



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

January Series 2018

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 OCCUPATIONAL STUDIES IN ENGINEERING AND ENGINEERING SERVICES

Principal Moderator's Report

Introduction

All moderators reported that they observed improving practice in the delivery of units within the Engineering and Engineering Services pathway this series. The quality of candidate evidence presented was, in general, of a good standard. A wide variety of teaching activities and assessment methods were observed resulting in good candidate outcomes being achieved by the majority of candidates. Where photographic evidence was used this showed, in the majority of cases, candidates performing realistic working activities. In most centres the photographs were well annotated by the candidate, identifying the processes involved.

It is pleasing to see the range of practical activities that have been developed to comply with the assessment outcomes of the specifications within this pathway.

Generally the candidate evidence presented indicates improvement in the majority of cases with regard to the following;

- Better breakdown and annotation of marks for individual tasks and sections.
- More individual identification of the topics and tasks within the sections.
eg. Health and Safety, Knowledge, Careers and Environment.

All centres undertaking Occupational Studies must support candidates to achieve the best possible outcome for their ability.

This includes :

- Providing access and guidance to appropriate assessment tasks and resources which cover the complete specification.
- Encouraging candidates to be evaluative rather than be descriptive in section Assessment Objective 3.

The candidate evidence must be presented in the following way:-

Front cover

The front cover must include the following information:-

- Pathway
- Unit name
- Candidate name and number
- Teaching centre name and number
- Administration centre name and number (where different from teaching centre)
- Completion date

It is good practice to include the following content within the first few pages of candidates' evidence:-

- Signatures to confirm authenticity (Candidate and teacher/lecturer)
- Learner Unit Tracking Grid clearly demonstrating where marks are awarded under all 10 assessment outcomes
- Unit specification

Assessment Objective 1 to include Health and Safety, Environment, and related Careers

(Time allocation to this section should equate to 20% of your overall time allocation i.e. approximately 14 hours of the recommended guided learning hours which is 70. The ratio of assessment marks for the Health and Safety, Careers and Related Environmental Issues should be approximately 4:3:3)

The structure of the questions and assessment tasks should allow for stretch and challenge to provide differentiation between learners of various abilities.

Health and Safety contains some common content such as the Health and Safety at Work Act (HASAWA) as it applies to the units within this specification.

(this represents 4 marks out of the total of 10 marks for this assessment outcome)

The assessment should include short answer questions on Health and Safety issues appropriate to this unit and slightly more demanding questions which demonstrate the candidate's ability. The final questions in this section should have a greater degree of rigor and allow candidates to apply their knowledge through stretch and challenge opportunities.

Careers

(this represents 3 marks out of the total of 10 marks for this assessment outcome)

Careers must relate to the occupational content of the unit. Candidates should relate this section to careers, job opportunities, annual salary, qualifications required and progression opportunities within the identified career. It is recommended that candidates identify three career pathways which relate to the unit of study.

An example of a 30 mark assessment should include short answer questions, 9 marks which focus on the 3 careers associated with this unit. Slightly more demanding questions/tasks, 9 marks. Demonstration of the candidates' ability to apply their knowledge will be assessed through stretch and challenge questions, 12 marks. (This mark will then be scaled back to a mark out of 3)

Environmental Issues

(this represents 3 marks out of the total of 10 marks for this assessment outcome)

Environmental issues should also relate to the occupational area being studied. Examples of topics which may be covered in this section include, sources of materials used, recycling and disposal of redundant materials and environmental footprint etc.

The assessment questions/tasks offered within this section must allow candidates the opportunity to fully demonstrate their knowledge and ability. This may include some short multiple choice questions/tasks, but learners must also have assessment questions/tasks which demonstrate stretch and challenge. Some of these tasks should have the opportunity for extended writing.

Practical Outcomes - Assessment Objective 2

Legitimacy of learner outcomes is essential. All practical work produced under Assessment Objective 2 must be supported by photographs (minimum of 7) that record the development of the Assessment Objective 2 project. Witness statements signed by the candidate and the teacher/lecturer together with appropriate evidence may also be used. The degree of complexity outlined in the specification must be reflected in Assessment Objective 2.

Evaluations Assessment Objective 3

This section still needs to be more fully addressed by many centres. Candidates tend to provide statements of the task which are descriptive rather than evaluative. Evaluations should also reflect on how the candidate's experience would impact on their outlook, career opportunities and job/employment prospects.

In the majority of centres the candidates' diaries were very well presented detailing the learning process. Although in themselves they don't achieve any assessment marks, in certain cases some reflective evaluations were included in diaries and contributed to the marks awarded for Assessment Objective 3 task evaluations.

Most moderators reported that marks awarded for candidates' evaluations tended to be lenient due to the descriptive rather than the evaluative nature of the content. Candidates need to reflect on how this experience would impact on their outlook, career opportunities and employment/job prospects.

Internal Moderation/Verification

All units within a pathway must be internally moderated/verified. This was a major issue in many centres. Schools and colleges should internally moderate/verify results within individual units and related units across the pathway or across pathways. All units within a centre must have the same rigor applied relating to learner outcomes. This process ensures all assessment marks are consistently accurate across all units.

The negative impact of not carrying out this process correctly is that any unit which has been marked too leniently will have the results amended by the moderation team. The adjustments applied will pull down the overall marks for that specific unit and all other units included for moderation within the pathway.

Pathway Units Moderated in this series:

VYMA - Basic Fast-Fit Operations - Unit 36

This unit is best delivered by centres that are generally well equipped and resourced with a range of tools and equipment to offer a range of fast-fit operations associated with the light vehicle industry. It is good practice for centres to have a minimum of four cars in order to deliver this unit to an average class of 16 students. The assessments are completed by observation, removal, inspection, repair/test and refit of fast-fit components supported by job cards, check sheets and supporting photographic evidence.

VYMB - Basic Vehicle Body Components and Fitting - Unit 37

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

Centres should provide good supporting photographic evidence of the learners undertaking their assessment tasks to endorse the Assessment Objective 2 section in their portfolio evidence.

YMD - Electrical Wiring Installation - Unit 39

This unit is popular with schools and colleges. This unit does not require large start-up costs other than tools and materials, testing equipment and mounting/display boards. It is important that cables are laid out in horizontal and vertical lines and secured neatly between components. A consumer unit should also be included as a component part. The assessment is by observation, assembly, examination and testing of practical tasks. The Assessment Objective 2 practical tasks must be supported by photographic evidence (final practical task not retained) with a range of questions/tasks to cover other aspects of the unit. The centres should provide evidence of the effectiveness of the circuits i.e. by using a multi meter or lit bulb.

YME - Electronic Circuit Construction - Unit 40

This unit is popular with schools and colleges because of the limited workshop and storage space required for candidates, and resources for the practical tasks. The assessment is by observation, assembly, soldering, examination and testing of practical tasks with supporting photographic evidence and a range of questions to cover all other aspects of the unit. PPE can be limited to safety glasses and an apron.

YMG - Manufacturing Techniques - Hand Fitting - Unit 42

This unit is best delivered by centres that have generally well equipped and resourced workshops with the supporting tools, machines and equipment to offer a range of hand fitting activities to meet the assessment tasks within this specification. Preplanning and design of the practical tasks chosen for assessment are crucial in providing the most effective means of completing the criteria specified in Assessment Objective 2 of the specification.

YMJ - Plumbing - Unit 44

This unit is best delivered by centres that are generally well equipped and resourced to offer a range of tasks designed to develop skills in plumbing and associated tasks. Candidates should undertake joining, assembly and pressure testing/leak detection of three specified tasks using different pipework material.

YMK - Vehicle Servicing and Valeting Operations - Unit 45

An amendment to the specification (Circular No. S/IF/24/14) was issued to all schools and colleges, outlining changes to be put into operation in this unit. Evidence must be presented to cover the knowledge and understanding elements of vehicle servicing and valeting. For the practical assessments, candidates have to choose either Servicing or Valeting and not both.

Several assessment opportunities need to be provided to candidates so that all the specification requirements are evidenced. In the majority of centres the evidence for knowledge and understanding tended to be simplistic and did not allow students to demonstrate their full potential. Centres should use a combination of open and closed questions to assess the learners.

Centres must ensure that all specification requirements are addressed i.e. Servicing and Valeting. This is despite the fact the practical assessment requires the learner to carry out either Servicing or Valeting. The practical assessments must fully meet the specification requirements. In some centres only the minimum opportunities were provided and this disadvantaged the learners. In some centres the section on careers needs developed to allow candidates the opportunity to carry out independent research into careers within the vocational area.

The evidence for the practical work in the majority of centres was photographic. This needs to be annotated, signed by both tutor and learner together with witness statements and teacher/lecturer observations. The photographic evidence must show the learners wearing the appropriate PPE.

There were no entries for the following units:

VYMC – CAD - Computer Aided Design – Unit 38

VYMF – Maintenance of Land-based Machinery – Unit 41

VYMH – Manufacturing Techniques – Sheet Metal – Unit 43

VYML – Vehicle Technician Operations – Unit 46

Contact details

The following information provides contact details for key staff members:

- Specification Support Officer: Nuala Tierney
(telephone: (028) 9026 1200, extension: 2292, email: ntierney@ccea.org.uk)
- Officer with Subject Responsibility: Dawn Agnew
(telephone: (028) 9026 1200, extension: 2445, email: dagnew@ccea.org.uk)