

CAMBRIDGE TECHNICALS LEVEL 2 (2016)

Moderators' report

ENGINEERING

05887, 05888

Summer 2023 series

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Introduction

Our Lead Moderators' reports are produced to offer constructive feedback on centres' assessment of moderated work, based on what has been observed by the moderation team. These reports include a general commentary of accuracy of internal assessment judgements; identify good practice in relation to evidence collation and presentation and comments on the quality of centre assessment decisions against individual Learning Objectives. This report also highlights areas where requirements have been misinterpreted and provides guidance to centre assessors on requirements for accessing higher mark bands. Where appropriate, the report will also signpost to other sources of information that centre assessors will find helpful.

OCR completes moderation of centre-assessed work in order to quality assure the internal assessment judgements made by assessors within a centre. Where OCR cannot confirm the centre's marks, we may adjust them in order to align them to the national standard. Any adjustments to centre marks are detailed on the Moderation Adjustments report, which can be downloaded from Interchange when results are issued. Centres should also refer to their individual centre report provided after moderation has been completed. In combination, these centre-specific documents and this overall report should help to support centres' internal assessment and moderation practice for future series.

Online courses

We have created online courses to build your confidence in delivering, marking and administering internal assessment for our qualifications. Courses are available for Cambridge Nationals, GCSE, A Level and Cambridge Technicals (2016).

Cambridge Nationals

All teachers delivering our redeveloped Cambridge Nationals suite from September 2022 are asked to complete the Essentials for the NEA course, which describes how to guide and support your students. You'll receive a certificate which you should retain.

Following this you can also complete a subject-specific Focus on Internal Assessment course for your individual Cambridge Nationals qualification, covering marking and delivery.

GCSE, A Level and Cambridge Technicals (2016)

We recommend all teachers complete the introductory module Building your Confidence in Internal Assessment, which covers key internal assessment and standardisation principles.

Following this you will find a subject-specific course for your individual qualification, covering marking criteria with examples and commentary, along with interactive marking practice.

Accessing our online courses

You can access all our online courses from our teacher support website [Teach Cambridge](#).

You will find links relevant to your subject under Assessment, NEA/Coursework and then Online Courses from the left hand menu on your Subject page.

If you have any queries, please contact our Customer Support Centre on 01223 553998 or email support@ocr.org.uk.

General overview

It is important that centres liaise with their assigned moderator early in the year to discuss potential visit dates and agree deadlines for candidate evidence to be completed and entered for moderation. The centres can enter candidates through Interchange within the timeline requirements. (At least 10 working days before planned virtual moderation date.) This will allow moderators to select a centre sample and return it to the centre thereby allowing them to upload the required candidates' evidence. Centres also should be aware of the requirements to upload all selected candidates' evidence onto the ASFA portal at least 3 days before planned moderation date. OCR will also set up a TEAMS meeting link for the virtual moderation which the moderator will send to the centre.

OCR has produced a number of guidance documents relating to the uploading of candidate evidence and URS onto ASFA system, which centres should refer to.

At each visit, centres are required to provide a complete Unit Recording Sheet (URS) for each candidate that clearly shows where the candidate has gained each grading criteria along with the final grade that is entered on Interchange. The URS should also include clear page referencing to show where work against the particular grading criteria has been awarded. This can be supported with suitable annotation in the candidate's portfolio. The URS should also be uploaded onto the ASFA portal before the virtual moderation date.

Internal Verification and Standardisation

Centres are encouraged to conduct Internal Verification of assignment briefs if they are set by centre. They should also conduct Internal Standardisation when grading candidates' evidence (OCR has produced sample documents that the centres could use). Where this has been carried out in centres it clearly demonstrated consistent and accurate assessment of candidate evidence and helped in the moderation process.

Meaningful Employer Involvement (MEI)

This is a requirement from DfE for all awarding bodies 'to confirm that providers have secured employer involvement for every learner' taking a Tech level qualification or a Technical Certification qualification that has been approved by DfE. This refers to all Cambridge Technical qualifications (except 05823) at both Levels 2 and 3. The employer involvement does not contribute to the overall qualification grading, but it is a requirement that all candidates must meet.

Authentication

It is important that each candidate provides a completed authentication statement for their work and understands the importance of authenticity in the evidence they are presenting. Centres only need to supply one authentication statement per candidate covering all units they are submitting.

Witness statements

Centres are encouraged to use witness statements to support candidates' work - noting that these cannot be used as a single source of evidence against grading criteria. An example of where this is effective is in Unit 13 when using a range of hand tools safely and effectively (P5). Witness statements can be used to support and corroborate evidence such as confirming safe and independent working.

Referencing

All candidates must be encouraged to reference their work. This could be as simple as footnotes on each page showing the source material used, along with numbered annotation within the work which should reference to particular grading criteria covered by the candidate's evidence.

Comments on individual units

Unit 3 Mechanical engineering – machine operations

Candidates have produced photographic evidence for this unit. All photographic evidence must have annotation that clearly identifies the activity and what grading criteria it relates to.

Within the Merit and Distinction grading criteria the candidates must produce in depth explanations and evaluations of the practical activities they have carried out.

As this is a practical based unit the use of a Witness Statement to enhance the evidence is useful but only as supporting evidence and should be individualised to indicate the support and help given to candidates.

Unit 4 Electrical, electronic engineering – operations and application

Candidates have produced photographic evidence for this unit. All photographic evidence must have annotation that clearly identifies the activity and what grading criteria it relates to.

All candidates attempting Distinction criteria must present in depth evaluation of their circuit construction and functionality; photographic evidence alone will not meet the criteria.

As this a practical based unit the use of a Witness Statement to enhance the evidence is useful but only as supporting evidence and should be individualised to indicate the support and help given to candidates.

Unit 5 Engineering systems control – operations and application

This unit was only presented for moderation by a limited number of centres. The candidates used photographic evidence to demonstrate the practical activities with well annotated notes attached to photos which were referenced to the grading criteria. Most centres also included a Witness Statement to provide supporting evidence for activities undertaken by candidates.

Unit 6 Develop and present engineering 2D and 3D design solutions

Candidates used CAD software and freehand drawing techniques to produce evidence for this unit. Candidates must provide clear annotation on all their drawings, both 2D and 3D, to indicate what grading criteria their evidence refers to. Candidates used screenshots to demonstrate the use of 3D CAD features; again, these must be annotated.

There is no limit on the number of 2D and 3D drawings candidates can produce but the drawings must be clearly related to the grading criteria.

Most common causes of centres not achieving

Centres should make sure that the assessment criteria are looked at in conjunction with the unit specifications to make sure that no elements of the assessment are missed. Candidate evidence must be explicit and not implicit for the grading criteria to be awarded. Any concerns or clarification should be discussed with the moderator.

Common misconceptions

Candidates are allowed to use templates where they are appropriate to complete tasks. These templates could be used for Risk Assessment or production planning. Structured writing frames are not permitted.

Avoiding potential malpractice

Centres are reminded that Witness Statements on their own provide insufficient independent evidence for candidates to be given particular grading criteria. Where limited evidence is provided to satisfy Merit and Distinction criteria (in addition to the required Pass criteria) centres should be careful not to double count a single piece of evidence as satisfying for both grades. They should make sure that there is clear explanation to satisfy Merit and further evaluation for Distinction criterion to be met.

Helpful resources

Centres should refer to the Delivery Guide for each unit and additional resources available on [Teach Cambridge](#) and the [OCR website](#). They should also sign up to the free face-to-face events and webinars published on [OCR Professional development](#).

Additional comments

Centres should always refer to both the Learning Outcomes and Teaching Content for the unit to make sure that their assignments cover the appropriate content and help candidates to access all of the grading criteria.

All candidates must be encouraged to reference their work which could be satisfied through simple footnotes on each page of their evidence or numbered annotation alongside their evidence.

Supporting you

Teach Cambridge

Make sure you visit our secure website [Teach Cambridge](#) to find the full range of resources and support for the subjects you teach. This includes secure materials such as set assignments and exemplars, online and on-demand training.

Don't have access? If your school or college teaches any OCR qualifications, please contact your exams officer. You can [forward them this link](#) to help get you started.

Reviews of marking

If any of your students' results are not as expected, you may wish to consider one of our post-results services. For full information about the options available visit the [OCR website](#).

Access to Scripts

For the June 2023 series, Exams Officers will be able to download copies of your candidates' completed papers or 'scripts' for all of our General Qualifications including Entry Level, GCSE and AS/A Level. Your centre can use these scripts to decide whether to request a review of marking and to support teaching and learning.

Our free, on-demand service, Access to Scripts is available via our single sign-on service, My Cambridge. Step-by-step instructions are on our [website](#).

Keep up-to-date

We send a monthly bulletin to tell you about important updates. You can also sign up for your subject specific updates. If you haven't already, [sign up here](#).

OCR Professional Development

Attend one of our popular CPD courses to hear directly from a senior assessor or drop in to a Q&A session. Most of our courses are delivered live via an online platform, so you can attend from any location.

Please find details for all our courses for your subject on **Teach Cambridge**. You'll also find links to our online courses on NEA marking and support.

Signed up for ExamBuilder?

ExamBuilder is the question builder platform for a range of our GCSE, A Level, Cambridge Nationals and Cambridge Technicals qualifications. [Find out more](#).

ExamBuilder is **free for all OCR centres** with an Interchange account and gives you unlimited users per centre. We need an [Interchange](#) username to validate the identity of your centre's first user account for ExamBuilder.

If you do not have an Interchange account please contact your centre administrator (usually the Exams Officer) to request a username, or nominate an existing Interchange user in your department.

Active Results

Review students' exam performance with our free online results analysis tool. It is available for all GCSEs, AS and A Levels and Cambridge Nationals.

[Find out more](#).

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01223 553998

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