



**National Qualifications 2014
Internal Assessment Report
Skills for Work: Energy**

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: Energy (National 5)

General comments

There were four centres externally verified during this session 2013–14.

All verification visits gave positive feedback on the standard of student responses, assessor marking and feedback.

The use of centrally devised learning and teaching materials (SFEU) with the use of NABs led to a clear understanding of the national standards which were clearly demonstrated at all centres.

Internal verification was found to be carried out to a satisfactory standard in all centres.

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

All centres were using SQA NAB materials and SFEU learning and teaching materials, which has led to a very high level of standardisation across all centres. All centre staff are working from the same set of Course guidelines and using the same instruments of assessment and marking schedules through the NABs.

Evidence Requirements

The use of NAB materials has given all centres a 'template' to work from which ensures that all Evidence Requirements are met.

Administration of assessments

All centres had internal verification processes in place. These processes included the verification of the instrument of assessment (which ensured that the correct NAB was being used) and the verification of marking candidate work to ensure that marking was appropriate and consistent across the centre.

Internal verification records were usually paper based and kept in a secure room; some centres kept them in digital form on a secure area on the centre's computer system.

Areas of good practice

The following areas of good practice have been selected from this year's verification reports:

Virtual learning environment

Use of the Virtual Learning Environment (VLE) (eg Moodle) to set up learning, teaching and assessment materials. Students have access to a range of learning materials and links to appropriate websites.

The way staff utilise the centre's VLE, incorporating a dedicated, secure Facebook page has clearly been positive for the delivery of the Course and has helped engage students.

e-portfolio

Excellent use of an e-portfolio (Mahara). This allowed students to set up a week by week journal of their activities. The journal included personal accounts of work being carried out through the Units and had photos displaying the practical aspects of their work. Mahara was also being used as an 'electronic CV' which includes students' qualifications and experience. These had been sent to staff at the Scottish Electrical Charitable Training Trust (SECTT) to pass on to prospective employers. This is seen as a very positive addition to the employability skills being developed by staff and students.

Industry links

Industry sponsorship of women undertaking these Courses is seen as helping the gender balance in engineering and technology. Courses are being run at a different school in the area (with sponsors such as Shell and Shlumberger). This is an excellent way of engaging women with engineering — all Courses are women-only with the specific reason of getting more females into the oil/gas and renewable energy industries.

College–school links

Engagement with schools for pupils at the end of S2 (prior to them selecting their Course choices for S3/4) was seen as excellent practice. A college team visits schools in the area and they speak to female pupils in S2 to discuss the various options that careers in engineering and oil/gas or renewable energy could offer them. This visit consists of talks from college staff and female engineers who are working in industry, and also competitions. This gives an understanding of what engineering has to offer as well as an enjoyable day.

The team involved in the running and delivery of this SfW Energy Course has about 50 candidates this session and hopes to have three more schools involved in delivering it next year. New sponsors could include Fugro and Subsea7.

Gender balance in engineering

A visit to one centre found that the pupils (all girls) were knowledgeable and were engaging in all areas of energy and within engineering in general. Many of them are thinking of a career in engineering — this is excellent to see.

Innovative design

The use of three different designs for the Domestic Solar Hot Water Systems module is a very effective means of reinforcing the concept, permitting useful comparisons of system performance.

Specific areas for improvement

Larger projects

The benefits of constructing larger turbines over the smaller desktop-based versions was discussed. Larger turbines would offer enhanced engineering skills and better teamwork opportunities.

Photographic evidence

Maintaining photographic evidence is seen as an excellent way of retaining assessment evidence for both internal and external verification.

Student feedback

Ensure all candidates' assessed work has written feedback. This ensures they have a physical record which they can use to make improvements to their work and it can form discussion points between staff and student. This information could also be used within the employability and careers Unit where personal progression/development is being evaluated.