

# Examiners' Report

January 2010

Principal Learning

## Construction Level 3 Controlled Assessments

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# Principal Examiners' Report

## Principal Learning - Construction and the Built Environment - Level 3

### General Comments

This is the second series of the Principal Learning in Construction and the Built Environment in which all of the units were offered. Unit 6: Value and Use of the Built Environment: Adding Value to the Wider Community did not have any entries this series. The learners' internally assessed portfolios that were submitted for moderation followed a logical format with a well developed brief that had been derived from the Edexcel Sample Assessment Material and then applied to the locality of the centre. As such it was clear to the learners what they had to do to access marks across all the mark bands. However, some centres included the benchmark statements in the assignment brief to assist the learners. This needs reviewing as it could be construed as leading the learner to suggested responses. The learners' work that was moderated achieved the full range of grades. Entries for the externally assessed units have increased since last year with a mixed level of responses to the questions posed.

Similar to last year some aspects of centre administration were not always properly addressed ie EDI print outs were not included with the samples and incomplete Candidate Record Sheets ie centre number, candidate number, candidate/assessor signatures etc. missing. Also, some of the learners' work was not annotated by the assessor to highlight where marks had been awarded.

During the moderation of learners' work it was occasionally found that marking was either too lenient where insufficient evidence had been produced, or too harsh. Therefore, centres must ensure they allocate marks in accordance with the Marking Grids. Further clarification of the mark allocation can be gained from the 'applying marks in the marking grid' section of the unit specification. The Tutor Support Material and Sample Assessment Material that are available on the Edexcel website also provide information regarding specific assessment requirements. The quality of feedback to the learners has improved since last year and is generally constructive, positive and suggests how an assessment decision has been made.



## **Level 3 Unit 2 - Design the Built Environment: Stages in the Design and Planning Processes**

### **General Comments**

This unit requires the learner to explore urban design and its influence on the urban environment. Upon completion of the unit the learner should be able to demonstrate knowledge of the processes and procedures that develop the client's needs into a design proposal and the impact of planning requirements on the design. Similarly, the learner should be able to demonstrate knowledge of the decision-making stages in the design and planning processes and the wider influences on major project planning. An understanding of the job roles and relationships with each other as well as potential career pathways and qualification requirements should be demonstrated.

### **Learning Outcome 1**

The majority of learners produced clear descriptions of a range of factors affecting the proposed design for the urban environment studied. The section regarding improvements for the infrastructure and transport services often included relevant information, but there was little evidence of application to the scenario.

### **Learning Outcome 2**

The majority of the learners demonstrated an understanding of the design process through the application of the RIBA Plan of Work to the scenario. Similarly, knowledge of the participants in the design process was evident. Generally, the requirements of the 'green client' were identified but only briefly described.

### **Learning Outcome 3**

Most learners produced clear descriptions of some of the stages of the planning process, particularly Feasibility, Outline Planning, Final Planning and Regulatory Approval. Few learners developed their response to include the different levels of planning in terms of National, Regional and Local. A similar comment made in Learning Outcome 1 in that more application to the scenario would have enhanced the responses.

### **Learning Outcome 4**

The job role publications etc. considered were informative and showed a good level of understanding. Most responses included a wide range of job roles that contribute to the design and planning process, the qualifications needed and career progression routes. However, the sections relating to team-working and the role and influence on the sector of the professional institutions were often only briefly considered.



## **Level 3 Unit 3 - Design the Built Environment: Physical and Environmental Influences**

### **General Comments**

This unit requires the learner to explore how health, safety and environmental factors can influence the design of the built environment. Similarly, the learner should be able to demonstrate an awareness of good practice in designs that offer sustainable construction, the reduction of emissions to air, land and water and the use of renewable energy. An understanding of the importance of the integration and distribution of incoming utilities together with alternative energy efficient designs should be demonstrated.

### **Learning Outcome 1**

Most learners demonstrated that they have a good understanding of general health and safety responsibilities and regulatory requirements. However, the health and safety knowledge gained by the learner should then be applied to its influence on the design of a project, rather than managing it during the construction phase. Some learners produced well developed sections regarding toolbox talks, risk management during the construction phase in terms of falls from height etc. that were not relevant to the learning outcome.

### **Learning Outcome 2**

The majority of learners produced clear descriptions and sustainable advantages and disadvantages of a range of essential primary services utilities. The better responses justified the selection of each service for installation into the building studied.

### **Learning Outcome 3**

Evidence suggests that a good deal of research had taken place because a wide range of issues relating to global warming and climate change were clearly described. The fully developed responses included justification of the steps taken to reduce emissions to air, land and water and their impact on design.

### **Learning Outcome 4**

Most learners produced clear descriptions of a wide range of traditional and renewable energy sources. Similarly, the principles and advantages/disadvantages of each alternative energy source were covered in appropriate depth, but often there was little justification for their inclusion into the building studied.



## Level 3 Unit 5 - Create the Built Environment: Management Processes

### General Comments

This unit requires the learner to identify and evaluate the construction processes to construct the substructures and superstructures of a range of built structures, including finishes and services. Upon completion of the unit the learner should be able to identify and evaluate a range of quality assurance and monitoring processes needed to ensure a project meets the given specification throughout the construction process. The learner should also be able to demonstrate knowledge and understanding of a range of project management processes and techniques and examine job roles and their relationships with each other, potential career pathways and qualification requirements.

Centres used the assignment brief contained within the Tutor Support Material as the basis of their assessment contextualised to an area local to their centre.

### Learning Outcome 1

The range of responses indicated a good understanding of the construction processes required to create elements of both substructure and superstructure for traditional and modern methods of construction. Learners generally provided good images to support their written description, however there was often a lack of information related to typical ground conditions, services and finishes for given situations. Learners generally gained marks towards the middle of mark band 2.

### Learning Outcome 2

The key requirements for a site induction were generally well detailed however emphasis was focussed on health and safety requirements, and the responses generally lacked sufficient information relating to site layout planning and storage. Monitoring of quality on-site should have focussed on a specific element of superstructure rather than describing general quality issues. The key aspects of communication between the team and client were not well developed and would benefit from additional information to demonstrate knowledge and understanding. Learners generally gained marks towards the top of mark band 1.

### Learning Outcome 3

Key management skills and techniques were described reasonably well; however the emphasis needs to be on the on-site staff rather than on members of the design team. Gantt charts produced to show sequence of operations for an identified project were limited in detail and generally did not include environment or cost considerations. Learners generally gained marks towards the top of mark band 1.

### Learning Outcome 4

Responses tended to focus on the roles, responsibilities and interactions of off-site construction professionals rather than concentrating on the on-site interactions between craft, technical and supervisory roles. Description of the roles of professional institutions and progression paths was limited in detail and would benefit from additional emphasis. Learners generally gained marks towards the top of mark band 1.



## Statistics

### Level 3 Unit 2 Design the Built Environment: Stages in the Design and Planning Processes

| Grade             | Max. Mark | A* | A  | B  | C  | D  | E  |
|-------------------|-----------|----|----|----|----|----|----|
| Raw boundary mark | 60        | 53 | 47 | 41 | 35 | 29 | 23 |
| Points score      | 21        | 18 | 15 | 12 | 9  | 6  | 3  |

### Level 3 Unit 3 Design the Built Environment: Physical and Environmental Influences

| Grade             | Max. Mark | A* | A  | B  | C  | D  | E  |
|-------------------|-----------|----|----|----|----|----|----|
| Raw boundary mark | 60        | 53 | 47 | 41 | 35 | 29 | 23 |
| Points score      | 21        | 18 | 15 | 12 | 9  | 6  | 3  |

### Level 3 Unit 5 Create the Built Environment: Management Processes

| Grade             | Max. Mark | A* | A  | B  | C  | D  | E  |
|-------------------|-----------|----|----|----|----|----|----|
| Raw boundary mark | 60        | 53 | 47 | 41 | 35 | 29 | 23 |
| Points score      | 21        | 18 | 15 | 12 | 9  | 6  | 3  |

## Notes

**Maximum Mark (raw):** the mark corresponding to the sum total of the marks shown on the Mark Scheme or Marking Grids.

**Raw boundary mark:** the minimum mark required by a learner to qualify for a given grade.

**Please note:** *Principal Learning qualifications are new qualifications, and grade boundaries for Controlled Assessment units should not be considered as stable. These grade boundaries may differ from series to series.*

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