



CCEA Level 1 Award in Occupational Studies
CCEA Level 2 Award in Occupational Studies

Summer Series 2019

Principal Moderator's Report

occupational studies

*Engineering and Engineering
Services*

Foreword

This booklet outlines the performance of candidates in all aspects of this specification for the Summer 2019 series.

CCEA hopes that the Chief Examiner's and/or Principal Moderator's report(s) will be viewed as a helpful and constructive medium to further support teachers and the learning process.

This booklet forms part of the suite of support materials for the specification. Further materials are available from the specification's microsite on our website at www.ccea.org.uk.

Contents

Principal Moderator's Report	3
Contact details	8

LEVEL 1 AND 2 QUALIFICATIONS IN OCCUPATIONAL STUDIES - ENGINEERING AND ENGINEERING SERVICES

Principal Moderator's Report

General Introduction (All six Occupational Studies pathways)

The summer 2019 series saw the introduction of E-Moderation for all centres. This transformation from a paper based system to an electronic system went very smoothly for both the teaching centres and the moderation team.

The number of cash-ins for the summer 2019 series has increased 11.1% to 8941 cash-ins. The total number of units entered has increased by 9.6% to 17325 units. The number of adjustments has decreased from 84 in summer 2018 to 61 in summer 2019. One further centre had an adjustment to moderator's mark. Some centres need to include more stretch and challenge assessment opportunities in order to give their candidates access to the higher mark bands within the AO1 criteria. Centres must clearly align AO2 practical tasks with all the assessment criteria found in each unit specification. If centres are found not to have covered some part of the assessment criteria their marks will be adjusted accordingly

Internal Standardisation

Whilst there has been an improvement from the previous series, some centres are still not carrying out effective standardisation across units within a pathway. It is important where a centre is entering candidates for a number of units from this pathway that there is a robust and effective internal standardisation process in place.

Engineering and Engineering Services Introduction

The number of centres entered in 2019 was 253 which showed an increase of 31 centres from 2018. The number of candidates increased from 1970 in summer 2018 to 2133 in summer 2019. Engineering forms 12.3 % of the overall candidate numbers.

After moderation the team felt that the following points would assist in any future moderation procedures:

- In future the structure of the questions in section AO1 should be more progressive from simple answering to more stretch and challenge type questions which would help to differentiate in the range of abilities of the learners and consequently reflect in the range of marks achieved by the individual learners.
- There should be evidence in the E-moderation process that the centre has carried out internal standardisation which will result in a consistency of marks/grades awarded across the pathway.
- The learner unit tracking grid from the individual unit specifications must be used to establish the final marks within each section. (Teachers/lecturers can still have individually annotated marking frames to ascertain the marks awarded at the various stages within the candidate portfolio). There were instances where there was no unit tracking grid completed and this made it difficult to see where the candidates obtained their marks.
- The AO1 Section 1 should have a respective 4, 3, 3 ratio for the marks for Health & Safety, Environmental Issues and Related Careers section to which a total of 10 marks are awarded. The careers section should include evidence of the candidates having carried out independent research into three careers within the vocational area. Also

AO1 Section 2 'materials and related skills and knowledge' should have the questions specifically related to the practical nature of the tasks to be undertaken within the specific unit.

- Evaluation marks should not be awarded for summarising the tasks undertaken, but must be more self-reflective, analysing and evaluating their work in the light of the overall experience and its influence on future vocational outlook and career choices and job prospects. Where evaluations are descriptive in nature they should be marked appropriately by the centre.
- Attention is drawn to the microsite circular S/IF/24/14 (April 2014) for those schools/colleges intending to deliver units 37, 45 & 46. (Amendments to specification). A number of centres still submit evidence for AO2 which includes both servicing and valeting. Centres must follow the requirements of the specification to submit work for AO2 in either servicing or valeting, not both.

This being the first e moderation the individual team members worked reasonably well on their own, being consistent in the moderation process and maintaining a good standard of judgement of the assessment procedures undertaken by the various centres.

Overall the standard of the portfolios presented were satisfactory with a few exceptions. Seven sets of marks were adjusted downwards. The main reason for the adjustments was, as has occurred in moderations previously - leniency of marking particularly in AO1 Section 1 and in AO3 the evaluations section. In some cases there was insufficient evidence in AO2 where the photographic evidence to support the completion of tasks was lacking. Centres must also ensure that the task in AO2 is sufficiently complex to meet the specification. This is particularly relevant in the CAD unit. Also in some centres there were no mark schemes to show how the candidates obtained their marks. In AO1 and AO3 too many marks were awarded for very basic questions and simplistic answers without stretch and challenge to establish the more able candidate worthy of the higher mark being given. The AO3 evaluations need to ask the correct questions – not concentrating on the quality of practical work only. The evaluations should be a reflection of how the candidates performed when completing the unit. They tended to focus mainly on the description of the tasks/experiences.

The senior moderation team carried out a number of detailed spot checks on centres as part of the moderation process. This process highlighted that most centres were marking within the tolerance of the specification although marks were adjusted in a number of centres.

To foster vocational skills, Occupational Studies allows learners to learn for work, through work and about work. This hands-on approach is ideal for those who prefer to develop their skills in a more practical, occupational environment.

Occupational Studies continued to be very popular with learners undertaking two units from any of the six single award pathways.

- Design and Creativity
- Technology and Innovation
- Construction
- Business Services
- Environment and Society
- Engineering and Engineering Services

There are still general issues in some units which include:

- Evidence is required of clearly annotated photographs for AO2 a minimum of seven photographs is required clearly showing the work being carried or in some cases the

development of a project.

- Better teacher mark grids that show where and why marks have been awarded in AO1, AO2 and AO3.
- A clearly defined mark scheme is required, showing how the candidates obtained their marks for the various tasks.
- Front cover sheets detailing the name of the unit and the candidates' details were not included in a few centres.
- In the summer 2019 moderation there were entries for all 11 units in the Engineering and Engineering Services pathway.
- There were errors in the marks on the candidates' portfolios when transferred to the E- moderation.

Basic Fast-Fit Operations

The second most popular unit in this pathway mainly due to the specific interests of learners in this vocational area and the hobby interests in cars also.

Centres are becoming better resourced with the tools and equipment to provide the necessary learning environment for this unit and meet the specification.

Centres should provide good supporting photographic evidence of the learners undertaking their assessment tasks. This photographic evidence should be clear and well annotated showing the tasks being undertaken to endorse the AO2 section in their portfolio evidence.

Basic Vehicle Body Components and Fitting

This is another popular unit, which requires teamwork and more specific detail in some instances.

Centres are becoming better resourced with the tools and equipment to provide the necessary learning environment for this unit and meet the specification.

(Note specification amendment S/IF/24/14 (April 2014))

Centres should provide supporting photographic evidence of the learners undertaking their assessment tasks to endorse the AO2 section in their portfolio evidence.

CAD – Computer Aided Design

This unit needs to be delivered by a tutor with the expertise and knowledge of CAD programmes and the technology associated with its delivery and having the ability to address the content of the specification. Portfolios should contain hard copies of the assessments undertaken for ease of moderation. Centres are reminded that the CAD drawings must be produced in 2D format and printed to scale on A3 sheets. It is important that centres carry out a task of sufficient complexity to fully meet the specification.

This unit can also be taken in the Technology and Innovation pathway

Electrical Wiring Installation

This is the most popular unit in this pathway. The equipment and resources are fairly minimal with display boards/panels and fixing components re-useable.

Centres should provide supporting photographic evidence of the learners undertaking their assessment tasks to endorse the AO2 section in their portfolio evidence.

Centres need to be aware that the specification asks for surface mounting of all cables,

components and all fixings using display boards/panels with appropriate layouts.

Centres should also ensure that the clipping of cables is in line with industrial standards.

It is also important that there is clear photographic evidence of the functionality of the completed circuit by means of a lit bulb or a multi meter test for continuity.

Basic Health & Safety aspects need to be encouraged by participating centres.

Electronic Circuit Construction

Another popular unit within this pathway that requires resources which are fairly minimal, with many components re-useable and also the tasks can be taught and delivered in minimal space i.e. a suitably resourced classroom or lab with soldering stations.

This unit demands a fair degree of understanding of electronic components and their identification and function, including circuitry. It also requires a good level of accuracy, neatness and precision in the assembly and soldering to bread/strip-boards or PCB's to satisfactorily achieve the necessary outcomes. It is important that there is clear evidence produced of the functionality of the two circuits produced by the candidates. There should also be clear evidence of the neatness and accuracy of the soldering techniques by the candidates. The photographic evidence must clearly show the neatness of the soldering and presentation of the components on the circuit board.

Basic Health & Safety aspects need to be encouraged by participating centres with aprons and safety glasses being used. Care should also be exercised regarding solder fumes.

Maintenance of Land Based Machinery

Only 113 candidates have undertaken this unit. The equipment and resources required are large and expensive requiring considerable space and layout e.g. tractor and/or other land based machinery and associated tools and equipment. Those who did undertake this unit seemed to gain immensely from it. It is important that all tasks are carried out on land based machinery

Manufacturing Techniques – Hand Fitting

Centres are becoming better resourced with the tools and equipment to provide the necessary learning environment for this unit and meet the specification.

Centres should provide supporting photographic evidence of the learners undertaking stages of their assessment task/s to endorse the AO2 section in their portfolio evidence and finished components should be retained. The photographic evidence should clearly show the development of the project through its various stages. These photographs should be clearly annotated by the centre. Centres must ensure that the chosen task fully meets the specification.

This unit can also be taken in the Technology and Innovation pathway.

Manufacturing Techniques – Sheet Metal

Centres are becoming better resourced with the tools and equipment to provide the necessary learning environment for this unit.

Centres should provide supporting photographic evidence of the learners undertaking their assessment tasks to endorse the AO2 section in their portfolio evidence and finished components should be retained. Again photographic evidence should clearly show the development of the project through its various stages. All photographs should be clearly annotated by the centre.

This unit can also be taken in the Technology and Innovation pathway.

Plumbing

Centres are becoming better resourced with the tools and equipment to provide the necessary learning environment for this unit and meet the specification. Hydraulic testing is an important aspect in these tasks. Centres should also ensure that when the candidates are required to use bending equipment in the mild steel task. In some cases centres simply placed a right angled bend fitting which does not clearly meet the specification requirements.

Centres should provide supporting photographic evidence of the learners undertaking their assessment tasks to endorse the AO2 section in their portfolio evidence and finished components should be retained.

This unit can also be taken in the Construction pathway.

Vehicle Servicing and Valeting Operations

This is the third most popular unit in this pathway mainly due to the interest of learners in this vocational area and the hobby interests in cars also.

Centres are becoming better resourced with the necessary tools and equipment to provide the necessary learning environment for this unit and meet the specification. (Note specification amendment). Circular S/IF/24/14 (April 2014) clearly states that in AO2 centres should provide evidence for candidates either servicing or valeting a car. In this series some centres were still producing evidence for both. Centres should provide supporting photographic evidence of the learners undertaking their assessment tasks to endorse the AO2 section in their portfolio evidence.

This unit can also be taken in the Business Services pathway

Vehicle Technicians Operations

This is the least popular unit within this pathway with only 70 entries the unit is more challenging to some candidates than the Basic Fast Fit or Vehicle Servicing units.

Centres are becoming better resourced with the tools and equipment to provide the necessary learning environment for this unit and meet the specification.

Centres should provide supporting photographic evidence of the learners undertaking their assessment tasks to endorse the AO2 section in their portfolio evidence.

Contact details

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