

National Qualifications 2006

Senior Moderator Report

Subject: **Practical Craft Skills**

Assessment Panel: **Technical Education**

The purpose of this report is to provide feedback to centres on moderation, which has taken place within National Qualifications in this subject.

NATIONAL UNITS

TITLES/LEVELS OF NATIONAL UNITS MODERATED

PRACTICAL CRAFT SKILLS – 318

Woodworking Skills

D182 10 Bench Skills 1 – Wood Flat Frame Construction

D182 11 Bench Skills 1 – Wood Flat Frame Construction

D183 10 Bench Skills 2 - Carcase Construction

D184 10 Machining & Finishing – Wood

Engineering Craft Skills

D178 10 Bench Skills – Metal

D178 11 Bench Skills - Metal

D179 10 Machine Processes – Metal

D179 11 Machine Processes - Metal

D180 10 Fabrication & Thermal Joining Techniques

D180 11 Fabrication & Thermal Joining Techniques

D181 10 Practical Electronics

D181 11 Practical Electronics

D536 09 Craftwork Enterprise

FEEDBACK TO CENTRES

General comments:

Unit Moderation

Unit moderation of incomplete evidence was again carried out in a random sample of centres over a wide geographical area and included centres in the FE sector. Units and assessments in both Engineering and Woodworking Skills were examined at both Intermediate 1 and Intermediate 2 levels.

The exercise took place between January and March this year, and proved to be very successful both in terms of information gathering and offering advice to centres. The increase in the quality of craftwork found in course projects proved to be reflected in the generally well-constructed Unit evidence. The process also provided an opportunity to reaffirm established benchmarks and criteria for evidence at Intermediate 1 and Intermediate 2 levels.

Advice on good practice and areas for further development:

Incomplete Unit projects

The evidence in some centres indicated that each Unit was not finally completed before the next Unit was started. This practice seemed to be justified by the course presenter as 'keeping the candidates motivated'. It seems that this practice applies mainly to FE centres where candidates can lose interest and leave the course, but cannot be justified in terms of the progressive learning of craft skills.

Completion of Unit work

Although the course material and amendments have been circulated to all centres and details are available electronically, it may be that staff require to be reminded once again of the need for centres to complete all Unit work in a systematic and progressive manner. It could also be stressed again that since there is no formal interim or final exam the completion and assessment of all Unit project evidence is of paramount importance. The processes involved in the course project should allow candidates a final opportunity to generate and refine those skills learned at the Unit stage.

COMPONENT / COURSEWORK IN NATIONAL COURSES

COMPONENT/COURSEWORK MODERATED

Course Project –	Woodworking Skills	CO35
	Engineering Craft Skills	CO34

FEEDBACK TO CENTRES

General comments:

On this the sixth year of Practical Craft Skills, both Woodworking Skills and Engineering Craft Skills courses once again proved to have run smoothly. These courses were found by members of the moderation team to have been organised and conducted to a very high professional standard. This was reflected in the very positive reports, which almost universally agreed with the internal assessments. This is a strong indication that the administration and conduct of the courses is now fully established.

As Practical Craft Skills continues to be firmly established within the curriculum there is increasing evidence, especially at the upper end of the ability range that craft skills are improving with the increasing popularity and uptake throughout the country.

The success of these courses is undoubtedly due to the simple, straightforward, graduated structure that enables candidates to develop self-confidence and provides for a clear and direct internal assessment of a wide range of basic craft skills.

There is evidence of a substantial enthusiasm among candidates at all levels, and that they are motivated by the practical nature of learning tool skills and working with machines in a workshop environment. Practical projects in the form of Assessment Instruments, which are designed to encourage enjoyment at all levels, continue to be a major factor.

In Woodworking Skills candidates performed very well in areas such as turnery, assembly and joint fitting. Candidates tended to perform less well in areas such as surface preparation and the application of finishes. This seems to indicate that candidates were rushing to complete the work in time for moderation. There was also evidence of some gross blemishes such as glue stains, plane and hammer marks, cross grain planing and sanding scratches.

In Engineering Craft Skills, particularly in the Bike Clamp project, candidates performed well in areas such as machine processes, turning, the forming of threads, and finishing to within tolerances. Some candidates tended however to perform less well in areas such as welding, final assembly and functionality.

Advice on good practice and areas for further development:

Administration

There was evidence that in some centres there were some slight difficulty in entering assessment details on the revised Moderation Sample Form but this has been largely resolved.

In the Master Record Sheet the extended notes were in the main well presented, but a few centres are not entering sufficient subjective detail about the amount of additional help required by each candidate, reasons for performance, good or not so good. This kind of information greatly helps in the moderation process. It would be helpful to moderators if centres were to enter more clearly on the rear of the Master Record Sheet the actual additional teacher help given to candidates and degree of independence. This information may be entered on a separate sheet if appropriate.

Examples might be:

- Reasons for being marked down on a particular process.
- Details of poor attendance or absence through illness.
- Details of changes in rate of performance over the course.
- Details of outstanding performance.

Some clarification may be required with regard to course and Unit evidence. Centres can use Unit evidence to upgrade from Int. 1 to Int. 2 in certain instances. Since the course is progressive through the Units the course project may be used for re-assessment. This is because the content of the course project is designed to be a reflection of the assessable processes contained in each of the Units. If however a candidate is upgraded from Int. 1 to Int. 2 that candidate must be withdrawn from Int. 1 and re-registered at Int. 2 level.

Candidates who complete one Unit and a course project in any year will only gain credit for that Unit and no course award. Again due to the progressive nature of the course if a candidate did only one Unit he would presumably not have gained sufficient skill experience to complete all aspects of the course project. Candidates must of course complete all three Units to gain a course award. However since Unit credit can be carried forward a course award may be achieved in a subsequent year.

A very small number of centres are marking unfinished project evidence according to an estimate of what could be achieved if allowed time to finish. Project marks must be based on actual evidence available.

Small design variations from the NAB specification should be applied to the whole teaching group and shown on the drawing and indicated to the moderator.

Woodworking Skills

Moderators paid particular attention to the quality of skills evidence in processes such as:

- Accurate marking out and Squaring
- Working to tolerances
- Square cutting of shoulders
- Forming joints shoulder & joint gaps
- Taper Planing
- Shaping
- Turning to specified dimensions
- Parallel sides framing, squaring & assembly
- Surface Preparation
- Application of surface finish

Clock project – It has again been noted that if candidates paid more attention to small details and worked more carefully instead of rushing to get finished the resulting grade would be greatly enhanced. While these details were observed mainly in the clock project the skill processes apply also in other woodworking projects.

The candidate skills evidence was found to be very good in all project work with regard to joint forming and fitting. Some work was found to be excellent at Intermediate 2 level. There was evidence of great care and attention to detail in aspects such as:

- Tolerances - well within the limits specified, especially at Intermediate 2 level.
- Arrises and corner detail.
- External surface finishes
- Applied finishing coatings

While the quality of the vast majority of turnery evidence was found to be very good / excellent, some centres have again allowed candidates freedom to design:

- The split turnery
- The finial at the top – In a small number of centres, candidates had turned this in brass – this is not an outcome.
- The rake of the angled top coping detail.

It must be stressed that the only acceptable practice, especially at Int. 2 level, is for candidates to first draw the profile / shape / detail and then work to the sizes and form created – This applies only if no size or shape is specified in the NAB.

Common skill processes where grades could be improved:

1. In a very small number of centres there was evidence that no haunches had been formed on mortice and tenon joints. All corner mortice & tenon joints in flat frames should have haunches formed in accordance with the performance criteria.
2. There was evidence that chamfers were sanded round in some cases. All chamfers should be clean and crisp.
3. Poorly finished internal curved work at top detail. All internal curved work should be smooth and continuous.
4. Rebate to rear of flat frame at clock face was found to be too deep in some cases, resulting in a gap showing round edge of clock face. There should be no gaps round the edge of the clock face.
5. Rebate to rear of clock carcass was found to be not deep enough to allow the back panel to be fitted flush.
6. Mortices extending outside the marked lines or rails planed too narrow resulting in mortice spaces showing on inside of flat frame. Candidates should restrict mortice slots to the width of corresponding rails and mortice within the marked lines.
7. There is still a variation in the quality and degree of surface finish between centres and this seems to be caused by some candidates rushing to complete projects at the end of the course.
8. In centres where there is little or no evidence of surface finish at the point of moderation, candidates are encouraged to produce a range of evidence from Unit work or on sample boards.

Engineering Craft Skills

Moderators paid particular attention to the quality of skills evidence in processes such as:

- Accurate marking out
- Square cutting of ends & finishing to within tolerance
- Shaping
- Threading and machine processes
- Turning to specified dimensions
- Folding and forming
- Fabrication methods
- Welding processes
- Mechanical fastening methods
- Deburring and surface finish
- Final assembly and functionality

While this subject still has a lower uptake than Woodworking Skills, some candidates have demonstrated craft skills of a very high quality, in terms of bench skills, machining processes, fabrication and thermal joining, surface preparation and finishing.

Bike Clamp - The following points however were noted:

1. In a small number of centres there was evidence of poor welding – lack of continuity of weld and inadequate fusion.
2. Some centres are still allowing candidates to apply a heavy paint finish to projects. This practice should be left till after the moderation visit, as it tends to obscure the quality of welding evidence.
3. There was evidence of the clamp not closing properly due to:
 - Thread not running true.
 - Welded nut not captured in line with threaded bar
 - Top and bottom curved clamp jaws not aligned properly
4. Pre-threaded bar to be used only by Int. 1 candidates
5. Although the bench work and machining skills may be good, candidates should be encouraged to take more care in the final assembly of the bike repair clamp as functionality is a major part of the final assessment.

Practical Electronics

Although only a few centres have presented the Practical Electronics Unit, these candidates have demonstrated by their enthusiasm that this is an excellent and thoroughly motivating course option but as far as the Assessment Moderation is concerned, apart from an overall check on the continuity of the circuit, there is no other means physically of examining the assembly evidence due to the small scale and inaccessibility of components.