



QUALIFICATIONS SUPPORT TEAM for the HN SCIENCE Portfolio of Awards

Minutes of the 29th Meeting held at 10:00 on Wednesday 22nd November 2017 in The Radisson 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
Fiona Jackson	Forth Valley College	Ruth Johnston	Perth College
Steven Donnelly	Glasgow Kelvin College	Elizabeth Barron-Majerik	Inverness College
Derek Steven	New College Lanarkshire	Miriam Walsh	Dundee and Angus College
Sandra Spence	West College Scotland	Anthony Luke	Inverness College
Val Gilchrist	Edinburgh College	John McLuckie	Argyll College
Alan McDowall	Ayrshire College	Joseph Jamieson	Glasgow Clyde College
Ryan Quinn	Edinburgh College	Kenneth Boyd	North Highland College
Leann Tait	North East Scotland College	Amanda McCoubrey	West Lothian College
Joan Purdie	Glasgow Clyde College		
Deborah Cottam	Fife College		
Rob Boyd	Perth College		
Katie Paget	Dundee and Angus College (<i>attending for Miriam Walsh</i>)		
Jonathan Gillies	SQA		
Laura Gibson	SQA		

1. Welcome and Apologies

Apologies had been received from Pamela Duke, Mhairi Hay, Samantha Bright, Ruth Johnson, Elizabeth Barron-Majerik and Miriam Walsh.

2. Minutes and Actions of last meeting held on 3rd November 2016

The minutes of the previous meeting were approved. All actions have now been closed off.

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.

Amendments to units/ASPs

QST members discussed and agreed the following changes:

- Animal and Plant Cell Culture: An Introduction (H920 34)
 - Outcomes 1 and 2
 - Duration of assessment to be extended to 60 minutes
 - Outcome 3
 - Delivery to include animal and plant cell culture
 - Assessment should cover either animal or plant cell culture
 - Outcome 4
 - Requirement for two full laboratory reports to be amended to two pro formas
- Science Industry: Key Issues (H92K 34)
 - Assessment should cover a specific company within an industry
- Plant Biology (H92H 35)
 - Marking instructions to be amended to allow interpretation of organisation as tissue organisation, and structure as gross structure or structural features

- Laboratory Skills for Science Industries (H91V 34)
 - Outcome 1
 - Requirement for two assessments of different types of hazardous substances to be amended to one assessment
 - Requirement for two risk assessments to be amended to one risk assessment. All significant hazards in the experiment must be included in the risk assessment, including hazards of high and low severity.
 - Outcome 2
 - Requirement for pro formas to be amended to allow evidence in a pro forma or a laboratory diary/book. However, the laboratory diary/book entry must meet the requirements of a pro forma, as set out in the understanding standards materials. The format is not crucial, as long as the criteria is met.

Action: Laura to update the following units/ASPS:

- Animal and Plant Cell Culture: An Introduction (H920 34)
- Science Industry: Key Issues (H92K 34)
- Plant Biology (H92H 35)
- Laboratory Skills for Science Industries (H91V 34)

Action: Laura to update the understanding standards materials for the Laboratory Skills for Science Industries unit

Content issues

QST members discussed the amount of content in the following units:

- DNA and Genetics (H929 34)
- Cell Biology: Theory and Laboratory Skills (H927 34)

It was agreed that the content in the above units exceeded the notional design length of 40 hours. QST members were encouraged to discuss the content of these units with their colleagues and to send feedback on content that could be removed to Laura.

In addition, QST members discussed the amount of content in the Mathematics for Science 1 (H8XP 33) and Mathematics for Science 2 (H8XR 34) units. It was agreed that the content in the Mathematics for Science 1 (H8XP 33) unit exceeded the notional design length of 40 hours and the content in the Mathematics for Science 2 (H8XR 34) unit was less than the notional design length of 40 hours. QST members were encouraged to discuss the content of these units with their colleagues and to send

feedback on content that could be removed from the Mathematics for Science 1 (H8XP 33) unit or moved to the Mathematics for Science 2 (H8XR 34) unit to Laura.

Fiona raised concerns with regard to the amount of content in the Animal Biology (H921 35) unit, highlighting that the content exceeded the notional design length of 40 hours. QST members were encouraged to discuss the content of the Animal Biology (H921 35) unit with their colleagues and to send feedback to Laura.

Action: QST members to provide feedback on content that could be removed from the DNA and Genetics and Cell Biology: Theory and Laboratory Skills units to Laura by Fri 26th January 2018

Action: QST members to provide feedback on changes to the content of the Mathematics for Science 1 and Mathematics for Science 2 units to Laura by Fri 26th January 2018

Action: QST members to provide feedback on the content of the Animal Biology (H921 35) unit to Laura by Fri 26th January 2018

Applied Sciences: Graded Unit 1 (H91W 34)

QST members discussed learners submitting lengthy reports containing superfluous information and the possible introduction of a word count amount and associated penalty. There was a general consensus that there should be a word count amount, and that this approach should be implemented and monitored prior to any associated penalties being introduced. QST members were encouraged to review previous year's submissions to ascertain a suitable word count amount. An online survey will be created to capture QST member's views on possible word count amounts.

Action: Laura to send QST members an online survey to capture their views on possible word count amounts

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

Animal and Plant Cell Culture: An Introduction (H920 34)

Fiona raised concerns with regard to the Animal and Plant Cell Culture: An Introduction (H920 34) ASP, highlighting the technical and problem solving aspects that are included in the assessment of Outcome 3. QST members were encouraged to discuss with their colleagues whether the technical and problem solving aspects should be removed from the ASP or moved to the assessment of Outcomes 1 and 2 and to send feedback to Laura.

Action: QST members to provide feedback on the Animal and Plant Cell Culture: An Introduction (H920 34) ASP to Laura by Fri 26th January 2018

Inconsistent approach to the 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 evidence requirements should, where possible, be standardised. Jonathan informed QST members that a list of units and associated evidence requirements for practical experiments would be collated and sent to QST members for their comments/feedback.

Action: Laura to collate and send a list of units and associated evidence requirements for practical experiments to QST members

Action: QST members to provide feedback on the proposed changes to the evidence requirements for practical experiments.

Pro formas

QST members discussed the requirement for pro formas in practical experiments and agreed that it should be amended to allow evidence in a pro forma or a laboratory diary/book. However, the laboratory diary/book entry must meet the requirements of a pro forma, as set out in the understanding standards materials. The format is not crucial, as long as the criteria is met.

Action: Laura to update units/ASPs that contain the requirement for a pro forma.

Note: To be actioned as and when units/ASPs are amended and republished.

Removal of half-marks

QST members discussed the impact on the organic chemistry ASPs due to the removal of half-marks, and it was agreed that additional guidance was required for the organic chemistry ASPs.

Action: Laura to develop guidance on the marking of the organic chemistry ASPs.

Laboratory Skills for Science Industries (H91V 34)

QST members discussed the challenges associated with the tracking and collation of evidence for the Laboratory Skills for Science Industries unit, and Jonathan advised that SQA were keen to exemplify innovative ways in which colleges were tracking/collating evidence for this unit.

Action: QST members to send Laura centre-devised toolkits that are used to track/collate evidence for the Laboratory Skills for Science Industries unit.

HNC Applied Sciences framework

QST members agreed that all of the mandatory SCQF level 8 units from the HND Applied Sciences, HND Applied Biological Sciences and HND Applied Chemical Sciences frameworks should be added to the optional section of the HNC Applied Sciences framework.

Action: Laura to add the mandatory SCQF level 8 units from the HND Applied Sciences, HND Applied Biological Sciences and HND Applied Chemical Sciences frameworks to the optional section of the HNC Applied Sciences framework.

4. HN Physics units/ASPs

Jonathan informed QST members that SQA are planning on reviewing the suite of physics units and ASPs. QST members were encouraged to raise awareness of this review to relevant colleagues. Lecturers interested in taking part in the review should contact Laura.

Action: Lecturers interested in taking part in the review of the HN Physics units/ASPs to contact Laura.

5. HN Science databooks

Doug advised QST members that learners should not be provided with any data sheets, when sitting an assessment, above what is included in the HN Chemistry and Physics databooks. QST members were encouraged to raise awareness of any issues or omissions with regard to the HN Chemistry and Physics databooks.

Action: QST members to provide feedback on the HN Chemistry and Physics databooks to Laura by Fri 26th January 2018

6. Curriculum for Excellence

Jonathan informed QST members of the recent changes with regard to CfE. The removal of units from the National 5 and Higher courses may have a significant impact on the level 5 and level 6 NC Applied Sciences group awards, and Jonathan advised that further scoping activity would take place, after the on-going review of the Higher courses, to ascertain if the NC Applied Sciences group awards were fit for purpose.

7. NC Applied Sciences

Jonathan informed QST members of the recent changes to the level 5 and level 6 NC Applied Sciences group awards, and advised that these changes were an interim measure until further scoping activity was carried out.

A summary of the recent changes is noted in the history of changes table in the [Arrangements document](#).

8. Prior Verification

A list of published SQA ASPs and centre-devised prior verified materials, which are available on the SQA secure website, was distributed to QST members. Jonathan encouraged QST members to submit any centre-devised assessments for prior verification and to share these assessments via the SQA secure website. SQA will update the list of published SQA ASPs and centre-devised prior verified materials on a regular basis and circulate it electronically to QST members.

Action: Laura to circulate an electronic version of the published SQA ASPs and centre-devised prior verified materials

9. Foundation Apprenticeship in Scientific Technologies

Jonathan informed QST members that a new Foundation Apprenticeship in Scientific Technologies at SCQF level 6 had been developed by Skills Development Scotland. The Foundation Apprenticeship in Scientific Technologies contains a new NPA in Scientific Technologies at SCQF level 6 and three units from the SVQ in Laboratory and Associated Technical Activities (Industrial Science) at SCQF level 6.

10. National Progression Awards

Jonathan informed QST members that a scoping exercise is planned and detailed feedback from centres would be sought to ascertain if the NPAs are fit for purpose. The NPAs that will be included in the scoping exercise are:

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

11. SVQs

Jonathan informed QST members that Cogent Skills were currently undertaking a review of the SVQs in Life Sciences and Related Industries and the SVQs in Laboratory and Associated Technical Activities (LATA). QST members should contact Ian Lockhart (ian.lockhart@cogentskills.com) to provide feedback on the SVQs.

Action: QST members to contact Ian Lockhart to provide feedback on the SVQs

12. The Royal Society of Chemistry

Jonathan informed QST members that the Royal Society of Chemistry are keen to work with colleges to support chemistry teaching. The Royal Society of Chemistry has two dedicated Education Co-ordinators, Heather Milton and Nicola Jordan, and Jonathan urged QST members to contact Heather and Nicola.

Action: Laura to send QST members contact details for Heather Milton and Nicola Jordan

13. AOB

Food Science

Derek informed QST members that he was involved in the development of new food science units, and it was proposed that these units be added to the optional section of the HNC/D Applied Sciences frameworks. QST members agreed that these units may be suitable for inclusion in the HNC/D Applied Sciences frameworks, and they should be discussed at a future HN Science QST meeting once the content of the units has been agreed by the Food Science Qualifications Design Team.

Action: Derek to provide an update on the development of the food science units at the next meeting of the HN QST.

Date of next meeting

Jonathan informed QST members that the next meeting of the HN Science QST would take place prior to the end of the 2017/2018 academic session.

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
Laura to update the following units/ASPS: <ul style="list-style-type: none">• Animal and Plant Cell Culture: An Introduction (H920 34)• Science Industry: Key Issues (H92K 34)• Plant Biology (H92H 35)• Laboratory Skills for Science Industries (H91V 34)	
Laura to update the understanding standards materials for the Laboratory Skills for Science Industries unit	
QST members to provide feedback on content that could be removed from the DNA and Genetics and Cell Biology: Theory and Laboratory Skills units to Laura by Fri 26 th January 2018	
QST members to provide feedback on changes to the content of the Mathematics for Science 1 and Mathematics for Science 2 units to Laura by Fri 26 th January 2018	
QST members to provide feedback on the content of the Animal Biology (H921 35) unit to Laura by Fri 26 th January 2018	
Laura to send QST members an online survey to capture their views on possible word count amounts	
Laura to update the Applied Sciences: Graded Unit 1 and associated understanding standards materials	
QST members to provide feedback on the Animal and Plant Cell Culture: An Introduction (H920 34) ASP to Laura by Fri 26 th January 2018	

Action (continued)	Date completed
Laura to collate and send a list of units and associated evidence requirements for practical experiments to QST members	
QST members to provide feedback on the proposed changes to the evidence requirements for practical experiments.	
<p>Laura to update units/ASPs that contain the requirement for a pro forma.</p> <p>Note: To be actioned as and when units/ASPs are amended and republished.</p>	
Laura to develop guidance on the marking of the organic chemistry ASPs.	
QST members to send Laura centre-devised toolkits that are used to track/collate evidence for the Laboratory Skills for Science Industries unit.	
Laura to add the mandatory SCQF level 8 units from the HND Applied Sciences, HND Applied Biological Sciences and HND Applied Chemical Sciences frameworks to the optional section of the HNC Applied Sciences framework.	
Lecturers interested in taking part in the review of the HN Physics units/ASPs to contact Laura.	
QST members to provide feedback on the HN Chemistry and Physics databooks to Laura by Fri 26 th January 2018	
Laura to circulate an electronic version of the published SQA ASPs and centre-devised prior verified materials	
QST members to contact Ian Lockhart to provide feedback on the SVQs	
Laura to send QST members contact details for Heather Milton and Nicola Jordan	
Derek to provide an update on the development of the food science units at the next meeting of the HN QST.	
Laura to send QST members an online poll to ascertain the best date for the next meeting of the HN Science QST.	