

### Examiners' Report June 2010

Principal Learning

### **Construction Level 3 Controlled Assessments**



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### Contents

1.	Level 3 General Comments	1
2.	Level 3 Unit 2 Report	3
3.	Level 3 Unit 3 Report	5
4.	Level 3 Unit 5 Report	7
5.	Level 3 Unit 6 Report	9
6.	Statistics	11

### Principal Examiners' Report

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

#### **General Comments**

This is the first series of the Principal Learning in Construction and the Built Environment in which work was submitted for all of the units offered at Level 3. The learners' internally assessed portfolios submitted for moderation followed a logical format with a well developed brief that had usually 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. The learners' work that was moderated achieved the full range of marks. However, some Centres used assignment briefs containing lists of factors taken directly from the benchmark statements as the basis of the assignment, which were used as headings by learners to structure their responses. Centres should allow the learners the opportunity to determine the range of responses they provide for each learning outcome to meet the requirements of the marking grid.

Learners' work generally contained large quantities of information and images copied directly from websites etc. however, in many cases the author or source was not cited within the body of the work or within a reference list. This raises questions regarding the authenticity of the work and should be addressed appropriately by Centres.

Entries for the externally assessed units have continued to increase with each series producing a mixed level of responses to the questions posed. Many learners re-wrote the majority of the question as the start to their answer, generally resulting in a response that only contained an identification that did not attract any marks. The use of grammar by the learners was often poor.

Similar to the previous series some aspects of Centre administration were not always properly addressed ie OPTEMS/EDI were not included with the samples and incomplete Candidate Record Sheets ie centre number, candidate number, candidate/assessor signatures, page references etc. were missing. Also, some of the learners' work was not annotated by the assessor to indicate where marks had been awarded.

During the moderation of learners' work it was occasionally found that marking was either too lenient where insufficient evidence has 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 continues to improve 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 demonstrated a level of understanding to allow marks in mark band 2 to be awarded. Evidence produced included clear descriptions of a range of factors affecting the proposed design for the urban environment studied. Generally, the section regarding improvements for the infrastructure and transport services often demonstrated a good deal of preliminary research but more application of the information gained to the scenario would have improved the submissions.

#### Learning Outcome 2

This learning outcome was usually quite well developed with the majority of learners demonstrating an understanding of the design process and in particular the RIBA Plan of Work. Generally, the majority of learners correctly applied the stages of the RIBA Plan of Work to the local scenario and included most of the participants in the design process. However, the requirements of the 'green client' were rarely covered in sufficient detail.

#### Learning Outcome 3

Most learners produced clear descriptions of the processes throughout the planning cycle that a project's design needs to comply with to satisfy the legislative and regulatory requirements. More application to the scenario in terms of time, cost quality safety and environmental matters would have enhanced the submissions.

#### 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 relevant job roles that contribute to the design and planning process, the qualifications needed and career progression routes. The sections relating to team-working and the role and influence on the sector of the professional institutions were rarely discussed or evaluated.

# 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

The majority of learners demonstrated that they had been well prepared regarding health and safety responsibilities and regulatory requirements. Generally, the health and safety knowledge gained by the learners is now being applied to the design of a project, rather than managing it during the construction phase.

#### Learning Outcome 2

Generally, the submissions contained clear descriptions, advantages and disadvantages of a range of essential primary services utilities. The fully developed submissions justified the selection of each service for installation into the building studied.

#### Learning Outcome 3

All learners demonstrated an understanding of the issues relating to global warming and climate change. The better submissions included reference to how regulatory and legal requirements and the reduction of emissions to air, land and water would influence the design of their chosen scenario.

#### Learning Outcome 4

Most learners produced clear descriptions of a wide range of renewable energy sources. Similarly, the principles, advantages and disadvantages of each alternative energy source were covered in sufficient depth. However, some learners neglected to include within this section a comparison of traditional energy sources with the renewable sources they had described.

## 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.

#### Learning Outcome 1

This learning outcome covers types of substructure, superstructure and methods of construction. Learners generally provided descriptions of a range of different foundation types, supported by appropriate images; however few learners provided any analysis with regards to their suitability for different ground conditions. Descriptions of superstructure elements were generally provided for both traditional and modern methods of construction, including cavity wall, timber frame and modular construction methods, however descriptions and analysis of services and finishes were sometimes not provided. The reports presented by learners consistently covered a wide range of descriptions meeting the requirements of mark band 3; however the majority of descriptions lacked clarity or analysis, and did not focus on the assignment scenario. A best-fit approach was applied well by the majority of centres with learners generally gaining marks in the middle of mark band 2.

#### Learning Outcome 2

The key requirements for a site induction specific to the assignment scenario were generally well described, however emphasis was focussed on site safety requirements and the responses generally lacked information on site layout, planning and storage. The key processes for monitoring quality on site should have focussed on an element of superstructure, eg. walls or floors, rather than describing general quality systems, eg. ISO 9000 or quality audits. Key aspects of effective team, customer and client communications were not focussed at site level and a high percentage of learners provided an organisation chart and described communication at head office level. A best- fit approach was generally applied, with learners providing an appropriate range and some evaluation but lacking in clear descriptions, generally gaining marks in the middle of Mark Band 2.

#### Learning Outcome 3

This learning outcome covers key management skills and techniques of on-site communication; however learners generally provided descriptions of communication between members of the design or management team, rather than focus on the on-site personnel. Also information relating to directing and developing on-site staff was often not provided. There was a wide variation in the overall quality and

presentation of Gantt charts and many provided construction operations that were not relevant to the assignment scenario or which did not contain environmental or cost considerations. The majority of charts contained inappropriate timescales for the operations, and should be given greater emphasis by centres. Learner responses consistently covered a wide range of appropriate descriptions; however they generally lacked clarity or adequate evaluation. A best-fit approach was applied well by the majority of centres with learners generally gaining marks towards the bottom of Mark Band 2.

#### Learning Outcome 4

Learners provided descriptions of a wide range of job roles; however responses tended to focus on the responsibilities, interactions and teamwork of off-site construction professionals rather than on the on-site roles between craft, technical, supervisory and management levels. Also, many responses did not adequately differentiate between the job roles and provided conflicting descriptions especially between craft and technical roles. Progression paths were generally well provided mainly in the form of charts showing the routes from craft to professional roles, however the description of professional institutions was limited in detail and could be considered for greater emphasis by centres. A best-fit approach was generally applied, with learners providing an appropriate range and some basic discussion but lacking in clear descriptions for all roles, generally gaining marks in the middle of Mark Band 2.

## Level 3 Unit 6 - Value and Use of the Built Environment: Adding Value to the Wider Community

#### **General Comments**

This unit requires the learner to understand the importance of communities, businesses and other stakeholders in the development and use of the built environment. The learner will also explore the contribution of the built environment and local infrastructure, including transport to the social and economic developments of the wider community. The learner will be able to analyse main career pathways and job roles associated with valuing, using and maintaining the built environment.

#### Learning Outcome 1

Learners generally provided clear descriptions of a range of ways in which stakeholders and the community can engage in and contribute to the built environment, and the benefits of social cohesion. Reports presented by learners consistently covered a wide range of descriptions that met the requirements of mark band 3; however the majority of descriptions lacked analysis or evaluation, and the evidence provided generally did not focus on the assignment scenario.

#### Learning Outcome 2

The key business drivers and contributions of the built environment to the wider community were generally clearly described by learners, however in many cases the responses tended to be general and did not focus on the assignment scenario.

#### Learning Outcome 3

This learning outcome covers the planning and evaluation of a team presentation and discussion regarding a range of job roles, progression paths, qualifications and professional institutions. Learners generally provided good evidence of their contribution to a team presentation usually by providing copies of power point slides used within a presentation; however learners provided insufficient individual evidence of coverage of the marking grid. Assessors generally allocated marks for delivery of the presentation which should have been the focus of the empirical evidence in marking grid B; emphasis should be placed on the requirement for the learner to provide individual evidence of planning and evaluation of the presentation and discussion.

### Statistics

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

Grade	Max. Mark	A*	А	В	С	D	Е
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*	А	В	С	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*	А	В	С	D	E
Raw boundary mark	60	53	47	41	35	29	23
Points score	21	18	15	12	9	6	3

### Level 3 Unit 6 Value and Use of the Built Environment: Adding Value to the Wider Community

Crada	Max.	۸*	^	D	0		F
Grade	Mark	A	A	В	C	D	E
Raw boundary mark	60	52	46	40	34	28	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.

<u>Please note:</u> 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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