



**Higher National and/or Graded Unit**

**National Units**

**Scottish Vocational Qualifications**

**Qualification Verification Summary Report 2019**

**Construction Technician**

**Verification group: 161**

## **Introduction**

There is a team of 11 external verifiers (EVs) in the construction verification group. Their activities in the past session have not been restricted to external verification, but have included prior verification of assessment materials, approval of centres to deliver SQA qualifications as well as credit and levelling of proposed qualifications and awards. In addition, all EVs contribute to the management, delivery and development of qualifications through their liaison with the regular qualification support team meetings.

In session 2018–19, 39 external verification events took place. In two visits (Foundation Apprenticeship in Civil Engineering) it was necessary to issue an action plan, giving detailed advice to centre staff in order to resolve issues.

A considerable number of SVQ awards were reviewed this session. The majority were across SVQ Levels 3 and 4, although a small number were at SVQ Level 5.

The following units and qualifications were reviewed during session 2018–19:

### **HN — 10 external verification events took place**

#### **HN units verified:**

DW4D 34	Construction Technical Communication Skills
F502 34	Geographic Information Systems
H72F34	Site Administration
DW3R 34	Architectural Design and Sketching
DW4P 33	Building Services: An Introduction
H729 34	Construction Technology: Industrial Commercial Superstructure
H72A 34	Construction Technology: Substructure
DW54 33	Construction Technology: Domestic Construction
DW3W 34	Statutory Control of Buildings
DW4J 35	Construction Planning
H728 34	Construction Industry Fundamentals

#### **HN graded units verified:**

H72S 34	Architectural Technology: Graded Unit 1
H72Y 35	Building Surveying: Graded Unit 2
H72R 34	Built Environment: Graded Unit 1
H733 35	Quantity Surveying: Graded Unit 2

### **SVQ — 21 external verification events took place**

#### **SVQ awards:**

GL51 46	Foundation Apprenticeship in Civil Engineering
GJ19 24	Construction Site Management (Construction)
GJ1C 23	Construction Site Supervision (Construction)
GJ19 24	Construction Site Management (Construction)

GJ1A 24	Construction Site Management: Residential Development
GL25 23	Construction Contracting Operations
GL28 24	Construction Contracting Operations Management: Quantity Surveying
GJ1C 23	Construction Site Supervision Building and Civil Engineering
GJ19 24	Construction Site Management (Construction)
GK7C 25	Construction Senior Management
GJ53 84	Construction Site Management (Construction)
G95L 23	Construction Contracting Operations (Site Technical Support)
GC4V 25	Construction Senior Management
GL27 23	Construction Contracting Operations: Site Technical Support
GL29 24	Construction Contracting Operations Management: Planning
GL26 24	Construction Contracting Operations Management: General
GL92 23	Built Environment Design
GL2A 23	Construction Contracting Operations: Estimating

**SVQ units:**

HA3P 04	Develop and Maintain Working Relationships and Personal Development in Construction
HA3N 04	Prepare programmes and schedule of works in Construction
HA3M 04	Operate health and safety and welfare systems in Construction
H6A6 04	Investigate factors affecting project dev in built environment design
H6AC 04	Collate project Info and prepare specification in Build Environment

**National units — eight external verification events took place**

**National units verified:**

F3JH 12	Civil Engineering Project
F3J7 12	Civil Engineering Technology
F3JB 11	Construction Materials: An Introduction
F3JC 12	Mechanics for Construction: An Introduction
F3JK 12	Construction Measurement and Costing
F3J6 12	Civil Engineering Site Work
H65V 46	Computer Aided Drafting: An Introduction
H669 46	Health and Safety in the Construction Industry
H66E 45	Drawing for Construction
H65W 46	Construction Project Management: An Introduction
H66H 46	Civil Engineering Materials
H65X 46	Construction Technology: Groundworks and Substructure
H66A 46	Modern Methods of Construction: An Introduction
F3HV 11	Mathematics: Craft 1

## **Category 2: Resources**

### **Criterion 2.1: Assessors and internal verifiers must be competent to assess and internally verify, in line with the requirements of the qualification.**

All assessors and internal verifiers have relevant and extensive vocational occupational experience. Most have the required assessor and/or internal verifier qualifications to effectively deliver the qualifications. A very few recently appointed staff have yet to achieve the appropriate L&D awards for assessor or internal verifier. However, all of the staff lacking in this qualification have already enrolled for these awards and have target dates for achievement. Many of the centres have appointed mentors to support new staff through their first session of delivery.

CPD activity evaluation within centres is a process of continual improvement, actively promoted by EVs during verification activities. Staff in all centres took part in CPD activity appropriate to the vocational areas in which they operated. More than a few staff were also pursuing academic or CPD opportunities offered by chartered institutes. In some centres, there was active reflection and evaluation of CPD activities in relation to programme delivery. Most assessors and internal verifiers have extensive experience of assessing and/or internally verifying construction vocational qualifications across a range of levels. In almost all cases, evidence of well-structured CPD records was observed, with recent and relevant CPD activity clearly recorded. In a very few cases, CPD records did not reflect the nature of the qualifications being assessed or had not been updated for some time to ensure industrial currency in line with assessment strategy requirements.

### **Criterion 2.4: There must be evidence of initial and ongoing reviews of assessment environments; equipment; and reference, learning and assessment materials.**

#### **Centres delivering NQs and HNs**

All centres had established internal quality control procedures. These were robust, effective and routinely applied. Centre staff demonstrated a good understanding of the assessment procedures, as evidenced through minutes of standardisation meetings, assessment reports, internal verifier reports and candidate feedback. Each of the units verified required candidate feedback, and there was documented evidence of effective, ongoing reviews. The format of the initial and ongoing reviews varied from centre to centre. In many centres, post-delivery feedback from candidates is employed effectively, which helps to inform the analysis and evaluation review of unit delivery.

In almost all centres there was a dedicated process of pre-delivery verification, regular meetings of the delivery and assessment team, standardisation practices and curriculum reviews. All centres provided good evidence of consistent appraisal of the assessment processes within internal verification schedules and minutes of internal verification/standardisation meetings. This demonstrated a robust and consistent approach to the review of all aspects of the delivery of the qualifications within their built environment portfolios. All centres that delivered the graded unit used SQA-devised Assessment Support Packs (ASPs) as the assessment instrument or adapted the ASPs.

### **Centres delivering SVQs**

There was clear evidence of review and risk assessment for almost all on-site assessment events. In almost all cases, the assessment environments are the candidates' places of work. Site selection checklists are used to confirm that the environments are safe and conducive to assessment. In all cases, assessment instruments for the SVQ were taken from the National Occupational Standards (NOS) for the qualification, aligning with sector assessment strategy and SQA requirements. In most cases, the assessment materials used are adapted to a more candidate-focused format by centres. Much of the assessment activity takes place under observed conditions on the candidate's active construction site. Most assessors are highly experienced in the development and application of appropriate assessment instruments and strategies that meet the demands of the evidence requirements. In a very few cases, assessment was conducted at the centre's premises, particularly the Foundation Apprenticeship in Civil Engineering, given the nature of the award.

## **Category 3: Candidate support**

**Criterion 3.2: Candidates' development needs and prior achievements (where appropriate) must be matched against the requirements of the award.**

### **Centres delivering NQs and HNs**

Candidates' development needs and prior achievements were matched against the requirements of the award through a variety of methods, including a robust application process and interviews. EVs confirmed that all centres have robust pre-registration measures in place to take account of candidates' needs, prior achievements and suitability to undertake the qualifications. In a few cases, centres used centre-devised knowledge analysis profiles, referred to as 'diagnostic testing tools'. At more than a few centres, personal learning plans are tailored to individual needs.

### **Centres delivering SVQs**

All centres set minimum pre-entry qualifications requirements and had processes in place to ensure that candidates' development needs and any prior achievements are taken into consideration. Most centres use a skills match profile to identify candidates' prior achievements, prior experiences and current job role. This enables centres to establish and confirm the suitability of potential candidates to undertake the qualification. Employers of those candidates pursuing a Modern Apprenticeship (MA), FA or an SVQ are regularly involved in the vetting and selection processes. In many centres, there are interim reviews during the delivery of the qualifications to ensure candidates' understanding and progress.

**Criterion 3.3: Candidates must have scheduled contact with their assessor to review their progress and to revise their assessment plans accordingly.**

All centres provided regular timetabled contact between assessors and candidates for NC unit study. Candidates had scheduled contact with assessors to review their progress and, where appropriate, to revise assessment plans. Overall, reports demonstrated robust evidence to show candidates have regular contact with tutors and assessors. This is evidenced through additional learner support from assessors and student support services.

### **Centres delivering NQs and HNs**

Candidates have regular, scheduled contact with their assessors. The frequency of contact is dictated by if the candidate is full-time, part-time or block-release and the subject timetabling. In addition to the formal, scheduled contact periods, many assessors offered supplementary review opportunities, normally in response to requests from candidates.

Almost all candidates who were interviewed commended the support, guidance and professionalism demonstrated by lecturers and/or assessors throughout the various HNs. The accessibility and flexibility shown by centre staff was highly valued and praised, especially outwith programmed contact times.

Many centres use a dedicated virtual learning environment (VLE) such as Blackboard or a similar learning portal to formalise and record candidates' reviews and assessment planning decisions, update candidates on all elements of the learning, teaching and assessment process, and track candidate progress and feedback.

Clear assessment plans were widely published on the portals. In many instances, the feedback and tracking process was supplemented with oral and written feedback given to candidates at the scheduled assessment review. A few centres have used social media platforms to disseminate generic class feedback and assessment updates. Most centres use emails that are usually linked to the centre's VLE systems.

Class-based support was also available in relation to the structure of the graded unit. Candidates have scheduled contact with assessors to review progress and revise their assessment plans. Assessors made sure issues raised by candidates were addressed through support and classroom discussions in all three stages of the graded unit. Monthly contact with assessors through tutorials, individual meetings, and email allowed the exchange of comments and suggestions to aid study. All centres recorded appropriate written feedback to individual candidates.

### **Centres delivering SVQs**

All assessors in the centres involved in SVQ delivery establish and agree a schedule of meetings with the individual candidate and their employers. The frequency of the contact is appropriate to the qualification being pursued, the centre's delivery model, the location of the candidate's place of work, (site location; local or remote; site accessibility; open, controlled or secure) and the available communications facilities. Most centres operate a regular monthly review of candidate progress, which includes assessment planning, guidance and support.

All centres employ a flexible and adaptable approach, so that candidates can negotiate directly with assessors to arrange supplementary scheduled contact, and additional assessment opportunities. Candidates can do this through text, email and/or smartphone video conferencing apps, for example. Candidates who operate in remote locations from the centres mostly use these ways to communicate, and EVs observed that there has been no loss of robustness and rigour by employing these forms of communication. In fact, in discussion with most assessors, EVs reported a marked improvement in candidate performance because of the ease of accessibility of their assessor. In most cases, EVs were unable to meet candidates due to the various and remote locations of candidates' workplaces. However, in many cases, EVs contacted candidates by telephone to confirm that satisfactory assessment arrangements were in place. Almost all centres provided suitable assessment plans with scheduled assessor and candidate meetings and assessor reports to confirm that scheduled formal contact takes place to review progress and revise assessment plans, where required.

Candidates who attend college as part of their FA or MA have weekly timetabled meetings with their assessor to discuss progress and assessment plans for both the SVQ and the knowledge-based NC units. Candidates at all centres received well-planned and effective feedback from their assessor on course progression and skills development. Feedback on completed assessments was very effective at many centres, with assessors confirming what had been achieved and, where necessary, identifying areas for improvement or skills development. Feedback related to both specialist and generic unit competences.

## **Category 4: Internal assessment and verification**

**Criterion 4.2: Internal assessment and verification procedures must be implemented to ensure standardisation of assessment.**

### **Centres delivering NQs and HNs**

All centres had relevant quality assurance policies and procedures in master folders and/or control files. There was clear evidence that the assessment and internal verification processes are implemented effectively in all centres. Quality assurance documentation, assessment and internal verification documentation, standardisation minutes and pre-delivery internal verification schedules and reports were available in master folders. Candidates' portfolios had records of standardisation activity throughout the delivery of the qualifications. Almost all centres have a digitised master folder on the centre's dedicated VLE system and retain paper versions. The documentation relating to assessment, verification and standardisation and other quality elements is held within the VLE and accessibility is restricted to the role of the user. EVs have commended these improvement impacts, not only on accessibility and efficiency, but also in transparency and enhancement of the management of delivery of the qualifications.

### **Centres delivering SVQs**

Almost all centres demonstrated robust quality assurance of the assessment and internal verification processes. This is evidenced by assessment and internal verification policies, procedures, and assessment and internal verification reports. Almost all centres have very clear and supportive guidelines and advice of responsibilities for assessors, internal verifiers and candidates to follow.

In almost all cases, centres are applying policies and procedures appropriately, as evidenced by assessor, internal verifier reports and candidate feedback. Centre evidence confirmed centres are working in line with SQA assessment guidance, and reports demonstrate good practice.

**Criterion 4.3: Assessment instruments and methods and their selection and use must be valid, reliable, practicable, equitable and fair.**

### **Centres delivering NQs and HNs**

In almost all cases, EVs noted that assessment instruments and re-assessment instruments met all of SQA's requirements. All centres based their marking system for the graded unit on SQA construction technician guidelines. The marks awarded were justified and assessment instruments used were working well. All centres apply internal verification of assessment instruments. All centres use SQA ASPs where available. If SQA ASPs were unavailable, specific re-assessment instruments had been submitted to SQA for prior verification, and most centres had devised valid, reliable, practicable, equitable and fair assessment instruments.

All centres were acutely aware of the assessment burden on candidates and planned assessment activity to avoid overload of assessment at specific times during delivery. Almost all centres had thoroughly documented pre-delivery checklists that confirmed the suitability of the assessment instruments and activity. All centres have developed clear policies and procedures on malpractice and plagiarism and require candidates to sign a disclaimer regarding submitting only work that is their own.



### **Centres delivering SVQs**

Almost all of the assessors spent time planning and agreeing assessment activity with each individual candidate. Assessment events also ensured assessments were appropriate, equitable, robust and fair. Pre-delivery checklists considered on-site assessment risks and hazards prior to any assessment activity. All centres use NOS as the assessment instrument for the qualifications delivered. Almost all centres develop their own in-house style of assessment instrument, in line with the NOS requirements, to present the assessment requirements in a more, candidate-focused format.

Almost all assessors used a variety of assessment methods to generate evidence. These include direct observation, questioning and answering, product evidence, witness testimonies and audio and/or video evidence (commended by EVs as providing clear evidence of candidate evidence and the authenticity of candidate evidence). All centres have developed clear policies and procedures on malpractice and plagiarism and candidates have to sign a disclaimer regarding submitting only their own work.

### **Criterion 4.4: Assessment evidence must be the candidate's own work, generated under SQA's required conditions.**

#### **Centres delivering NQs and HNs**

All centres have very thorough malpractice policies in place with well-publicised sanctions appropriate to the scale of the infringement. This particularly applies to graded unit submissions. The policy and procedures tend to be introduced to candidates upon enrolment and are regularly reinforced throughout the duration of the qualification. Verification processes also ensured that assessment implementations were carried out under SQA's required conditions. All centres had candidate identification on assessment materials. Many centres routinely applied anti-plagiarism software to authenticate candidate submissions.

#### **Centres delivering SVQs**

Much of the candidate evidence produced is under observed conditions in the candidate's own work environment, generated through direct observation. Assessors and candidates have question and answer sessions in the candidate's workplaces — confirmed by an assessor's observation report supplemented with digital evidence (images/videos) and witness testimonies. Questioning also relates to candidate's product evidence to confirm authenticity. All candidates complete a candidate declaration form when completing and submitting an assessment script or portfolio of work. Candidates also complete a unit achievement or declaration form on completion of the award.

In a few cases, there was insufficient candidate evidence to confirm the uniqueness of their evidence. These included examples of candidate evidence being signed off by their workplace supervisor on an A4 sheet of paper. This is not on a formalised document and has not been assessed, judged and internally verified.

**Criterion 4.6: Evidence of candidates' work must be accurately and consistently judged by assessors against SQA's requirements.**

**Centres delivering NQs and HNs**

Marking schedules and assessor templates ensured accurate judgement of candidates' work. Many centres use SQA's prior verification facility to ensure that assessment instruments, associated marking schedules and conditions are appropriate and meet the required standards. This is particularly effective for graded unit assessment materials. The comprehensive marking schedules ensure consistency of judgement over a number of assessors. In most cases, candidate feedback was comprehensive. In a very few centres, feedback should be enhanced to give the candidate a deeper insight into deficiencies as well as highlight good work. With the exception of one centre, all centres demonstrated that assessors' judgements were accurate and consistent and in accordance with unit evidence requirements and SQA's requirements. In almost all cases, standardisation and internal verification activities were fully documented.

**Centres delivering SVQs**

Most of the centres delivering SVQs use an e-portfolio data system such as Proof Positive, Onefile or Learning Assistant to collate and assess portfolio evidence from the workplace. These systems allow assessors, verifiers and candidates to identify, map and link the evidence submitted. In some centres with only one assessor and one internal verifier, the assessor and internal verifier work closely together to maintain appropriate quality standards. In most cases, candidate feedback was comprehensive. Internal verifier reports for many centres provided good, clear and comprehensive feedback to assessors with action points, where required, to confirm accurate and consistent assessor judgement. In a very few centres, feedback should be enhanced to give the candidate a deeper insight into deficiencies as well as highlight good work. However, in these centres, through EV discussions, supplementary oral and written feedback was provided during the assessment review process. In more than a few centres, there is only one assessor and one internal verifier. In such cases, almost all had other suitable assessors and internal verifiers that could be deployed, if required.

**Criterion 4.7: Candidate evidence must be retained in line with SQA requirements.**

**Centres delivering NCs, HNs and SVQs**

There were no issues reported relating to the retention of evidence for the purposes of external verification review. All centres demonstrated a thorough knowledge of SQA requirements on the retention of candidate evidence and associated documentation. Qualification verifiers reported that all centres continue to retain candidate evidence and assessment records in line with SQA requirements. In most cases, centre retention policies exceeded SQA requirements. All centres complied fully with qualification verification visit plan sampling requirements in relation to candidate evidence. Almost all centres now retain documentation electronically and the candidates' hard copy scripts and portfolios are stored securely. In a few centres, these storage facilities are located off-site.

More than a few centres responsible for the delivery of HN graded units require candidates to produce two copies of their final project. This allows the centre to retain one copy and return the second to the candidate, after marking and grading. The candidates use their copies of the graded unit submission when pursuing employment and/or further learning.

**Criterion 4.9: Feedback from qualification verifiers must be disseminated to staff and used to inform assessment practice.**

**Centres delivering NCs, HNs and SVQs**

All centres had clear policies and procedures in place for the dissemination of information from qualification verifiers to assessors and internal verifiers. Staff at all centres implemented centre procedures effectively and there was good evidence of undertaking improvements and enhancements to develop assessment practice. Almost all centres provided suitable and well-documented minutes from standardisation meetings to disseminate feedback from EVs to all relevant staff on assessment practices. Where centre co-ordinators manage the external quality procedures, they disseminate external quality reports directly to managers and other relevant staff. Centres also hold internal verification group meetings to discuss report feedback. If action points were noted, these are discussed and centres contact SQA for clarification of quality assurance issues. In a few cases, an action plan was issued, with appropriately agreed timeframes for promptly completing the actions stipulated.

Only two action plans were issued in this session. The centres concerned had recently begun delivering the FA award and had subsequently enrolled a very small number of candidates. There was a lack of appreciation by the assessor of the SQA requirements to have appropriate evidence documenting systems, such as an index/cross-reference of candidate evidence to the specific skills and knowledge requirements within the particular unit specification. Despite this, the EV reports would suggest that the standards of assessment and quality assurance within centres are improving year on year.

## **Areas of good practice reported by qualification verifiers**

The following good practice was reported during session 2018–19:

- ◆ Use of VLE to provide ongoing learner support and guidance, and manage and support the delivery of qualifications.
- ◆ High quality documentation to support the delivery of qualifications and the assessment and internal verification process.
- ◆ Accessibility of assessors outwith scheduled contact times.
- ◆ Innovative use of blended learning platforms.
- ◆ Quality of instruments of assessment for graded units.
- ◆ Tracking and checking student progress was extremely robust.
- ◆ Implementation of emerging technologies currently used in industry, such as 3D laser scanners.

## **Specific areas for development**

A few issues were identified in a very small minority of centres. The following areas for development were reported during session 2018–19:

- ◆ CPD to ensure compliance with the assessment strategy. (Criterion 2.1)
- ◆ Recording the ongoing reviews of the assessment environments, learning materials and equipment. (Criterion 2.4)
- ◆ Compliance with consolidated assessment strategy and SQA's requirements for internal verification (two centres only). (Criterion 4.2)
- ◆ Centre-devised assessment instruments must meet the criteria specified in the evidence requirements. It is highly recommended that centre-devised assessment instruments are submitted to SQA for prior verification. (Criterion 4.3)
- ◆ Missing signatures, names and dates on candidate assessment evidence and records. (Criterion 4.4)
- ◆ Feedback to candidates from knowledge assessments to be enhanced. This will help to ensure that final assessment decisions are fair and it will assist in giving feedback to candidates where remediation and/or re-sit is required. (Criterion 4.6)