



**National Qualifications 2014
Internal Assessment Report
Skills for Work: Laboratory
Science**

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

National Courses

Titles/levels of National Courses verified:

Skills for Work: Laboratory Science (National 5) consisting of:

Careers Using Laboratory Science (F86K 11)

Working in a Laboratory (F86L 11)

Practical Skills (F86M 11)

Practical Investigation (F86N 11)

General comments

The centres visited since the last report have a good understanding of the national standards associated with this Course. Candidates undertaking the Course tended to have the recommended entry requirements — they had completed or were undertaking a Science subject and Mathematics at National 4 or National 5.

Course Arrangements, Unit specifications, instruments of assessment and exemplification materials

The assessors and internal verifiers in all centres were familiar with the Course Arrangements documents and the Unit specifications. The National Assessment Bank materials were being used by all centres, with some centres making appropriate small changes to checklist sheets to adapt them to their own requirements. These changes did not alter any of the Outcomes. Support materials produced by SQA were being used extensively and in some cases altered to suit apparatus and teaching approaches in local centres.

Evidence Requirements

The evidence materials provided by centres during external verification visits indicated that the requirements of the Course and Unit assessments were clearly understood by centres. Omissions highlighted in the 2012 report were undertaken by centres, namely evidence for all four types of calculation required for Outcome 3/PC(b) Practical Skills. Some centres were still having difficulty with Outcome 2/PC (b)&(c) where candidates were able to state safety procedures used when dealing with radioactive sources, but in many cases they did not give an explanation for the use of the safety measure.

All Outcomes in the Careers Unit were undertaken well by centres. At the time of external verification (May) the evidence for the Practical Investigation Unit was either unavailable or partly available as candidates were still completing the Unit. All centres had good plans in place to enable candidates to complete this Unit in time.

Administration of assessments

All Units were found to be assessed at the required national standard.

Internal verification was evident in all centres visited with many centres providing internal assessment plans and logs of judgements made on individual candidates and Outcomes.

In the Careers Unit, all evidence was assessed to an appropriate level and most centres had spread this Unit throughout the Course to enable candidates to complete their reviews with time for self-reflection. This enabled candidates to show progression in skills as they moved through the Course as a whole. Again, the timing of the verification found many centres had just started the Practical Investigation or were half way through it, but internal verification was evident in the Outcomes that had been completed.

Areas of good practice

All centres visited provided well organised and easily accessible evidence for each candidate. Centres were very clear on standards and although all centres gave candidates opportunities for re-assessment they were very clear when a candidate had not met the required standard and were able to explain why during verification.

Many centres had very clear internal assessment policies and plans, including documented discussion at departmental meetings regarding internal verification procedures and individual approaches to best practice for teaching and learning. Staff teaching particular aspects of the practical work had arranged for internal verifiers to be present for visual verification.

Many centres had spread the Careers Unit throughout the year in order that external visits to local industries could be arranged more readily and external visitors could come in to give talks to candidates. All centres had used this Unit well to develop candidates' reviews to show progress. One centre had good contacts with the local careers service and NHS, combining both to allow candidates the opportunity to complete application forms for jobs. On completion of their application the candidates were given interviews and feedback on their interview skills.

Links with local industries were used well by the majority of centres with a wide variety of industries investigated by candidates in each centre. In some centres this was limited for understandable reasons (locality, etc) but even in these centres efforts were made to vary the local industries as much as possible.

Specific areas for improvement

Centres should:

- ◆ Ensure that internal verification is planned and documented prior to assessment. The internal verifier should clearly sign and date the appropriate

documents on the same day, or as reasonably close to the day of assessment as possible, to ensure consistency in assessment.

- ◆ Use the class record sheets for each Unit so that External Verifiers can get a clear overall view of the Outcomes achieved by the candidates before the evidence is consulted.
- ◆ Ensure the requirements of each Outcome are completed by candidates before signing off for internal verification.
- ◆ Ensure that during calculation work that candidates are made aware of appropriate significant figures in final answers.
- ◆ Ensure that where evidence for a particular Performance Criterion (PC) is used as evidence for another PC then this is made clear for external verification. There are many areas in this Course where this is possible and perfectly valid.
- ◆ Ensure that where evidence is submitted for the report in the Practical Investigation Unit that it is clearly indicated by the assessor exactly where the Performance Criteria have been assessed as achieved.
- ◆ Ensure that, where possible, visits to local industries are organised in a meaningful and prepared manner and that talks are organised from representatives of local industries. Also, ensure where possible that candidates are given opportunities to reflect on their personal progress in their personal reviews.