



QUALIFICATIONS SUPPORT TEAM for the HN SCIENCE Portfolio of Awards

Minutes of the 30th Meeting held at 10:00 on Wednesday 20th June 2018 in The Double Tree Hilton Hotel, Glasgow

Present		Not Present	
Doug Fraser (Chair)	North East Scotland College	Pamela Duke	Dundee and Angus College
Jane Manson	Inverness College	Mhairi Hay	Forth Valley College
Marko Prorocic	Ayrshire College	Samantha Bright	Moray College
Ruth Johnston	Perth College	Fiona Jackson	Forth Valley College
Steven Donnelly	Glasgow Kelvin College	Elizabeth Barron-Majerik	Inverness College
Leann Tait	North East Scotland College	Miriam Walsh	Dundee and Angus College
Alan McDowall	Ayrshire College	Derek Steven	New College Lanarkshire
Ryan Quinn	Edinburgh College	Val Gilchrist	Edinburgh College
Sandra Spence	West College Scotland	Joseph Jamieson	Glasgow Clyde College
Joan Purdie	Glasgow Clyde College	Kenneth Boyd	North Highland College
Sandra Dickson	Glasgow Kelvin College	Rob Boyd	Perth College
Colin McMorrin	Forth Valley College <i>(attending for Mhairi Hay)</i>	Deborah Cottam	Fife College
Patrick Lawlor	Forth Valley College <i>(attending for Fiona Jackson)</i>	Amanda McCoubrey	West Lothian College
Jonathan Gillies	SQA	Jane Nichols	Argyll College
Laura Gibson	SQA		

1. Welcome and Apologies

Apologies had been received from Pamela Duke, Mhairi Hay, Samantha Bright, Miriam Walsh, Derek Steven, Val Gilchrist, Fiona Jackson and Deborah Cottam.

2. Minutes and Actions of last meeting held on 22nd November 2017

The minutes of the previous meeting were approved. The majority of the actions have now been closed off. However, the following actions are still ongoing:

Laura to update the following units/ASPs:

- Animal and Plant Cell Culture: An Introduction (H920 34)
- Plant Biology (H92H 35)
- Animal Biology (H921 35)
- DNA and Genetics (H929 34)
- Cell Biology: Theory and Laboratory Skills (H927 34)
- Mathematics for Science 1 (H8XP 33)
- Mathematics for Science 2 (H8XR 34)

Note: Units with significant changes will be recoded, and the existing version of the unit will have a two year lapsing out period.

3. HN Science Issues Log

A log of all queries/concerns with regard to HN science units/ASPs was collated and sent to QST members in advance of the meeting, to allow QST members to discuss these units/ASPs with their colleagues prior to the meeting.

QST members discussed and agreed the following changes:

- Physics 1 (H93D 33)
 - Duration of assessment to be increased to 90 minutes.
- Forensic Science: Applications (F823 11)
 - All references to future practical advances to be amended to become current practical advances, and all references to future applications to be amended to become current applications.

- Microbiological Techniques (H92F 35)
 - Outcome 1
 - Random assortment to be replaced with reassortment, and the knowledge and/or skills to be amended to cover antigenic shift and drift. Surface antigen variation to also be included.
 - Outcome 3
 - To be amended due to the majority of antimicrobials/antivirals having no effect on adhesion or invasion.

- Statistics for Science 1 (H8XT 33)
 - The ASP to be revised to remove any unnecessary content from the contexts.

Action: Laura to update the following units/ASPs:

- Physics 1 (H93D 33)
- Forensic Science: Applications (F823 11)
- Microbiological Techniques (H92F 35)
- Statistics for Science 1 (H8XT 33)

Ecology and Ecosystems (H93A 34)

The volume of assessment in the Ecology and Ecosystems unit was discussed, and QST members suggested the following amendments to the evidence requirements:

- Outcome 2
 - Reduce the number of ecosystems to be researched from 2 to 1
- Outcome 3
 - Reduce the number of field trips from 2 to 1

Jonathan advised QST members that the Ecology and Ecosystems unit did not belong to the science verification groups, and discussions with regard to the proposed changes would need to take place with the owner of the unit.

Action: Jonathan to liaise with the relevant Qualifications Manager to discuss the proposed changes to the evidence requirements in the Ecology and Ecosystems unit.

Duration of assessment

QST members discussed standardising the duration of assessment for single and double credit units to 60 minutes and 120 minutes. However, it was agreed that this was not possible, and each unit should be discussed/amended on an individual basis.

4. Applied Sciences: Graded Unit 1 (H91W 34)

QST members discussed the introduction of a word count amount for the Applied Sciences: Graded Unit 1, and it was agreed that a standard statement, containing an upper and a lower limit as guidance only, should be added to the unit specification and the understanding standards materials. Possible word count amounts were discussed, and a range of 3,000 to 6,000 words was proposed.

Marking of the developing stage was also discussed, and it was agreed that the understanding standards materials should be amended to clarify how learners should be penalised if the report is not clear, well structured and concise (section 2.6).

Action: QST members to review previous Applied Sciences: Graded Unit 1 submissions to sense check the proposed range of 3,000 to 6,000 words. QST members to contact Laura to advise if they are happy with the word count proposal.

Action: Laura to update the Applied Sciences: Graded Unit 1 unit specification and associated understanding standards materials.

5. Evidence requirements for practical experiments

QST members discussed the inconsistent approach to the evidence requirements for practical experiments across HN science units, and it was agreed that the following changes should be actioned:

- Biology: An Introduction (H923 33)
 - The number of practical experiments to be reduced from 3 to 2.
 - 1 of the experiments must be reported by production of a full laboratory report. The remaining experiment can be reported by production of a full laboratory report, completion of an appropriate pro forma, laboratory diary entry or a checklist.
- Fundamental Chemistry: An Introduction (H92W 33)
 - The number of practical experiments to be reduced from 3 to 2.
 - 1 of the experiments must be reported by production of a full laboratory report. The remaining experiment can be reported by production of a full laboratory report, completion of an appropriate pro forma, laboratory diary entry or a checklist.

- **Fundamental Chemistry: Theory and Laboratory Skills (H92X 34)**
 - The number of practical experiments to be reduced from 5 to 4.
 - All 4 experiments can be reported by production of a full laboratory report, completion of an appropriate pro forma or a laboratory diary entry.

QST members also discussed reporting practical experiments via checklists for the SCQF level 7 and 8 units, to reduce the number of laboratory reports/pro formas/laboratory diary entries. QST members agreed to sense check the reporting requirements for individual college programmes to ascertain if the amount of laboratory reports/pro formas/laboratory diary entries was an issue.

Action: Laura to update the following units/ASPs:

- **Biology: An Introduction (H923 33)**
- **Fundamental Chemistry: An Introduction (H92W 33)**
- **Fundamental Chemistry: Theory and Laboratory Skills (H92X 34)**

Action: A checklist to be developed and published on the understanding standards website.

Action: QST members to advise Laura if the revised reporting requirements is an issue.

6. National Progression Awards

Jonathan informed QST members that a scoping exercise was currently being carried out. The following NPAs are included in the scoping exercise:

- Science and Health at SCQF level 4
- Science and Technology at SCQF level 4
- Practical Science at SCQF level 5

An online survey had previously been sent to QST members and they were encouraged to complete it.

Action: QST members to complete the online survey.

7. National Certificates in Applied Sciences

QST members discussed the content of the group awards, as they contain the old Intermediate 2/Higher units and the new National 5/Higher units, to ascertain if there was a need to carry out further scoping activity. QST members agreed that no further action was required at this stage, as long

as the flexibility was retained to do the old Intermediate 2/Higher units and/or the new National 5/Higher units.

QST members also discussed the recent changes to the content of the revised National 5 and Higher courses and the removal of units from these courses. Jonathan informed QST members that if they were delivering SCQF level 5 and/or 6 freestanding units that were previously part of a National 5 or Higher course, they could continue to deliver and assess the old content. However, learners must be taught the revised content if they are sitting the external examination.

8. SVQs

Jonathan informed QST members that Cogent Skills were currently reviewing the following SVQs:

- SVQs in Life Sciences and Related Industries
- SVQs in Laboratory and Associated Technical Activities (LATA)

It was noted that the SVQs in Life Sciences and Related Industries would be renamed to become SVQs in Laboratory Skills (Life Science).

9. Food Science

Laura informed QST members that the PDA in Food Science/Technology was progressing well. Derek is a member of the qualifications design team and he will provide an update at the next meeting of the HN QST.

Action: Derek to provide an update on the development of the PDA in Food Science/Technology at the next meeting of the HN QST.

10. Understanding Standards Website

QST members were asked to consider if the materials currently published on the understanding standards website should be moved to the SQA secure website. All QST members were in agreement that the materials should remain on the understanding standards website.

11. AOB

Prior verified assessments

Doug raised awareness of the potential impact on prior verified assessments, as a result of changes to units/ASPs being progressed. Jonathan agreed to liaise with colleagues in SQAs Operations Directorate to discuss the issue.

Action: Laura to liaise with colleagues in SQAs Operations Directorate to discuss the potential impact on prior verified assessments.

Date of next meeting

QST members discussed the most appropriate timing for the next meeting, and it was agreed that the next meeting should take place late October/early November.

Action: Laura to send QST members an online poll to ascertain the best date for the next meeting of the HN Science QST.

ACTION GRID

Action	Date completed
<p>Laura to update the following units/ASPs:</p> <ul style="list-style-type: none"> • Animal and Plant Cell Culture: An Introduction (H920 34) • Plant Biology (H92H 35) • Animal Biology (H921 35) • DNA and Genetics (H929 34) • Cell Biology: Theory and Laboratory Skills (H927 34) • Mathematics for Science 1 (H8XP 33) • Mathematics for Science 2 (H8XR 34) 	
<p>Laura to update the following units/ASPs:</p> <ul style="list-style-type: none"> • Physics 1 (H93D 33)] • Forensic Science: Applications (F823 11) • Microbiological Techniques (H92F 35) • Statistics for Science 1 (H8XT 33) 	
<p>Jonathan to liaise with the relevant Qualifications Manager to discuss the proposed changes to the evidence requirements in the Ecology and Ecosystems unit.</p>	
<p>QST members to review previous Applied Sciences: Graded Unit 1 submissions to sense check the proposed range of 3,000 to 6,000 words. QST members to contact Laura to advise if they are happy with the word count proposal.</p>	
<p>Laura to update the Applied Sciences: Graded Unit 1 unit specification and associated understanding standards materials.</p>	
<p>Laura to update the following units/ASPs:</p> <ul style="list-style-type: none"> • Biology: An Introduction (H923 33) • Fundamental Chemistry: An Introduction (H92W 33) • Fundamental Chemistry: Theory and Laboratory Skills (H92X 34) 	

A checklist to be developed and published on the understanding standards website.	
QST members to advise Laura if the revised reporting requirements is an issue.	
QST members to complete the online survey.	
Derek to provide an update on the development of the PDA in Food Science/Technology at the next meeting of the HN QST.	
Laura to liaise with colleagues in SQAs Operations Directorate to discuss the potential impact on prior verified assessments.	
Laura to send QST members an online poll to ascertain the best date for the next meeting of the HN Science QST.	