



Research and Evidence Report: Internal Unit Assessment in National Courses

This edition: May 2016, version 1.0

© Scottish Qualifications Authority

Contents

Acknowledgements	1
1 Background.....	2
1.1 Purpose	2
1.2 Research methodology	2
1.3 Unit-based structure in current National Courses.....	2
2 Review of policy and guidance material	5
2.1 A ‘new’ type of unit.....	5
2.2 Comparing current and legacy National Qualifications unit approaches	9
2.3 Fewer outcomes and assessment standards?	10
2.4 Relationship between unit assessment and course assessment.....	13
2.5 Assessment support and exemplification	15
3 Emerging themes: National Qualifications Support Teams.....	20
3.1 Positive aspects of unit assessment in new National Courses	20
3.2 Negative aspects of unit assessment in new National Courses.....	20
3.3 Volume of assessment.....	21
3.4 Verification.....	21
3.5 Additional demands on teachers.....	22
4 Discussion	23
Appendix 1: Benefits and issues associated with unitisation.....	26
Appendix 2: Design of new National Qualifications.....	28
References.....	32

Acknowledgements

SQA would like to acknowledge the contribution which National Qualifications Support Team members, and respondents to the associated online practitioner survey, have made to this research activity.

1 Background

1.1 Purpose

This report explores recent stakeholder concerns around the internal unit assessment approach to current National Qualifications. Throughout this report 'current National Courses' is used to describe National 4 and National 5 qualifications introduced in 2013. 'Legacy National Courses' is used to describe Intermediate 1 and Intermediate 2 qualifications. Internal summative assessment in both current and legacy National Courses was primarily undertaken through an internal unit-based assessment approach, which may be described as competence-based and criterion referenced. The focus is primarily on SCQF levels 4 and 5 as this is where the main policy discussions on internal unit assessment centred. However, much of the discussion is also relevant to current National Courses at SCQF levels 6 and 7.

1.2 Research methodology

This report is based on an examination of policy and guidance documents, and other product specification and support material used in current and legacy National Courses. It is also informed by workshop discussions in 29 National Qualifications Support Team (NQST) meetings held in October and November 2015; and an online practitioner survey between October 2015 and January 2016. A short discussion on the unit-based approach can be found in Appendix 1.

1.3 Unit-based structure in current National Courses

All SQA qualifications feature internal unit-based assessment. This may be viewed as a policy trend which can be traced back to *16–18s in Scotland: An Action Plan* launched by the Scottish Education Department in 1983. The starting point for this discussion on the internal summative assessment in the new National Qualifications is the *Consultation on the Next Generation of National Qualifications* undertaken by the Scottish Government in 2008. This proposed (for SCQF 4 and 5 only at that point) that the new qualifications should consider the inclusion of the best features of Standard Grade and Intermediate, for example:

- ◆ 'inclusive' approach to certification contained in Standard Grade
- ◆ 'unit-based' structure of Intermediate qualifications¹.

¹ This was based on 'research', for example a series of semi-structured interviews with senior managers, teachers and learners in schools undertaken by SQA in 2006/07.

As a result, it was proposed that the new qualifications would have a unit-based structure with the units assessed and possibly graded by teachers (Scottish Government, 2008, p.19). The consultation document, while identifying why a unit-based approach would be introduced, raised some caveats around the approach to internal assessment in legacy National Courses. For example a unit-based structure was proposed because it was held to provide flexibility to meet the diversity of young people's needs, including more choices, more chances, setting short-term goals, and building a series of achievements. Nonetheless, it was noted that pass/fail, minimum competence units carried little credibility. Instead, as a solution to the above, it was suggested that unit assessments should be designed so that they would demonstrate the full range of learning, possibly graded A–C; and would help prepare for external assessment and perhaps, even provide evidence for appeals (Scottish Government, 2008: 20–21). This consultation document also introduced the notion of what would become coursework in the new National Courses:

'There may be scope for making better use of different types of assessment alongside external examinations, such as projects, performances and practical tasks depending on the nature of each course. Detailed proposals would be developed following this consultation. These could be subject to sign off by a national stakeholder group to ensure overall coherence'

(Scottish Government, 2008, p. 21)

The consultation paper clearly identified a role for internal summative assessment, within the wider discourse around this time, in terms of 'Assessment is for Learning' (SQA, 2007). It was clear that how internal units were assessed was held to be problematic. Responses from stakeholders to the above consultation's proposals around the use of internally assessed units were largely inconclusive. For example while around half (51%) of consultation respondents agreed with the proposal to grade units, 43% disagreed. Further, a similar proportion (51%) did not want graded units to count towards the final award, whereas 40% were supportive of this (Scottish Government, 2009). It could be argued that the almost even split of stakeholder views could provide a platform to pursue grading in the new National Qualifications; however as outlined in subsequent sections this was not pursued.

In January 2010 the Qualifications Governing Group (QGG) (a sub-group of the Curriculum for Excellence Management Board) approved the model for the design of new National Qualifications at SCQF Levels 4 and 5 (see Appendix 2).

Although the consultation had shown some support for the grading of units, the approved model incorporated internally assessed, ungraded, minimum competence units. Of particular interest in this review, it indicated that there would be a 'new type of unit' with a goal for the new unit specifications to be less prescriptive and more user-friendly, more flexible and open, with room for centre/learner choice.

To achieve this, new units would have fewer, broader outcomes, specified in a way which encouraged synoptic/holistic rather than 'atomised' assessment — relying on assessors to exercise more professional judgement about candidates' work and attainment of outcomes in the round, rather than chasing evidence for a detailed list of criteria.

This 'new type of unit' specification would also need to fit within an overall qualifications system (outlined in Appendix 2). One criterion of which was to create an overall approach to assessment which reduces the time learners spend on assessment for certification and allows more time for learning, and more focus on skills and integration with other aspects of learning. The model emphasised the importance of unit assessments being suitably skills-based and not 'mini exams' as some National Assessment Bank (NAB) materials were.

In relation to new National Units the approved model stated that the purposes of units were to:

- ◆ provide a marker of the learner's progress
- ◆ allow the learner to develop breadth of skills/knowledge and understanding
- ◆ ensure coverage of all aspects of performance

2 Review of policy and guidance material

2.1 A 'new' type of unit

To support the development of the new unit and assessment approach and to meet the requirements of the approved model, a hierarchy of policy documents and guidance documents were developed: *Design Principles for National Courses*; *Guidance on Unit Specifications for new National Units*; *Guidance on Unit Assessment for new National Units*.

Design Principles for National Courses (SQA, 2010)

The Design Principles take forward most of the structural aspects of the approved National 4 and 5 models, for example all units are assessed, certificated and ungraded; units are internally marked, based on professional judgement and quality assured by SQA; there should be flexibility in the number of units that make up a course; and to be awarded the course and learners are required to provide evidence which meets the requirements of all units in addition to any added value or course assessment.

There is no real emphasis in the Design Principles of shaping the units and their assessment in terms of reducing assessment, being flexible and/or less prescriptive. The Design Principles do suggest that units should encourage 'synoptic/holistic' rather than encouraging 'atomised' assessment and should be both 'fit for purpose' and 'proportionate'.

Guidance on unit specifications for new National Units (SQA 2014)

A new unit specification template was developed to support the proposed new assessment approach. An associated guidance document was also developed to support unit writers tasked with the development of the new unit specifications.

The new unit specification template differs from the legacy unit specification template in a number of ways. For example there is no section for support notes as these have been moved to a separate document and there is an additional section for Skills for Learning, Skills for Life and Skills for Work. The section that defines the standards for the unit is very similar, with the only difference being the use of the term 'assessment standards' instead of 'performance criteria'.

The guidance on unit specifications for new National Units supports the key aspects of the approved model for National 4 and 5 qualifications. Although there is no explicit reference to the aim of reducing the overall amount of assessment, the guidance does promote the aim to have fewer and broader outcomes.

As unit specifications set national standards for acceptable performance, it is not surprising that the guidance also stresses the importance of clarity and precision in writing outcomes and assessment standards to ensure that candidates and assessors are clear about what is required. Some of the statements regarding the need for clarity are often in tension with the aim of producing broadly based outcomes and fewer outcomes and assessment standards, for example:

'It is important that the Outcomes should be written in clear and simple English. Non-experts should be able to understand from the wording what learners are being asked to do. The Assessment Standards may be used to clarify and amplify the intent of the Outcome.'

'The Assessment Standards must give a clear indication of the standard or quality of performance expected and should tell the assessor what to look for.'

'There are no rules about the amount of information you can have in each Assessment Standard. For example, one or two sentences may be required to describe the Assessment Standard to ensure that there is clarity and that it is unambiguous.'

'This may result in very detailed Assessment Standards. However, it is more important to give clear and unambiguous information than to worry about the number of words. The length of an Assessment Standard is of secondary importance; clarity should be the priority.'

Guidance on unit assessment for new National Units (SQA 2015a)

Similarly to the guidance on unit specifications the guidance on unit assessment begins by re-stating and supporting the key aspects of the approved model for National 4 and 5 qualifications. Unit assessment should be fit for purpose and proportionate, enabling combined assessment of units and allowing for professional judgement. Not surprisingly, it also states that unit assessment should address issues of validity and reliability as well as practicability.

Later sections introduce further requirements including:

'Outcomes and Assessment Standards cannot be sampled: all Outcomes and Assessment Standards must be covered.'

'However, sampling of skills, knowledge and understanding can be considered when designing Unit assessments ... There is no minimum size of sample but if the proportion chosen for sampling is low, then the evidence generated by the sample may make it more difficult to infer that learners are competent across the Unit.'

'Items which are considered crucial to the achievement of competence for the Unit must be included on each assessment occasion.'

'Information on judging evidence must be:

- ◆ *unambiguous and clearly illustrate the standard expected of learners who achieve the Unit*
- ◆ *as comprehensive as possible and cover all Outcomes and Assessment Standards in the Unit'*

There is a potential tension between the above requirements and the aim to reduce assessment, in particular the need to produce evidence of attainment of all outcomes and assessment standards. Even if sampling is used there are requirements on what must be included in every sample and on determining an appropriate sample size that could work against reducing the overall amount of assessment. Of course it should be noted that the stated aim in the guidance is for assessment to be 'proportionate' and not necessarily reduced.

Additionally the requirement to provide comprehensive and unambiguous information on how to judge evidence could be seen to be in tension with the requirement to *'allow assessors to exercise professional judgement about learners' work and attainment of Outcomes and Assessment Standards, and not rely on detailed lists of criteria in setting standards'*.

NQST members were asked to outline the assessment and re-assessment implications of the requirement to meet all assessment standards in units in their subjects.

A small number of members felt that this was necessary to ensure that candidates had acquired all the necessary skills and knowledge for the unit. The majority of members felt that it puts too much pressure on teachers and especially candidates. They contrasted the use of cut-off scores in course assessment, where a candidate can obtain a C pass even though they answered half of the questions incorrectly, with the requirement to achieve every single standard to achieve a unit pass. They suggested that there were candidates who would be capable of getting a passing grade in the course assessment but would not be able to achieve every assessment standard in a unit.

Members also gave this as one of the reasons for continual re-assessment *'chasing every single Assessment Standard'*, and excessive record keeping so that they know who is still to achieve an assessment standard and which assessment standards are outstanding. Some members have reacted to the re-assessment issue by taking an outcome-by-outcome approach to teaching and assessing while others have moved to the portfolio approach even though it requires additional record keeping.

The wider practitioner survey outlined the following implications:

Table 1: Implications of meeting every assessment standard

Category	%
Candidate	
Is a barrier to candidates achieving unit	12.4
Implications for student motivation	3.6
Assessment	
Too much assessment	15.7
Does not reflect the requirements of course assessment	5.6
Practicalities	
Is time consuming	24.4
Workload/administration	12.2
Takes away from learning	8.7
SQA exemplification (quality/availability)	5.3
Too much paperwork	4.8
n=2884	

NQST members were reminded that units in current National Courses should have both fewer outcomes and assessment standards and that those outcomes should be expressed in broader terms than the units in legacy National Courses to give practitioners the freedom to decide how to assess the units. They were then asked how this has worked in their subjects.

With a small number of exceptions most teams felt there has not been a decrease in the number of outcomes and assessment standards compared with previous courses, and many felt that there were now more. While some teams felt that outcomes in their subjects were broader, others (even those in the same team) felt that overall assessment requirements were still very prescriptive. Many members appreciated the flexibility afforded by broader outcomes, but some claimed that the broad nature of the outcomes meant that standards were not always clear.

In general, members used this question to say that there was too much assessment and too much time spent on assessment. In some cases this was related to the fact that assessment standards could have additional aspects (eg sub skills in Mathematics and Problem Solving skills in Chemistry) and also to the requirement for all outcomes and assessment standards to be evidenced.

The wider practitioner survey indicated very strongly that this intention to provide practitioners greater freedom has not been realised as outlined in the table below.

Table 2: How has unit assessment worked in your subject?

Category	%
Badly	88.7
Well	8.4
No difference	2.9
n=2287	

In summary, SQA's *Design Principles, Guidance on Unit Specifications* and *Guidance on Unit Assessment* support the key aspects of the agreed model for National 4 and National 5 qualifications. Given the need to define national standards and ensure validity and reliability of assessment it is not surprising that the guidance documents introduce additional requirements for clarity and precision of specifications; assessments that cover all outcomes and assessment standards; and comprehensive and unambiguous criteria for judging evidence in assessment support packs.

There could be tensions between these understandable requirements and the aims of having fewer outcomes that are broad in nature, reducing the overall amount of assessment and allowing professional judgement in making decisions about learners. In retrospect some of these tensions may have been evident in the original paper that described the model. For example, although the paper states that one of the aims of the new system is to achieve '*an overall approach to assessment which reduces the time learners spend on assessment for certification*', it also states that '*All units will be assessed and certificated*' and that one of the purposes of units is to '*ensure coverage of all aspects of performance*'.

2.2 Comparing current and legacy National Qualifications unit approaches

Although the 2008 consultation highlighted some concerns regarding internally assessed unit-based National Courses there was not the level of practitioner discontent expressed around Intermediate 1 and 2 as has been the case with National 4 and 5.

This raises the question as to what is different in the current National Courses which may have resulted in this discontent.

A comparison of the guidance on unit writing for current and legacy National Courses reveals a great deal of similarity between the two approaches (SQA, 2011; SQA, 2014).

In both legacy and current courses, the purpose of outcomes is to '*tell the reader precisely what a learner will be able to do as a result of learning*'. Both guidance documents advise that '*it is better to have fewer Outcomes — this makes it easier to deliver the Unit and helps keep assessment and workload within reasonable boundaries*'. In current courses it states, '*Outcomes should be broad-based and specified in a way that leaves flexibility for combining and integrating assessments within and across Units where appropriate*'.

The purpose of performance criteria in the legacy National Course units and assessment standards in the current National Course units is to '*set the standard of achievement expected and give more information about what a learner must*

do to achieve the Outcome'. They should *'give a clear indication of the standard or quality of performance expected and should tell the assessor what to look for'*. The need for clarity and precision of performance criteria and assessment standards is emphasised in both guidance documents even to the extent of saying that *'it is more important to give clear and unambiguous information (in Performance Criteria) than to worry about the number of words'* and *'The length of an Assessment Standard is of secondary importance; clarity should be the priority'*.

A comparison of legacy and current guidance on unit assessment again reveals a great deal of similarity. In both legacy and current courses the production of evidence for all outcomes and performance criteria/assessment standards is required. Outcomes and performance criteria/assessment standards cannot be sampled.

Marks and cut-off scores can be used for assessment in both legacy and current units. In both cases this is stated in relation to tests of knowledge and understanding only and it is also stated that cut-off scores should be set to *'demonstrate success across the Outcomes and Assessment Standards'* or *'allow a reasonable inference to be drawn that all Performance Criteria for a Unit have been met'*.

In other words, the principle that all outcomes and performance criteria/assessment standards should be achieved and demonstrated is implicit in guidance for both legacy and current National Course units.

Guidance on evidence requirements differs between the legacy and current units. In the legacy National Course units, the purpose of the Evidence Requirements section was to *'state clearly and unambiguously exactly what learners have to do, and to what standard, to demonstrate that they have achieved the Unit or Outcome, and how much evidence is required'*. Whereas in the current units, the evidence requirements should *'give a brief, high level description of the evidence required to show competence for the Unit'*. In both legacy and current units, guidance states that evidence requirements should not specify the evidence type or any particular assessment method and that where possible the Evidence Requirements section should be written for the unit as a whole.

2.3 Fewer outcomes and assessment standards?

A comparative analysis of Intermediate 2 and National 5 qualifications was undertaken to identify whether the intention of fewer outcomes and assessment standards has been realised.

Qualification Development Consultants worked with Qualifications Design Teams to develop course and unit specifications in line with SQA guidance across a

range of subjects making use of the allowable flexibility, and a range of course structures emerged. It should be noted that a range of course structures was also evident in previous National Courses. For example the following table compares the structures of 46 related Intermediate 2 and National 5 subjects:

Table 3: Comparative analysis: number of units

Level	Two-unit courses	Three-unit courses	Four-unit courses	Totals
Intermediate 2	13	29	4	46
National 5	21	25	0	46

Although the majority of Intermediate 2 Courses consisted of three units there were a small number of four-unit courses and a significant number of two-unit courses. The two-unit courses were mainly in Modern Languages and consisted of one mandatory 12 credit unit, plus one 6 credit unit chosen from two optional units. The four-unit courses usually consisted of two 6 credit units and two 3 credit units. Several Intermediate 2 courses allowed candidates to choose from a list of optional units.

Although three-unit courses are still the most common at National 5 there is a much larger number of two-unit courses. There are no four-unit courses at National 5 and there are no National 5 courses with optional units, although some courses have optional topics within units, eg History.

Numbers of outcomes and assessment standards:

Within the group of 46 related subjects there are differences in the numbers of outcomes and assessment standards/performance criteria as shown:

Table 4: Comparative analysis: average number of outcomes, assessment standards or performance criteria

Level	Outcomes	Assessment standards or performance criteria in course	Assessment standards or performance criteria in outcome
Intermediate 2	8	23	3
National 5	5	18	3

Looking at the averages it appears that there has been some success in reducing the numbers of outcomes and assessment standards/performance criteria at National 5 compared with Intermediate 2. The average number of assessment standards/performance criteria per outcome is the same at both levels (ie 3). So the main source of the reduction appears to be in the number of outcomes.

Comparing courses with similar structures:

Table 5: Comparative analysis: average number of outcomes, assessment standards or performance criteria — two-unit courses

Level	Outcomes	Assessment standards or performance criteria in course	Assessment standards or performance criteria in outcome
Intermediate 2	5	14	3
National 5	4	14	4

Table 6: Comparative analysis: average number of outcomes, assessment standards or performance criteria — three-unit courses

Level	Outcomes	Assessment standards or performance criteria in course	Assessment standards or performance criteria in outcome
Intermediate 2	9	26	3
National 5	6	20	3

Table 7: Comparative analysis: average number of outcomes, assessment standards or performance criteria — four-unit courses

Level	Outcomes	Assessment standards or performance criteria in course	Assessment standards or performance criteria in outcome
Intermediate 2	12	40	3
National 5	0	0	0

In summary, in both Intermediate 2 and National 5 courses the average numbers of outcomes and assessment standards/performance criteria are lower when the courses consist of smaller numbers of units and the average number of assessment standards/performance criteria per outcome seems to be fairly stable around 3.

The average numbers of outcomes and assessment standards/performance criteria is lower in National 5 courses regardless of the numbers of units. This again, does seem to indicate some success in reducing the numbers of outcomes and assessment standards in new National Courses.

Of course reducing the number of outcomes and assessment standards does not necessarily reduce the amount of assessment. This will depend on the methods and conditions of assessment and, although some approaches have been exemplified in unit assessment support, teachers have been given a great deal of flexibility in the methods and conditions that they can use for unit assessment.

2.4 Relationship between unit assessment and course assessment

Background

The approved model for the design of new National Qualifications at SCQF levels 4 and 5 (Appendix 2) made it clear that at both levels, to be awarded the course, learners would have to provide evidence which meets the requirements of all of the units of the course plus evidence of added value.

Added value was defined as *'depth of understanding, integration or application of (higher order) skills'*. At SCQF 4, the added value would be assessed through an *Added Value* unit while at National 5 it would be assessed through an externally assessed course assessment.

Design principles (*Design Principles for National Courses*) and guidance (*Guidance on Course assessment for new National Courses*) were produced to support the development of course assessments for National 5 courses.

Course assessment and unit assessment

The design principles confirm that *'The award of a Course at National 5, Higher and Advanced Higher will require achievement of Units and an external assessment, which will be graded.'* The guidance on course assessment (SQA, 2015b) sets out the purposes of unit assessment and course assessment as follows:

'Unit and Course Assessment complement each other. However Unit and Course assessment have different purposes. Unit assessment assesses competence in terms of Unit Outcomes and Assessment Standards on a pass/fail basis, while Course assessment assesses added value and provides the basis for grading.'

'Course assessment is qualitatively different from Unit assessment. It has different purposes. Its first purpose is to assess Added Value (Breadth, Challenge and Application). Course assessment assesses the ability of learners to accumulate, assimilate, integrate, and apply the skills, knowledge, and understanding which they gain through the Units of the Course. This is what gives the Course assessment its Added Value.'

The guidance further advises developers that:

'You should not design an assessment which contributes directly to Units and Course. You should aim to keep these separate and ensure a conceptual and practical differentiation between them' while noting that *'Of course, the Course assessment will draw on other aspects of the Course, and so in that sense, there will be a degree of overlap between Unit assessment and Course assessment.'*

The relationship between unit assessment and course assessment is therefore quite complex and subtle. Where units are taught as part of a course, they must prepare candidates for added value assessment in terms of skills, knowledge and understanding. In order to pass a unit a candidate need only demonstrate the competence necessary to overtake the unit outcomes and assessment standards. To achieve a Course Award they must demonstrate the ability to accumulate, assimilate, integrate and apply the skills, knowledge and understanding that they gain through all of the units.

Although there will necessarily be overlap between the skills, knowledge and understanding developed in the units and assessed in the course assessment, developers are advised that unit assessment and course assessment '*should not duplicate each other.*'

Separation of unit and course assessment

NQST members were asked whether there is duplication of assessment across unit and course assessment in their subjects. Although there were variations across and within subject groups, in general members felt that there was some duplication across unit and course assessment. While some members felt that this led to over assessment many felt that this was necessary and inevitable as the course is composed of units. Many members felt that it would be possible to use evidence for course assessment to cover some unit outcomes or to use evidence for unit assessment as a starting point for the course assessment. For example, '*Allows us to use practice essays, for example, as evidence of a candidate's skill. It may have marks attached and exceed the standard but it is still evidence of a candidate's skill.*'

Some members raised the issue of tracking which outcomes and assessment standards had been covered and also copying evidence so that it could be used for various purposes. In relation to the latter, members stated that photocopied evidence could not be submitted for verification.

As outlined in the tables below the wider practitioner survey indicated a large amount of duplication of assessment across knowledge and skills; analysis of specific course information may give us an idea of where issues have been identified. This will be useful should this be considered as a future approach to reducing assessment load.

Table 8: Duplication of unit and course assessment

Category	%
Yes	55.1
No	37.0
N/A	7.9
n=2245	

Table 9: Examples of duplication of assessment

Category	%
Same knowledge and skills assessed more than once	41
Specific course examples provided	36.2
Same/similar questions asked	10.3
Units are preparation for course assessment	4.2
Yes, but does not help candidates prepare for course assessment	3.7
n=983	

2.5 Assessment support and exemplification

Unit assessment support packs

In relation to the provision of unit assessment materials, the Curriculum for Excellence Management Board model (see Appendix 2) made the following statements:

'Externally set assessments will be available through a rich assessment resource, with e-assessment options where possible.'

'Centres can also design their own assessment tasks. It is likely that this practice will evolve over time as centres gain confidence and expertise in assessment development and have time available to do so.'

'Exemplification and support to help this process will be provided.'

'It will be important to ensure that Unit assessments are suitably skills-based and not 'mini exams' as some current National Assessment Bank assessments (NABs).'

Unit assessment support packs (UASPs) have been provided to support the assessment of units in new National Courses. UASPs come in a variety of formats:

- Unit-by-unit: UASPs for each individual unit in a course, normally covering all of the outcomes and assessment standards
- Combined: supports a combined approach to assessment which can be effective for gathering evidence across a number of units of a course
- Portfolio: supports a portfolio approach by providing information on judging evidence for assessment normally covering all outcomes and assessment standards for all the units in a course

UASPs are designed to be as open and flexible as possible. They can be used by teachers and lecturers to:

- ◆ assess learners
- ◆ adapt for their own assessment programmes
- ◆ develop their own assessments

The *Guidance on Unit Assessment for new National Units* (SQA, 2015a) states that teachers and lecturers must use their professional judgement, subject knowledge, experience and understanding of learners to decide the most appropriate ways to generate evidence and the conditions and contexts in which they are used. UASPs provide examples of how this can be done but it is not mandatory to use the tasks in the assessments provided and it is not necessary to use the packs at all.

NQST members were asked what has been the most common approach in their subject. The most common approach to unit assessment is unit-by-unit, although there is some evidence of combined and portfolio approaches being used in some areas. Members who use the unit-by-unit approach give various reasons including: it's similar to their existing approaches; it fits in with the mode of delivery; it fits in with the requirements in the Local Authority and/or school, eg assessment timetables. In some schools teachers are required to use the unit-by-unit approach and report every time a learner fails to pass an assessment. Further, members who use the combined approach mainly said that this was because it saved time and/or it fitted in with the way they delivered the course.

Reasons for using the portfolio approach included: it makes re-assessment easier and it is more suitable for '*less able*' pupils. Teachers in some subjects felt that using naturally occurring evidence helped to relieve the assessment burden on their pupils, as pupils were not aware that they were achieving each assessment standard.

In contrast, reasons for not adopting the combined or portfolio approaches included: lack of time; lack of confidence; concerns about having to re-assess towards the end of the course (combined) and concerns about the amount of recording and tracking necessary (portfolio). Discussions suggested that members may adapt or change their approaches to assessment as they gain more confidence.

The wider practitioner survey indicated that the unit-by-unit approach predominated with 71% of respondents (n=2295) indicating this was the approach they were using. This is interesting in the context of the view in the approved model where this was not the intention, for example it was stated that '*assessment instruments will be designed to demonstrate achievement of more than one Unit. Unit-by-unit assessment will also be possible.*'

Perhaps implicit in providing practitioners with the freedom to assess, is the intention that they should develop their own assessments.

There was some evidence of NQST members creating their own unit assessments and many of them have adapted SQA unit assessment support to suit their needs. However a significant number are using SQA unit assessment support '*off the shelf*'. The main reasons for this are: lack of confidence; the requirement for prior verification; fear of verification generally; and school policy. Where members have created their own assessments or adapted SQA

assessments this has been to fit in with how they deliver the course or in some cases to assess beyond minimum competence.

The wider practitioner survey provided a more detailed picture here with just over half only using SQA produced assessments as outlined in the table below.

Table 10: Developing own unit assessments

Category	%
Have not developed assessments	53.1
Have developed own assessments	30.3
Have adapted SQA assessments	14.2
Authority have developed assessments	2.4
n=1753	

A number of respondents indicated that they have not developed their own assessment materials. Some respondents did not provide any reason for this, however the table below gives the three reasons most frequently given. A number of respondents indicated that they had previously developed their own assessment materials. They had then encountered issues with these prior verified materials no longer being deemed appropriate due to changes made by SQA.

Table 11: Reasons for not developing unit assessments

Category	%
Time constraints	45.9
Prior verification	26.0
Confidence	15.1
n=721	

A number of respondents indicated that they have developed their own assessment materials. Some respondents did not provide any reason for this; however the table below gives the three reasons most frequently given.

Table 12: Reasons for developing unit assessments

Category	%
SQA materials are not fit for purpose	41.0
Insufficient materials provided by SQA	35.0
To suit candidates/context	12.0
n=466	

Comparison with National Assessment Bank assessments (NABs)

The assessment of National Units that contributed to legacy National Courses was supported by NAB assessments which included assessment instruments, marking schemes and, where appropriate, cut-off scores. Although achievement of a cut-off score was supposed to indicate competence across the outcomes and performance criteria, in practice this was rarely if ever justified in the NAB documentation. In most cases NAB assessments were designed to take 1 hour or less. This varied across subjects and more time would be required for practical or performance type assessments.

In some subjects NAB assessments contained separate tests and cut-off scores for each outcome but there were some cases where NAB tests were provided that claimed to cover all outcomes and performance criteria.

For example one NAB assessment states:

'To obtain the minimum standard for a pass, candidates must provide evidence to satisfy the Performance Criteria in all Outcomes. Each assessment item covers the range of Performance Criteria for all Outcomes. Success in a Unit assessment can be achieved by demonstrating a satisfactory standard across the Outcomes and is not dependent upon success in each Performance Criterion for each content area. A cut-off score is used to indicate whether to award a Unit pass.'

In this NAB assessment the cut-off score was 12/25 although this was not justified anywhere in the marking guidance. For example questions and marking instructions were not explicitly related to any particular outcome and performance criteria and it's not clear why the mark of 12/25 would enable a reasonable inference that all performance criteria had been met.

In general, marks were assigned to points in a sample answer similar to the way that questions in course assessments would be marked, rather than to qualities in an answer that relate to the requirements of an outcome and/or performance criterion statement.

Where NABs detailed assessment conditions, including time limits, UASPs generally leave the conditions open and do not normally set time limits. Where NABs usually included marking schemes, UASPs provide information on judging evidence. The guidance on unit assessment states that information on judging evidence must be:

- ◆ unambiguous and clearly illustrate the standard expected of learners who achieve the unit
- ◆ as comprehensive as possible and cover all outcomes and assessment standards in the unit
- ◆ where appropriate, consistent with skills, knowledge and understanding specified in the Further Mandatory Course Coverage section of the course assessment specification or National 4 added value unit specification

In UASPs, although marks and cut-off scores can be used for tests of knowledge and understanding, the guidance emphasises that it is important to explain how the cut-offs used fit the outcomes and assessment standards as described in the unit specification. It also states that the essence of most unit assessment should be about making an informed professional judgement about the learner's performance — whether or not the learner has achieved the outcomes and assessment standards rather than adding up marks.

Although the use of marks and cut-off scores are exemplified in some UASPs (eg Mathematics, Physics, Chemistry and Biology) most UASPs exemplify the standard of response required to meet the outcomes and assessment standards. This is normally in the form of a Judging Evidence Table (JET) which relates aspects of responses to each assessment standard and exemplifies the standard of response required. Where marks and cut-off scores have been used, this has been in the context of individual assessment standards (eg 2.1 in Physics).

In general UASPs take a more rigorous approach to showing how evidence should be judged in relation to outcomes and assessment standards than NABs did.

3 Emerging themes: National Qualifications Support Teams

During discussion with NQST members various themes emerged.

3.1 Positive aspects of unit assessment in new National Courses

Some members commented on what they saw as positive aspects of unit assessment.

Some felt that unit assessment ensured that the full course content would be covered and this was a good thing. Others welcomed the flexibility that they now had to deliver and assess courses in ways which suited their learners.

New National Units raise the profile of outcomes and assessment standards making it clear to teachers and learners what has to be done to achieve a unit pass. This has also led to more professional discussion amongst teachers about standards. This can be contrasted with the perception of some members that NABs had not focussed on outcomes and assessment standards (performance criteria) at all.

The requirement to pass unit assessments allowed teachers to track learners' progress and could be a motivating factor for learners. Unit assessment provided opportunities for teachers to provide rich feedback to their learners.

3.2 Negative aspects of unit assessment in new National Courses

Most members commented on what they saw as negative aspects of unit assessment.

In contrast to the positive comments about flexibility above, many members felt that the broadly stated nature of outcomes meant that standards were not always clear and the flexibility allowed by the unit specifications meant that there could be differences in standards being applied across centres. Some stated that teachers don't want freedom — they want to be given the SQA approach.

Many members felt that assessment was driving learning and that the requirement for unit assessment was affecting their ability to prepare learners for course assessment. Related to this many members felt that unit assessment did not provide them with any information about how a learner might perform in the course assessment and this led them to question the value of unit assessment.

Some members also questioned the value of unit certification at all.

3.3 Volume of assessment

The overwhelming view of members was that too much time was being spent on unit assessment. The reasons for this are not so clear.

Some members said overall assessment requirements meant that a large amount of evidence had to be gathered, collated and recorded for each learner. This could be related to the number of assessment standards but also to the complexity of assessment standards as, even when the number of assessments standards has been reduced, each assessment standard often includes several criteria that need to be evidenced.

The requirement to achieve every single assessment standard was seen by many members as being too challenging for many learners and this led to assessment '*dragging on*' for some time because of the need for re-assessment. The creation and maintenance of tracking systems to record each learner's achievement of assessment standards and identify which were still to be achieved was seen as burdensome. Keeping track of and catching up with absentees was also mentioned.

Some members have broken unit assessments down into smaller chunks to reduce the need for re-assessment. This could be one reason for some members claiming that assessment has become a weekly occurrence. In general the flexibility allowed by the specifications and lack of specified conditions mean that teachers feel they must allow learners as much time as they need to complete an assessment. This could lead to an increased amount of time being spent on assessment.

Some members indicated that the amount of internal assessment for National 5 was much larger than for Standard Grade Credit and indicated that the combined effect of unit assessment for several classes across Nationals 3, 4, 5, Higher and Advanced Higher could lead to '*marker meltdown*'. The pressure on learners was also mentioned.

3.4 Verification

Some members said that they were worried that their assessment decisions might not be accepted if verified. Therefore they felt that more guidance on the evidence required for verification was needed. In general, worries about verification were cited as the reasons for not straying from SQA unit assessments and also for adopting certain assessment approaches. For example one delegate had been asked to supply the assessment tasks that were used in a portfolio approach. It was suggested that verification should be more supportive rather than punitive in the first years of the new National Courses.

3.5 Additional demands on teachers

Some members indicated that their approaches to unit assessment were affected by requirements from senior management teams and pressures from parents. For example some schools have assessment timetables and deadlines for unit results that apply to all departments and some schools and/or Local Authorities require unit-by-unit approaches to be used by all departments. There is a perception amongst some members that accountability systems lead to pressure to enter learners for the highest level of qualification and this can lead to learners struggling to achieve. Some members then feel under pressure to *'get them through'*.

4 Discussion

Apart from the intention that current National Units should have fewer, broader outcomes and that unit specification should have more open evidence requirements, the approach to unit assessment in current National Units is very similar to the approach in legacy National Units. Further, there is evidence to show that the units in most current National Courses do have fewer outcomes and assessment standards than their legacy National Courses. However most teachers have the perception that the approach to unit assessment has changed, there are now more outcomes and assessment standards and that the amount of time spent on assessment has increased.

The main difference between the assessment of current and legacy units is in the nature of support and exemplification provided. In general, NABs for legacy units provided instruments of assessment and marking schemes that were similar in form to course assessments. They also set conditions of assessment and, in particular, they set time limits for the assessment. UASPs generally do not set conditions for assessment and do not provide time limits. They are also more rigorous in their approach to showing how evidence should be judged in relation to outcomes and assessment standards and the requirement to achieve all outcomes and assessment standards is more evident in UASPs than it was in NABs. Whereas most NABs provided cut-off scores, most UASPs don't and where they do they are linked to individual assessment standards.

Although the use of NABs and UASPs is not mandatory they are often interpreted as such and at the very least are seen as another layer adding to the definition of standards. See NQST response below:

'Teachers are making use of the Judging Evidence table in UASPs to guide what needs to be done. The JET gives the detail and tells the teacher what they need to know/ do. Without it teachers would not know what to teach.'

The more open nature of UASPs, the lack of cut-off scores and the clearer requirement for achievement of all assessment standards could be seen as major changes in SQA's approach to assessment — although the actual approach as defined in guidance to unit writers and unit support writers has not actually changed.

Teachers who, rather than looking at unit specifications, focussed mainly on NABs which did not emphasise the requirements of outcomes and performance criteria may have the perception that there is a new approach to unit assessment. See NQST responses below:

'There was a lack of awareness of assessment in NABs; NABs didn't have Outcomes and Assessment Standards. Perception is that the new system is more and more intricate.'

'In the past, candidates did NABs and there was a perception that all candidates passed Units. There is more structure and formality for Unit assessment now.'

'More emphasis than ever before on assessment standards putting greater emphasis on ensuring each one is achieved.'

'The Unit assessments are more demanding. There are a greater number of elements which candidates have to answer correctly.'

These comments are actually comparing NABs and UASPs, which are not mandatory, rather than comparing unit specifications and the underlying approach to unit assessment which, in principle, is the same.

The fact that UASPs do not generally specify time limits and the flexibility allowed may also be leading teachers to feel that they must allow learners as much time and as many assessment opportunities as they need to provide evidence of achievement of all outcomes and assessment standards. See NQST responses below:

'... the requirement that pupils sit at any point in the course, can take as long as they need to sit the assessment and have access to materials such as books, etc.'

'If you break down each Assessment Standard into its smallest part to ensure each candidate is aware of and can achieve the standard it becomes cumbersome. But once this is done the pupils are clearer on what they have to achieve.'

'It just means I assess one outcome at a time so I can prepare candidates fully for it. It also means increased admin for me.'

'Clearer instructions on conditions for time plan/service details and how often they can be re-assessed' so it's not a case of rewrite, rewrite.'

It should also be remembered that for many teachers National 4 and National 5 courses have replaced Standard Grade courses which were not unitised and in most cases had little or no internal assessment requirements. Now all courses are unitised. See NQST responses below:

'I feel it is really important to take into account that the CfE NQs are taking over from SG as much as Intermediate where there were NO Units or NABs. We had total freedom to assess Units/topics for Standard Grade.'

'I am anticipating marker overload when having to assess and re-assess at multiple different levels with H & AH now coming on stream; on top of N3 – N5 in S4 & N4 – N5 in S5/6.'

Finally, teachers are subject to additional pressures and demands that have an effect on their decisions on how to carry out unit assessment. See NQST responses below:

'There is freedom to pick up Assessment Standards from across the Course. However, in some cases, there is pressure from LAISMT to have units completed by a 'deadline''

'Naturally occurring evidence doesn't sit well with Senior Management. Senior management still like NABs and UASPs rather than naturally occurring evidence.'

Investigate ways in which unit assessment can contribute to course assessment and course grading

In the longer term it might be useful to re-visit the rationale for the inclusion of units in National Courses. This might involve investigating the extent to which the perceived benefits of units are realised and, if so, whether these benefits outweigh the costs in terms of assessment load and teacher workload.

If this course of action was pursued then the design of course assessment would have to be reviewed and amended in light of removing units. This may result in question papers being redesigned and would probably result, in many cases, in longer exams. There are also some areas of courses that are only assessed currently within units which would have to be included within course assessment, and may result in additional course assessment components.

Appendix 1: Benefits and issues associated with unitisation

The principal that new National Courses would be unitised was already decided prior to the consultation and development of the approved model for the qualifications. At this point it might be useful to review the international evidence related to the benefits and issues associated with unitisation of courses.

Benefits of unitisation

Hart and Howieson (2004) found a lack of hard research evidence for the benefits of unitisation. However the most common reasons given for unitisation are: rationalisation and simplification; access and progression; uptake; flexibility and responsiveness; quality of learning; and quality assurance of qualifications.

More generally, in relation to Standards Based Assessment, Rawlins et al (2005) found that 'Advocates stress improved transparency and understanding of the assessment process'. More generally, benefits of the approach were held to be higher levels of student achievement (Supovitz, 2001); improved links between knowledge and performance (Barker in Peddie and Tuck, 1995); improved generic skills (Gfroerer, 2000); more stability and robustness of teacher judgements from diverse assessment methods (Pitman, 1985); enhanced international comparability (Peddie and Tuck, 1995); and the potential democratisation of learning and the erosion of traditional barriers and quotas (Barker in Peddie and Tuck, 1995).

In theory, programmes of work which are common to many courses can be embedded in discrete units which can then be incorporated into several courses, reducing duplication and reducing the number of qualifications. Unitisation should allow learners to work in manageable chunks, gaining recognised certification for their achievements as they progress, building up qualifications over time and possibly across institutions.

The report on the Review of Initial Implementation of New National Qualifications (SEED, 2001) states that:

'Unitisation allows learners to take courses gradually and build up qualifications over time. Adult returners, for example, are able to ease their way into learning by taking a course on a unit-by-unit basis taking as much time as they need. Unitisation also allows for appropriate credit transfer, for example a student may complete in college a course that they started at school. This also avoids the need to repeat work.'

The report also states that,

'... unit assessment has a number of purposes — the key being to support learning by checking that the candidate has achieved at least a minimum level of attainment on the content/skills of the unit; and to provide feedback to the learner and teacher/lecturer.'

In practice the acceptability of rationalisation has continued to be controversial, with pressure from specialist users and providers to extend the range of specialised units (Hart and Howieson, 2004) (eg Maths for Engineers). This has led to possible duplication of provision, although SQA has processes to help manage this, and sections of the catalogue where growth has led to avoidable duplication have been rationalised with the collaboration of stakeholders. It is also the case that units developed as part of National Courses are rarely incorporated into other courses.

In National Courses, although learners can build up qualifications over time, *'Students who have accumulated units over a longer period may need support to review units and integrate and apply their knowledge, understanding and skills before undertaking a course assessment.'* (SEED, 2001)

In relation to providing feedback to the learner and teacher/lecturer it could be questioned if this is a necessary function of assessment for certification.

Issues with unitisation

Unitisation in Scotland incorporates an approach to assessment that is based on standards rather than the place, pace or mode of learning. Unit assessment is outcome-based and internally assessed by teachers or lecturers. This has led to the development of quite complex verification systems and a level of exemplification and support which, while being welcomed by some practitioners, is seen by others as both bureaucratic and restrictive to learning and teaching. (Hart and Howieson, 2004).

In relation to Standards Based Assessment (SBA), Rawlins et al (2005) found that *'Critics are equally vocal in their opposition to SBA'*. Lee and Lee (2000) and Sizmur and Sainsbury (1997) identify issues of proliferation, atomisation and specificity in SBA as resulting in manageability and workload problems for teachers. Dearing (cited in Sizmur and Sainsbury, 1997) states that *'many teachers feel that the mechanics of recording teacher assessment information have interfered with teaching and learning'* (p.137). Singh-Morris (1997) contends that *'standards are reductionist'*.

Unitisation has often been associated with claims of burdensome assessment. For example the report on the Review of Initial Implementation of New National Qualifications (SEED, 2001) states that

'Both staff and students considered that there were too many assessments taking place at the same time for different subjects and that internal assessments were often completed too close to the final exam' and '...evidence indicates a widely held view that the volume and intensity of assessment activity during NQ courses — especially at the end, and in cases where significant reassessment is necessary — interfere with learning and teaching.'

Appendix 2: Design of new National Qualifications

**Model approved by Qualifications Governing Group,
15 January 2010**

What are we trying to achieve?

Discussions about the design of new qualifications have suggested broad agreement that we are trying to achieve a qualifications system which:

- ◆ supports the values, purposes and principles of Curriculum for Excellence and support the learning of the new curriculum, including its breadth
- ◆ provides a seamless transition from outcomes and experiences, with increased emphasis on skills
- ◆ is inclusive, coherent and easy to understand for pupils, parents, staff, employers and other users
- ◆ meets the needs of all learners in progressing from prior levels of achievement and provides opportunities for learners to develop at different rates, at different times, in different areas across the curriculum
- ◆ provide clear and smooth progression and articulation between different levels of qualifications, from Access to National 4 and 5, to Higher and Advanced Higher, and onto post-school learning and employment
- ◆ involves an overall approach to assessment which reduces the time learners spend on assessment for certification and allows more time for learning, and more focus on skills and integration with other aspects of learning
- ◆ results in assessment that supports, motivates and challenges learners, with more scope for personalisation and choice
- ◆ maintains high standards, credibility and relevance

When members of QGG (then called the Management Board sub-group) met in April 2009, they noted the following key points about what they were trying to achieve.

Relationship between qualifications and learning programmes

The group found it helpful to start with ideas about learning programmes which can be flexibly designed to meet learners' needs. The group also noted the benefits of designing learning programmes which lead to qualifications over 2 years to allow depth of study.

Units

New qualifications at SCQF levels 4 and 5 will be made up of units.

All units will be assessed and certificated (credited).

The purposes of units are to:

- ◆ provide a marker of the learner's progress
- ◆ allow the learner to develop breadth of skills/knowledge and understanding
- ◆ ensure coverage of all aspects of performance

Assessment instruments will be designed to demonstrate achievement of more than one unit. Unit-by-unit assessment will also be possible. Units should be designed to be achieved at different levels where possible, for example where the task is a performance and the level of achievement depends on the quality of the learner's performance. This will allow learners to delay decisions about the level they are presented for and allow flexibility at point of entry/exit.

Unit assessment will be:

- ◆ internally marked,
- ◆ based on professional judgement
- ◆ quality assured by SQA

Externally set assessments will be available through a rich assessment resource, with e-assessment options where possible.

Centres can also design their own assessment tasks. It is likely that this practice will evolve over time as centres gain confidence and expertise in assessment development and have time available to do so. Exemplification and support to help this process will be provided.

It will be important to ensure that unit assessments are suitably skills-based and not 'mini exams' as some current NABs.

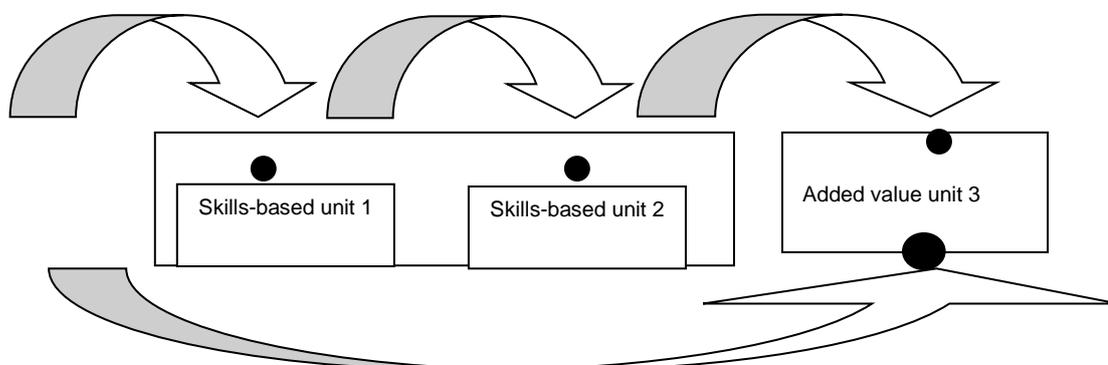
In addition, it is important to note QGG, Management Board and SQA Qualifications Committee members have agreed that the units we are referring to here will be a new type of unit, which are:

- ◆ less prescriptive and more user-friendly
- ◆ new unit specifications will be more flexible and open, with room for centre/learner choice
- ◆ new units will have fewer, broader outcomes, specified in a way which encourages synoptic/holistic rather than 'atomised' assessment - relying on assessors to exercise more professional judgement about candidates' work and attainment of outcomes in the round, rather than chasing evidence for a detailed list of criteria
- ◆ assessment criteria will be more generic than at present, and there will be less prescription on both content and assessment approaches

National 4

120 hours of skills-based units and added value unit — total 160 hours

Unit-by-unit assessment



Combined assessment for units including added value (this type of assessment will be available where it is appropriate for the subject)

In both National 4 and National 5, there will be flexibility in the number of units — the diagram illustrates only one possibility. The ‘skills-based’ term for units is used to describe the new primarily skills-based approach. These units will also require knowledge and understanding to be developed. These units assess and ensure breadth, in line with Building the Curriculum 5 (BtC5). It is important to bear in mind that this is a new type of unit, and that assessment will not take the form of ‘NAB tests’. The added value unit will require the learner to demonstrate depth of understanding and/or application of skills, in line with BtC5.

Assessment

Qualification designers for subject areas will design assessment approaches which are appropriate for the subject area:

- ◆ for learners who need to build up achievement over time, unit-by-unit assessments will be available for units 1, 2 and 3 (the last of these will assess the added value)
- ◆ where appropriate for the subject area, qualification designers may justify the development of a combined assessment which will provide evidence that the learner has achieved the requirements of units 1, 2 and 3, including assessing the added value in unit 3

All assessment will be assessed pass/fail within centres and quality assured by SQA. SQA will provide external quality assurance, including external verification, to ensure consistency in assessment judgements to national standards.

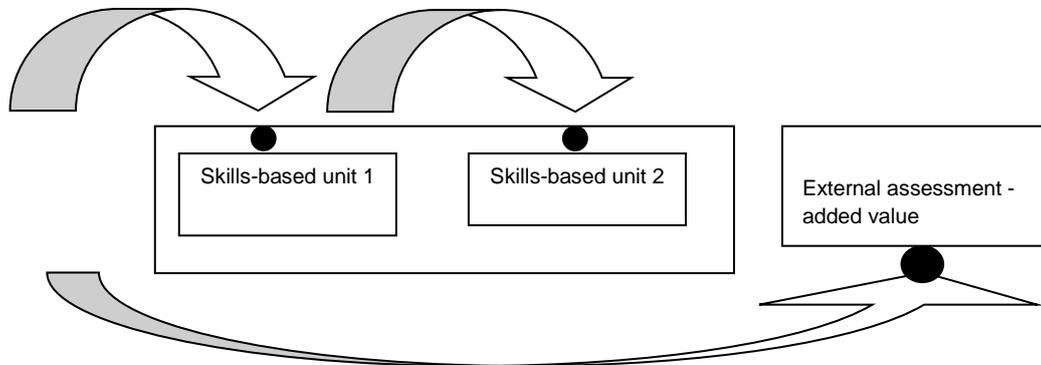
Award of the course

To be awarded the course, learners would have to provide evidence which meets the requirements of all of the units.

National 5

120 hours of skills-based units and added value external assessment — total 160 hours

Unit-by-unit assessment



Combined assessment for units (this type of assessment will be available where it is appropriate for the subject)

The external assessment will assess added value, requiring the learner to demonstrate depth of understanding, integration or application of (higher order) skills, in line with BtC5.

Assessment

- i) Qualification designers for subject areas will design assessment approaches which are appropriate for the subject area:
 - ◆ for learners who need to build up achievement over time, unit by unit assessments will be available for units 1 and 2
 - ◆ where appropriate for the subject area, qualification designers may justify the development of a combined assessment which will provide evidence that the learner has achieved the requirements of units 1 and 2

All unit assessments will be assessed pass/fail within centres and quality assured by SQA. SQA will provide external quality assurance, including external verification, to ensure consistency in assessment judgements to national standards.

- ii) External Assessment — this will provide a basis for grading, sampling breadth, depth and application from across the course. At present this could take a number of forms, eg exam, project, practical task, case study, performance, or in some instances a combination of these (usually no more than two). Graded A–D.

Award of the Course

To be awarded the course, learners would have to:

- ◆ provide evidence which meets the requirements of all of the units
- ◆ achieve grade A–D in the external assessment

References

- Curriculum for Excellence Management Board. (2014) *Report of the Working Group on the First Year of the New National Qualifications*. [online] Available at: <http://www.educationscotland.gov.uk/Images/MBReportOnFirstYearofNewQuals/tcm4-837160.pdf>. [Accessed: 04/09/15].
- Gfroerer, M. (2000) *Career guidance on the cutting edge of competency-based assessment*. *Journal of Career Development*, 27(2), pp. 119–131.
- Hart, J. and Howieson, C. (2004) *Unitisation — Benefits and Issues*, Research bulletin 9, Scottish Qualifications Authority.
- Lee, H. and Lee, G. (2000) *The National Certificate of Educational Achievement (NCEA): 'Fragile – handle with care'*. *New Zealand Annual Review of Education*, 10, pp. 5–38.
- Peddie, R. and Tuck, B. (Eds.) (1995) *Setting the standards*. Dunmore Press: Palmerston North.
- Pitman, J. (1985) *Criteria-based assessment: The Queensland experience*. Paper presented at the 11th International Conference of the International Association for Educational Assessment, Oxford, England, 27 June–2 July and at the Australian Conference of Assessment and Certification Authorities, 29 July–2 August.
- Rawlins, P., Brandon, J., Chapman, J., Leach, L., Neutze, G., Scott, A. and Zepke, N. (2005) *Standards-Based Assessment in the Senior Secondary School: A Review of the Literature*, *New Zealand Journal of Teachers' Work*, 2(2), pp. 107-115.
- Scottish Education Department. (1983) *16-18s in Scotland: An Action Plan*, Edinburgh: SED
- Scottish Government. (2008) *A Consultation on the Next Generation of National Qualifications*. The Scottish Government, St Andrew's House, Edinburgh.
- Scottish Government. (2009) *Research on the Consultation on the Next Generation of National Qualifications in Scotland*. Education Analytical Services, Scottish Government, Victoria Quay, Edinburgh.
- SEED. (2001) *Review of Initial Implementation of New National Qualifications*. A Report by the National Qualifications Steering Group to the Scottish Executive.
- Singh-Morris, A. (1997) *A response to the Green Paper*. *Access: Critical Perspectives on Cultural and Policy Studies in Education*, 16(2), pp. 65–73.

Sizmur, S. and Sainsbury, M. (1997) *Criterion referencing and the meaning of National Curriculum assessment*. *British Journal of Educational Studies*, 45(2), pp. 123–140.

SQA. (2007) *Internal Assessment, External Assessment, and Assessment for Learning — a think piece for those involved in developing assessments*. Scottish Qualifications Authority.

SQA. (2010) *The Design Principles of new National Qualifications*. Scottish Qualifications Authority.

SQA. (2011) *Writing National and Higher National Units*. Scottish Qualifications Authority, Glasgow, Publication code: AA5396.

SQA. (2014) *Guidance on Unit Specifications for new National Units*. Scottish Qualifications Authority.

SQA. (2015a) *Guidance on Unit assessment for new National Units*. Scottish Qualifications Authority.

SQA. (2015b) *Guidance on Course assessment for New National Courses (National 5, Higher and Advanced Higher)*. Scottish Qualifications Authority.

Supovitz, J.A. (2001) *Translating teaching practice into improved student achievement*. In S.H. Fuhrman (Ed.) *From the capitol to the classroom: Standards-based reform in the States* (pp. 81–98). Chicago: The University of Chicago Press.