



**National Qualifications 2011  
Internal Assessment Report  
Scottish Baccalaureate in Science**

**Interdisciplinary Project**

The purpose of this report is to provide feedback to centres on verification in National Qualifications in this subject.

# National Qualifications (NQ) Units

## Titles/levels of NQ Units verified

F785 Science: Interdisciplinary Project (SCQF level 7)

### General comments

This is the second year of delivery of the Interdisciplinary Project Unit. The number of presenting centres increased to 42 and these submitted evidence for a total of 149 candidates, with 11 candidates undertaking the Interdisciplinary Project as a stand-alone Unit. During central verification the assessment decisions of 26 centres for 123 candidates were judged to be in line with national standards. This represents 82.5% of candidates which is an indicator that centres have a clear and accurate understanding of the requirements of the national standards. Issues were identified in 16 centres where assessment decisions were deemed to have been severe or lenient. This resulted in External Verifiers recommending that a total of 23 candidates be down-graded and 3 up-graded. Final results for the Unit were 58 Grade A passes, 47 Grade B passes, 40 Grade C passes and 4 No Awards.

### Unit specifications, instruments of assessment and exemplification materials

Support events were held in September and February and were attended by both new and returning centres. Information was given to centres on different models of Quality Assurance and External Verifiers led workshops facilitating discussions on assessment criteria and national standards using exemplar material. These were joint Science and Languages events, and attendees commented on how this helped them to focus on the process and criteria rather than on the subject and projects. The support events have been instrumental in developing a good understanding in most centres of the Unit requirements and national standards.

The Quality Forum events, which were a key part of External Verification, provided centre representatives with the opportunity to see and discuss candidate evidence from other centres, thereby strengthening their understanding of national standards.

Exemplar material on SQA's website was widely used by centres. The quantity of material available was greatly increased at the start of session 2010–11 using project evidence from 2009–10 presentations. These provided centres with exemplars for Grades A–C with supporting EV commentaries explaining the grading. Centres found these 'enhanced' exemplars extremely helpful in the assessment process and this was commented on at support events.

Almost all centres used the templates provided on SQA's website, though some chose to devise their own or alter the SQA templates. This was not always to the advantage of the candidates and in some cases made it difficult for External Verifiers to verify the centre's assessment decisions as it was not clear that there was evidence of criteria being met. Any shortcomings of self-generated templates were included in the central verification report to the individual centre.

Generally the instruments of assessment were completed fully and correctly. A few centres misunderstood how the Assessment Checklist should be completed, but this became apparent at the Quality Forum meeting and centre representatives were advised on how to

complete them. Full, insightful and informative assessor comments were provided by most centres. Many centres have adapted the Assessment Checklist to include comments specific to the criteria for each piece of evidence. The specific nature of these comments was most useful during central verification and External Verifiers gave feedback commending centres on the helpfulness of these comments in understanding how grading decisions had been reached.

### **Evidence Requirements**

All mandatory evidence was provided by most centres though some pieces were incomplete, the most common item being insufficient reference to timescales or skills development. Candidates from some centres used Gantt charts to show timescales and dependencies but did not include them with evidence. In some cases these were referred to by the candidate in other pieces of evidence or by the assessor in their comments, allowing candidates to meet the timescale criterion. Feedback to centres highlighted where this had occurred and directed that any chart or spreadsheet used for timescales should be submitted as evidence.

Some centres continue to provide Interim Reviews and in some cases discs containing presentations and reports. These are not required and are not taken into consideration during central verification. Centres have been advised of this in their central verification report.

### **Administration of assessments**

Many centres have developed good links with colleges and universities with some forming strong partnerships. These links have allowed candidates to access facilities and expertise, and have provided them with opportunities to access less familiar learning environments. Some centres have also involved college and university staff as joint assessors. In this capacity they contribute comments to pieces of evidence, attend presentations and are part of the internal verification process. This strengthens the robustness of the process.

In general, centres have a good understanding of the need for internal verification and in many cases this has been much more robust than last year. Many centres have developed a collegiate approach to internal verification and there were some excellent examples of co-operative working between departments (Science and Languages), or between centres within the same local authority. This approach has provided excellent support to staff within centres in understanding and applying national standards.

### **Areas of good practice/areas for improvement**

Many centres were commended on the extremely structured approach to the Interdisciplinary Project with regular scheduled meetings and a clear outline of the process from induction to the conclusion of the work. Some centres further developed this structured approach with a formalisation of the proposal, with candidates giving a presentation of their ideas at this stage. While this is not mandatory, candidates have commented on the focus it gives them at this early stage. A few centres gave candidates the practical experience of a supportive *viva* at the end of their project, both as a way of assessing the project and further developing individual personal skills.

Many excellent models of internal quality assurance were in evidence. Enhancing the interdisciplinary nature, several Science departments worked closely with Language departments, particularly where there were presentations in both subjects. There were a few examples of very good authority-led verification involving several centres. This particularly

provided support to centres with low presentation numbers. Other centres involved senior management or staff from other departments in the verification process. Where centres had links with HE/FE this aided the implementation of the delivery of the Interdisciplinary Project, both with respect to induction and to verification of outputs. Chosen models were fully explained by centre representatives at the Quality Forum, and provided insight into the robustness of their process.

Almost all centres provided assessor comments which were consistently rich, detailed and extremely helpful in the external verification process. Particularly useful was the supportive but clear explanation of why specific Grade A criteria had not been awarded which some centres provided.

Candidates undertook a broad range of challenging, creative and interesting projects and it was apparent that centre staff had been fully committed in their mentoring and support of their pupils, though at the same time allowing them to flourish and develop their skills.

Some centres have developed excellent links with FE and HE institutions and other agencies in relation to supporting candidates with their research. Having this access to library facilities and additional subject expertise allows candidates to fulfil the criterion of accessing less familiar learning environments.

Candidates in some centres expanded on the broad contexts, giving clear, insightful information on how they felt their project related to their chosen contexts.

A few centres have developed additional assessment tools which were included with the assessment checklist. For example:

- ◆ a criterion referenced checklist to support the assessment of the presentation
- ◆ draft grids for assessors to record justification of assessment decisions
- ◆ a checklist to clearly document evidence of cross-marking
- ◆ a report form for audience feedback on presentations

Centres have supported candidates in the creative and adept use of ICT and technology to make contacts and carry out research, particularly where centres are in a rural location and local links are more difficult.

### **Specific areas for improvement**

Centres should ensure that all mandatory documentation is included in the evidence submitted. For example, within the plan, if reference is made to a Gantt matrix, it must be included in the evidence that is submitted.

Centres should ensure that candidates have recognised all the sub-headings and prompts on the templates and have completed them fully — in particular the context, the skills being developed, and the timescales and milestones.

It is recommended that if centres wish to adapt SQA proformas or devise their own, they must make sure that all sub-headings and prompts are included in the revised structure. Care should be taken that all relevant sections are included to allow candidates to potentially meet all criteria.

Only the five pieces of mandatory evidence should be submitted along with the Assessor Checklist. Interim reviews, reports and presentations are not required. Centres should provide the opportunity for the resubmission of the proposal and/or plan to allow candidates to potentially meet additional criteria. However, where a candidate has resubmitted a proposal or plan, all versions **can** be submitted, but the final version **must** be submitted.

The additional dimension involved in participation in a collaborative group project imposes further challenges in what is already a very demanding process. It is advisable for centres to take this into account when considering their candidates' proposals.

Although not assessed, the project title should direct towards the theme and context of the Interdisciplinary Project.

Assessors should ensure that the project theme chosen by candidates has clear relevance to at least one of the broad contexts.

Centres should ensure that evaluations are reflective and clearly demonstrate how a candidate has developed their skills through carrying out their project.