NCFE Level 2 Certificate in Engineering Studies (601/4532/8)

Assessment window: Spring 2020

This report contains general information in relation to the external assessment from the Chief Examiner, with an emphasis on the standard of learners' work within this assessment window.

The aim is to highlight where learners generally performed well, as well as any areas where further development may be required, described against each assessment criteria.

Key points:

- administering the external assessment
- standard of learner work
- Regulations for the Conduct of External Assessment
- referencing of external assessment tasks
- evidence creation
- interpretation of the tasks and associated assessment criteria
- planning in the external assessment.

It is important to note that learners should not sit the external assessment until they have taken part in the relevant teaching of the unit to ensure they are well prepared for the external assessment.

Administering the external assessment

The external assessments must be independent from the teaching of the unit. Work completed during the teaching of the unit cannot be used in the external assessment. Any stimulus materials used by the Centre during the teaching of the unit cannot be used in the external assessment. Learners must complete all of the tasks independently.

The completion of the timed tasks must be invigilated and sat in accordance with the Regulations for the Conduct of External Assessment.

Standard of learner work

Centre's should make ensure that when considering which entry they place a learner in, they should consider the ability of a learner being able to cope with the standard and rigor of level 2. Some learners struggled to cope with the standard of the level 2 qualification and as a result did not achieve a grade. Learners used CAD effectively to help them produce drawings with elements of the industrial standard within the engineering sectors. Students used screen shots to support their evidence log of the drawing production to help access higher grades. Learners need to include critical judgement within this evidence stating why they favored one process over another as this would lift candidates' grades into the top-grade boundaries.

Malpractice & Maladministration

There were no cases of malpractice or maladministration raised during this assessment window. Centre's are reminded of the policy documents published by NCFE on the website.

Referencing of external assessment tasks

The Assessment Criteria (AC) are clearly visible within the exam paper and are presented next to each question they apply to.

Learners need to be encouraged to refer to the grading criteria within each question as they work through the exam papers. This will help students focus upon creating evidence that will meet the AC for each question. This is especially important for learners hoping to achieve Merit and Distinction grades rather than a pass grade. The key to achieving the AC is within the verbs used within the grading tables.

Evidence creation

Learners should use the answer booklet, using the space provided, to answer questions. Where answers are typed or additional pages included, the learners name must be clearly visible and it must be clear which task the answer refers to. Learners used a mix of A4 and A3 sized paper for the submission of their hardcopy drawings.

Interpretation of the tasks and associated assessment criteria

Task 1, AC 1.1

Candidates for this AC had to distinguish between the common systems of measurement by identifying both common systems of measurement, common units for each system and an explanation of each system. Learners were confident in identifying both metric and imperial measuring systems and stating units used in each system such as (mm, cm, inch and feet). Learners did not access the higher grades due to their knowledge on each measuring system. For the learner to achieve higher grades for this AC they could have discussed knowledge such as the history of each measuring system and geographical locations where the systems were used.

Task 1, AC 1.2

Candidates for this AC had to describe how measuring devices are used in engineering drawings. Learners correctly identified the names of devices within question 2 however learners were unable to achieve the higher grades for this AC. This was due to limited descriptions that did not explain how each device could be used to prepare and produce engineering drawings.

Task 2/3, AC 1.3

Candidates for this AC had to describe the purpose of scale and proportion within engineering drawings. Learners had two opportunities to address this AC both in task 2 and task 3. Learners addressed the use of scale in engineering drawings well. Learner responses regarding proportion were limited and at times resulted in students not achieving a higher grade for this AC. Some learners did not attempt these questions resulting in them being awarded NYA for this AC.

Tasks 2/3, AC 2.1

Candidates for this AC had to demonstrate the correct layout of a design sheet for engineering drawings in both 2D and 3D. Learners had opportunities to do this in both task 2 and task 3. Learners produced accurate borders and accurately laid out views. The level or detail and description in learner's title blocks on both 2D and 3D drawings restricted grades for this AC. Learners should include detail such as drawing number, material, measuring system used and method of projection in order to access the higher grades for this AC.

Tasks 2/3, AC 2.2

Candidates for this AC had to apply appropriate scales to both 2D and 3D engineering drawings. Learners choose appropriate scales for their drawings which were mostly applied accurately and realistically. Learners who achieved the higher-grade boundaries considered the scale of the drawings and how they fitted onto the page.

Tasks 2/3, AC 2.3

Candidates for this AC had to demonstrate the accurate use of drawing tools and equipment. Learners had the opportunity to demonstrate this in both task 2 and task 3. Learners achieved a range of grades for this AC and where learners skillfully demonstrated the use of drawing tools or CAD, they achieved the higher grades. Learners who evidenced experimentation within their evidence logs to produce their drawings also achieved the higher marks for this AC.

Tasks 2/3, AC 2.4

Candidates for this AC had to present their 2D and 3D engineering drawings showing evidence of the process involved. Learner's drawings lacked detail in the title block and did not include information on the part such as material and finish of the part. Learners confidently dimensioned drawings and chose appropriate scales to ensure drawings fitted on the page. Learners commentary of the process involved in producing the drawings, held back students achieving the higher grades boundaries. Learners need to justify why they have chosen a specific drawing tool or process to produce their drawing. To enable learners to achieve the distinction grade in this AC explanations required the skill of including opinions, analysis and evaluation of the chosen processes involved.

Planning in the external assessment

This is the final paper of the legacy course and Centre's would be planning for teaching of the new specification of the NCFE Level 1/2 Technical award in Engineering.

Chief Examiner: Peter Groves

Date: Spring 2020