Rewarding Learning

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

Summer Series 2017

Principal Moderator's Report

occupational studies

Engineering and Engineering Services

Foreword

This booklet outlines the performance of candidates in all aspects of CCEA's Level 1 and Level 2 Qualifications in Occupational Studies - Engineering and Engineering Services for this 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.

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

Principal Moderator's Report

Introduction

The number of cash-ins for the Summer 2017 series has increased by 717. This represents almost 10% increase on the previous summer series. The number of centres adjusted in this series has increased from 59 in Summer 2016 to 64 in Summer 2017. Some centres need to include more stretch and challenge assessment opportunities in order to give their candidates access to the higher mark bands within AO1. Centres must clearly align AO2 practical tasks with all the assessment criteria found in each unit specification. If centres are found to have not 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.

Engineering and Engineering Services Introduction

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

- 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.
- TAC2 should be signed by all teachers/lecturers who deliver units in this session and a sample of the internal standardisation of candidates selected and actually IV'd in each unit and/or any additional units within the pathway. This would reinforce that IV work had actually taken place and been agreed, resulting in a consistency of the 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).
- 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.

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 for candidates who are self-reflective, analysing and evaluating their work in the light of the overall experience and its influence on future vocational outlook, careers choices and job prospects.
- Attention is drawn to the microsite circular S/IF/24/14 for those schools/colleges intending to deliver units 37, 45 & 46. (Amendments to specification).

Overall the standard of the portfolios presented was satisfactory with a few exceptions. Four centres' marks were negatively adjusted. The main reason for the adjustments were, as has occurred in moderations previously – leniency of marking particularly in AO1 Section 1 and in the AO3 evaluation section. In these sections too many marks were awarded for very basic questions and simplistic answers without stretch and challenge to differentiate between candidates. The AO3 evaluations need to ask the correct questions – not concentrating on the quality of practical work only.

Internal standardisation needs to be better addressed in some cases to avoid accurately assessed units being penalised along with other leniently assessed units in the same pathway. (See bullet point 4 above).

Engineering and Engineering Services made up 15% of the overall candidature.

The senior moderation team carried out a number of random 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 few 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 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 annotated photographs for AO2.
- Better teacher mark grids that show where and why marks have been awarded in AO1, AO2 and AO3.
- Front cover sheets detailing the name of the unit and the candidates' details were not included in a few centres.

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 necessary tools and equipment to provide the necessary learning environment for this unit and meet the specification requirements.

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

Basic Vehicle Body Components and Fitting

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

Centres should provide good 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 the ability to address the content of the specification to assess the learner within the remit of the specification.

Portfolios should contain hard copies of the assessments undertaken for ease of moderation.

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

Electrical Wiring Installation

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

Centres should provide good 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.

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

Electronic Circuit Construction

A popular unit within this pathway. The equipment and resources 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.

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

Not a popular unit in this pathway. 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.

The vocational/agricultural aspect associated with this unit may not be as attractive to the majority of learners.

Manufacturing Techniques – Hand Fitting

Centres are becoming better resourced with the necessary 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 stages of their assessment task/s to endorse the AO2 section in their portfolio evidence and finished components should be retained.

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

Manufacturing Techniques – Sheet Metal

Centres are becoming better resourced with the necessary 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 to endorse the AO2 section in their portfolio evidence and finished components should be retained.

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

Plumbing

Centres are becoming better resourced with the necessary 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 provide good 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

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) Centres should provide good 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 Technician Operations

The uptake of this unit in this pathway is mainly due to the interest of learners in this vocational area and their hobby interests in cars also. This unit whilst popular, is more challenging than the Basic Fast Fit or Vehicle Servicing units because it has a broader specification and more extensive range of coverage than the others and is therefore more difficult to achieve.

Centres are becoming better resourced with the necessary 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 to endorse the AO2 section in their portfolio evidence.

Contact details

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