there are major implications for National Courses in S4–S6. National Courses were designed for 16+, and to follow Standard Grade — each would need reviewed/revised to ensure progression from what comes before. End of S4 is still the statutory leaving age for most, so certification at the end of S4 may still be a dominant pattern. Whatever kind of assessment and certification is used in S3, the 'two term dash' issue may be transferred from S5 to S4,

Key question	Important factors to consider
	and may affect all levels. This problem could be mitigated if there was some form of formal assessment and certification at the end of S3, which prepared candidates well for higherstakes National Courses, and provided a 'fallback' which gave candidates and parents confidence to by-pass certification in S4.
How can National Courses be reviewed	How many courses do we envisage young people will take in S4? How do we achieve personalisation, choice and breadth?
to ensure smooth progression from any new system implemented in S1–S3?	 If the new curriculum introduces a greater element of personalisation and individual choice, then we will need to redefine progression in each course area, and review/revise courses to ensure that they can be used for candidates looking for a general grounding in a subject area, dipping into a subject as a one-off, or specialising in a subject for a number of years. We may need different titles within a suite of courses. Timetabling patterns will have a big impact on what candidates can choose in practice, and we will need to take account of these in the review/revision. This will involve questioning all aspects of course design — for example must all courses be the same size if they can be used for such different purposes? It would be helpful to radically challenge our ideas of what we think of as a "course" — for example must all the units of the
	course be at the same level? Must all courses follow the same design principles? It may be more fruitful to envisage the system as a unit-based system with rules of combination, keeping the number of more formally designed 'courses' to a limited number for a limited number of purposes. How long will each course last? How do we envisage the three-year block being divided?

Table 4: modernising National Courses

Key question	Important factors to consider
Do we need more than one diet of exams for National Courses?	 This relates to several issues discussed in tables 1–3, above. Being considered in relation to other modernisation issues — for example place of appeals system. Current multiple certification dates for PBNCs — not used — but intended to provide flexibility for colleges. If the curriculum if divided into two three-year blocks, then a more flexible external assessment system might help centres provide for the individual needs of candidates. Might help get around the problem of how to divide the S4–S6 block — could be two 18-month blocks for some subjects. Again, timetabling issues will affect what centres can offer in practice.
How could e-learning and e-assessment be used to aid learning in National Courses?	 Again, might help schools offer flexibility and choice. Technology provides an opportunity to enrich learning and assessment and make it suit the learning/thinking styles of more learners — for example does not have to rely on verbal tasks, can introduce visual and sound elements. Technology is frequently reported as motivating young people to learn. Technology can allow greater interaction between teacher and learner, allowing learner to engage in the learning process and learn more effectively (and learn higher-order skills) — cf research on effect of interactive whiteboards. Technology allows some curriculum areas access to learning and assessment experiences which could not practically be provided in the classroom — for example some science topics, design activities. E-assessment developments allow immediate feedback to candidates, and could allow assessment for learning, assessment as learning, and assessment of learning, to be effectively combined. Technology could be used to reduce workload for teachers, especially that associated with internal assessment of units. SQA experiences difficulties recruiting sufficient appointees — technology could be used to reduce logistical problems in setting, vetting, marking and quality assuring large numbers of external assessments — for example electronic item banks, electronic marking. Technology has the potential to remove issues with authenticity of evidence, and blur the distinction between

Appendix 2: design principles for National Courses

Approved by QGG, 15 January 2010

Introduction

The Curriculum for Excellence values, purposes and principles will underpin all new and revised National Courses. Learners should have the opportunities to continue to acquire and develop the attributes and capabilities of the four capacities¹ as well as skills for learning, skills for life and skills for work.

The purpose of National Courses is to enable certification for general educational aims. Each individual course has its own particular rationale and aims, but all follow a common set of design principles and have a broadly consistent structure of units and course assessment. National Courses are organised within eight curricular areas.² The broad objectives of National Courses are to provide high standards, and breadth and depth of learning which will help learners progress. National Courses are qualifications which provide a statement of a learner's achievement against a defined standard. The achievement of National Courses provides learners with the opportunity to demonstrate their acquisition of skills, knowledge and understanding in a formal way. They also give learners the opportunity to gain 'marketable' qualifications for progression to further study, training and employment.

All National Courses will conform to the design principles below:

Design principles

Course design

- 1. Every National Course must have a clear rationale that:
 - justifies the need for the course and its uniqueness
 - provides evidence of demand for it
 - explains how the National Course fits with other qualifications
 - identifies the progression opportunities into and from the course
 - outlines the aims, purposes and intended learning outcomes of the course and explains how the award structure meets these purposes
- 2. National Courses will have the following SCQF credit points:
 - courses at Access 2 and 3 will have nits totalling 18 SCQF credit points
 - courses at National 4 will have units totalling 24 SCQF credit points. One unit (6 SCQF credit points) will assess added value, that is, it will require the learner to demonstrate depth of understanding and/or application of skills.

¹ The four capacities are: Confident Individuals, Effective Contributors, Responsible Citizens, Successful Learners

² Expressive Arts, Health and Wellbeing, Languages, Mathematics, Sciences, Social Studies, Religious and Moral Education, Technologies

- ♦ courses at National 5 and Higher will have units totalling 18 SCQF credit points with an additional 6 SCQF credit points to allow the use of an extended range of learning and teaching approaches, remediation, consolidation of learning, integration and preparation for external assessment.
- courses at Advanced Higher will have units totalling 24 SCQF credit points with an additional 8 SCQF credit points to allow the use of an extended range of learning and teaching approaches, remediation, consolidation of learning, integration and preparation for external assessment.
- 3. The level of a National Course should be consistent with the appropriate SCQF level descriptor. The extent of coverage of a National Course should be comparable to appropriate existing or previous qualifications at the same levels and should be consistent with the rationale and the aims, purposes and intended learning outcomes of the Course. Units in a National Course must all be at the SCQF level of the course.
- 4. Every National Course should provide appropriate opportunities for skills for learning, life and work to be developed.
- 5. National Courses should take into consideration practical aspects of delivery and should be able to be delivered in a range of centres. The requirements for practitioner expertise and resources should not be restrictive and should be appropriate for general qualifications.
- 6. National Courses should take into consideration the needs of all learners and be designed to be as accessible as possible to learners who will achieve in different ways and at a different pace.

Course structure

- 7. A National Course may be made up of mandatory and/or optional units. However at least 6 SCQF credit points (8 at Advanced Higher) must comprise mandatory units and these must reflect the title of the course. There will be no alternatives within this mandatory section. In some courses, all component units will be mandatory.
- 8. Optional units can account for up to 12 SCQF credit points (16 at Advanced Higher). Where optional units are used, these should reflect identified needs of the specialist area and the rationale, aims, purposes and intended learning outcomes for the course.
- 9. Where appropriate, a suite of courses with the same title at different levels should have a course structure which is consistent across levels.

Units

10. Each unit in a National Course should be coherent and worthy of recognition in its own right.

- 11. Units in National Courses will be internally assessed on a pass/fail basis and ungraded. Unit assessment should be fit for purpose and proportionate. Units can be assessed on a unit by unit basis. In some subjects, it will be possible to gather evidence of achievement of units in an integrated way, combining assessments across units.
- 12. Units in a National Course can be of different SCQF credit values.

Assessment

- 13. Assessment methodologies for National Courses should support the *Strategic Vision* and *Key Principles for* Assessment 3–18. They should promote best practice and enable learners to achieve the highest standards of which they are capable. They should support greater breadth and depth of learning and a greater focus on skills development.
- 14. Assessment approaches for National Courses should support learning by engaging learners. Assessment has to be fair and inclusive and allow learners to show what they have achieved.
- 15. Assessment approaches should be proportionate and fit for purpose: different forms of assessment are appropriate in different areas of learning, and this should be reflected in the assessment approaches for National Courses.
- 16. Assessment for National Courses will be based on unit assessment and course assessment as follows:
 - ◆ To achieve the award of a Course **at any level**, the candidate must provide evidence of achievement of the units of that course. Units can be assessed on a unit by unit basis. In some subjects, it will be possible to gather evidence of achievement of units in an integrated way, combining assessments across units.
 - ♦ The award of a course at Access 2 and 3 and National 4 will require achievement of units.
 - ◆ The award of a Course at National 5, Higher and Advanced Higher will require achievement of units. There will also be an external assessment which will be graded. The external assessment will confirm attainment in the course award sampling the skills, knowledge and understanding in the course units as well as integration and application of these as appropriate. The external assessment will take a form which is fit for purpose and proportionate, and might involve an examination, performance, project, practical activity or other form of assessment (or combination of two of these) as appropriate to the subject area.
- 17. Courses at National 5, Higher and Advanced Higher will be graded A–D.

Award of course

18. For the award of a National Course at Access 2, Access 3 and National 4, candidates must pass all the units in the course.

For the award of a course at National 5, Higher and Advanced Higher, candidates must pass all the units and achieve an overall pass grade in the external assessment.