



## WJEC LEVEL 1 / 2 AWARD in DESIGNING THE BUILT ENVIRONMENT

# SAMPLE ASSESSMENT MATERIALS - Internal

Teaching from 2014





# WJEC LEVEL 1/2 AWARDS IN DESIGNING THE BUILT ENVIRONMENT

## SAMPLE INTERNAL ASSESSMENT

## **UNIT 2: DRAWING CONSTRUCTION PLANS**

## For teaching from September 2014

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### Specimen Assessment Criteria Grid

#### LEARNER ASSIGNMENT BRIEF

#### Brief

Trelew is a rural village with a well used community centre. The community centre has a small bar area that is sometimes used for functions and parties. It is small and lacks cooking facilities.

The trustees of the centre would like an extension and have visited an architect so that plans can be drawn up. The following are the notes taken by the architect at an initial meeting with two of the trustees:

- Want a room that can cater for 50 people
- Need a small kitchen and toilets
- Interested in the possibility of an outside area for summer functions, accessed from the extension
- Make use of natural light on internal areas as much as possible
- Need to get from main building to extension and outside easily
- Hard pedestrian areas needed around extension
- Toilets:
  - Male 2 urinal, 1 WC
  - Female 2 WC
  - 1 Disabled WC.

The architect has also come up with some possible dimensions and specification requirements, based on the discussions:

- Total 100 sq. m.
- Kitchen (including storage) 12 sq.m.
- 3.5m to wall plate
- 45 degree pitched roof
- Strip foundation 600mm wide 450mm deep
- 150mm floor slab, 50mm screed, 50mm under floor insulation
- Cavity wall construction 50mm insulation 50mm cavity
- Facing brick outer, block work inner
- Prefabricated roof trusses (drawing will be provided by manufacturer)
- Concrete roof tiles
- Hard wearing vinyl flooring such as 'Altro'
- Sand cement rendered internal wall gypsum plastered
- Plasterboard ceiling insulated with 150mm rock wool

You are a junior architectural technician and have been asked to draw plans of the proposal so that they can be shown to the trustees. You have been asked to produce the following hand drawn plans in single point perspective:

- Block plans
- Floor plans
- Front elevation
- Side elevation
- Cross sections

As the members of the community may not be able to visualise the proposal you are also asked to produce a computer model of the extension.

#### TASKS

- 1. Draw plans of the proposed extension
- 2. Produce computer model of proposed extension.

| Task<br>Number | Evidence  | AC   | Controls  |
|----------------|---|--|---|
| 1.             | <ul> <li>Hand drawn:</li> <li>Block plan</li> <li>Floor plan</li> <li>Front<br/>elevation</li> <li>Side elevation</li> <li>Cross section</li> </ul> | AC1.1<br>Identify information<br>requirements for<br>construction designs<br>AC1.2<br>Calculate information<br>required for construction<br>designs<br>AC2.1<br>Draw plans<br>AC2.2<br>Draw elevations<br>AC2.3<br>Draw plans in single point<br>perspective | Time 9 hours<br>Resources Access to<br>class notes, calculator,<br>drawing equipment, paper<br>Supervision You will be<br>supervised throughout<br>Collaboration Individual<br>task<br>Feedback You cannot be<br>given feedback on the work<br>you produce until it has<br>been marked                              |
| 2.             | Screenshots/<br>photographs/<br>MP4 file  | AC3.1<br>Draw 2D plans of<br>construction designs<br>construction projects<br>AC3.2<br>Draw 3D plans of<br>construction designs<br>AC3.3<br>Add features to 3D plans<br>of construction designs  | Time 3 hours<br>Resources access to class<br>notes; access to computer<br>design software, access to<br>hand drawn plans<br>Supervision You will be<br>supervised throughout<br>Collaboration Individual<br>task<br>Feedback You cannot be<br>given feedback on the work<br>you produce until it has<br>been marked |

#### **ASSESSOR INFORMATION**

#### WJEC Approach to Assessment

Unit 2: Drawing construction plans of the WJEC Level 1/2 gualifications in Designing the Built Environment is internally assessed and externally moderated. The following principles apply to the assessment of this unit:

- All units are assessed through summative controlled assessment. Details of controls for this unit are provided in this model assignment.
- All assessment criteria must be met under controlled conditions, as specified in this • model assignment, for the unit learning outcomes to be achieved.
- Performance bands for Level 2 Merit and Level 2 Distinction can only apply once a • candidate has achieved all assessment criteria at the level of qualification to be awarded. Evidence must clearly show how the candidate has met the standard for the higher grades.

The WJEC Level 1/2 qualifications in Design the Built Environment have adopted the principles of controlled assessment as set out in the Joint Council for Qualifications document 'GCSE, GCE, ELC, Functional skills, Principal learning in the Diploma and Project Qualifications – instructions for conducting coursework'. This document can be accessed through the JCQ website (www.jcq.org.uk). Each centre must ensure that internal assessment is conducted in accordance with these controls.

There are three stages of assessment that will be controlled:

- Task setting
- Task taking .
- Task marking.

#### Task setting

WJEC have produced this model assignment for the assessment of unit 2: Drawing construction plans. Centres will be allowed to modify the assignment, as outlined in the 'Accepted changes to assignments' section of this model assignment. This will enable centres to tailor the assessment to local needs. This model assignment has been written to demonstrate how the following controls are incorporated into an assignment:

- Each unit is assessed through one assignment. •
- Each assignment must have a brief that sets out an applied purpose. An applied • purpose is a reason for completing the tasks that would benefit a business or society. Further details are in Section 1.2 of the specification.
- The assignment can specify a number of tasks but tasks must be coherent i.e. show • how the assessment requirements all contribute to the achievement of the applied purpose of the assignment.
- The assignment must provide each candidate with the opportunity to address all • assessment criteria and all performance band requirements.
- The assignment must indicate the acceptable forms of evidence. •
- Where a centre has adapted the model assignment, there must be evidence of quality assuring its fitness for purpose. Sample documentation for this activity is provided with each model assignment.

#### How the learner assignment brief meets these controls

This is a single assignment that addresses all assessment criteria for this unit. There is a clear applied purpose - to use computer software to present drawings of construction designs. Although the context and organisation in the scenario is fictitious, it has been developed through discussions with representatives of real organisations to ensure the requirements are realistic. The tasks are all coherently related to the applied purpose. The Summary table makes clear the evidence requirements.

#### **Task taking**

There are five areas of task taking that are controlled: time, resources, supervision, collaboration and resubmission.

#### Time

'Time' has limited control. There are **12** hours available for assessment of this unit. The learner assignment brief suggests how this time can be allocated.

#### Resources

'Resources' has limited control. The assignment makes clear the type of resources that learners must have access to. Learners may only access ICT and computer design software for task 2. Learners can access class notes for both tasks, including any outcomes of formative assessment, unless the context for the formative assessment is similar to the context for this summative assessment. Learners will need drawing equipment and paper for task 1. They will also need the drawings produced in task 1 for task 2.

#### Supervision

'Supervision' has medium control. Learners must be supervised by an assessor whilst completing all tasks. Centres must have in place systems to ensure learners cannot access evidence they have been developing outside of supervised activities.

#### Authentication

Supervision is in place to ensure the authenticity of evidence produced for summative assessment. Assessors are not expected to provide input or guidance to learners during the controlled assessment time. This includes providing formative feedback on the evidence being produced. Assessors can provide guidance on the requirements of the task and remind learners of the performance bands and how they can be interpreted. Assessors must intervene where there is a health and safety hazard observed.

Candidates can review and redraft evidence independently within the time controls for the assessment. Candidates cannot redraft based on feedback from an assessor. Learners must sign the declaration in this model assignment to confirm that all evidence submitted for moderation is their own work and that any sources used have been acknowledged.

Assessors must sign the declaration in this model assignment to confirm that evidence submitted for moderation was completed under the controlled conditions set out in the model assignments.

#### Collaboration

'Collaboration' refers to group work and has limited control. For this model assignment group work is not allowed when learners are producing evidence for assessment.

#### Task marking

All marking of evidence must be made against the performance band statements given in each unit specification. Evidence marked must comply with the controlled requirements set out in this model assignment.

Written evidence must be annotated to show how it relates to the assessment criteria and performance band requirements.

Marking should only be undertaken by a designated assessor. An assessor should have appropriate expertise in the subject and level for a specified unit. The assessor is responsible for ensuring that:

- Assessment is conducted under specified controlled conditions
- They are clear of the requirements of the learning outcomes, assessment criteria and performance band statements prior to commencing controlled assessment
- Evidence presented for assessment is authentic
- Assessment decisions are accurately recorded
- Evidence is appropriately annotated
- Observation records contain sufficient detail for objective corroboration of decisions
- Judgements are only made against the performance band statements

#### ACCEPTED CHANGES TO THIS MODEL ASSIGNMENT

#### Assignment Brief (Task setting)

#### Type of evidence

No changes can be accepted for the format of any task.

#### Tasks

No changes allowed, except for references to the specific context of the assignment brief

#### Purpose

No changes allowed

#### Context

The context must be realistic and credible, but does not have to be real. There must be sufficient data for learners to make calculations needed to be able to draw designs. There must be the same number and complexity of calculations as required of this model assignment. The scenario must allow learners to makes the same design decisions as required of this model assignment.

#### How Assessment is Managed (Task taking)

#### Time

The time suggested for each task, as set out in the learner assignment brief, takes account of the amount of time it would take to complete the task and the contribution of the task to the overall assessment requirements. There can be no changes to the total time available for controlled assessment, as set out in this model assignment. Centres can, however, amend the suggested time available for each task.

#### Resources

Learners must have access to an assessment grid. Details of essential resources are provided in the Summary table of the Learner Assignment Brief and the Task taking: resource section of this Assessor Guidance. There should be no changes to these.

#### Collaboration

Group work is not allowed for this unit when learners are producing evidence for assessment

#### Supervision

No changes are allowed

#### Feedback

No changes are allowed

#### SUGGESTED ASSESSMENT PLAN

The following demonstrates a good practice approach to delivering this assessment. It is recommended that assessment practice incorporates these activities. This will ensure that the approach to applied learning, as set out in the specification, is maintained throughout the assessment process. It will also support centre quality assurance processes.

| Stage | Activity   |
|-------|--|
| 1     | Assessor meets with employers, agrees to changes in context, tasks and evidence.   |
| 2     | Assignment brief is quality assured.   |
| 3     | Prior to commencing summative assessment, learners presented<br>with assignment brief, but not tasks. Learners advised of date when<br>learners will meet with the employer at the site of the proposed<br>extension or construction project, to provide further details of the<br>brief.  |
| 4     | Employer representative meets with learners to present the brief<br>and tasks. The purpose of the visit is for learners to visualise the<br>existing property or site. Learners do not need any information from<br>the visit. Learners also have the opportunity to ask questions of<br>employer representative.                      |
| 5     | Learners complete task 1 under direct supervision.   |
| 6     | Evidence produced for task 1 is annotated and assessed against<br>performance bands and assessment criteria. Where there are<br>significant errors that would prevent learners from accessing the full<br>range of performance bands for task 2 (e.g. to calculations), the<br>assessor can make amendments to the evidence submitted. |
| 7     | Learners complete task 2 under direct supervision.   |
| 8     | Evidence produced by the learner is annotated and assessed against performance bands and assessment criteria.  |
| 9     | Assessor meets with employer representatives to review evidence and agree feedback to be provided to learners.   |
| 10    | Employer 'assessment' and feedback is formative and<br>summative assessment has taken place at an earlier stage.<br>Employer feedback is to contribute to future learning and<br>development. Employer meets with learners to present and<br>discuss feedback and present their own computer generated design                          |
| 11    | Assessment decisions are quality assured.  |

#### WJEC LEVEL 1/2 AWARDS IN DESIGNING THE BUILT ENVIRONMENT MARK RECORD SHEET

#### **UNIT 2: Drawing construction plans**

#### Learner Name:

I confirm that the evidence submitted for assessment has been produced by me without any assistance beyond that allowed.

Signature:

#### Assessor Name:

The assignment brief used for summative assessment is attached, together with evidence of quality assurance.

Date:

I confirm that the evidence submitted by the learner has been produced under the controlled conditions set out in the qualification specification and model assignment.

The overall grade awarded for this unit is \_\_\_\_\_

Signature:

Date:

#### Lead Assessor Name:

I confirm that the evidence submitted by this learner for summative assessment has been quality assured and the grade awarded is confirmed as accurate.

Signature:

Date:

| Assessment<br>Criteria   | Performance bands   |   |  |  |         |
|--|---|---|--|--|---------|
|  | Level 1 Pass  | Level 2 Pass  | Level 2 Merit  | Level 2 Distinction  | Awardeo |
| LO1<br>Be able to use<br>mathematical<br>techniques for<br>construction<br>designs | AC1.1 identify<br>information<br>requirements for<br>construction designs   | Identifies a limited range<br>of information<br>requirements for<br>construction designs  |  |  |         |
|  | Assessor comments   |   |  |  |         |
| AC1.2<br>Calculate<br>information<br>required for<br>construction<br>designs       | Calculates a range of<br>information required for<br>construction designs.<br>Some calculations are<br>incorrect. | Accurately calculates a<br>range of information<br>required for construction<br>designs. Answers may<br>have some minor<br>inaccuracies and errors<br>in use of units of<br>measurement | Accurately calculates a<br>range of information<br>required for construction<br>designs. Answers may<br>have some errors in use<br>of units of measurement | Accurately calculates a<br>range of information<br>required for construction<br>designs. Answers are<br>presented using<br>appropriate units of<br>measurement |         |
|  | Assessor comments   |   |  |  |         |

| Assessment<br>Criteria                    | Performance bands   |   |   |   |                  |
|---|---|---|---|---|------------------|
|   | Level 1 Pass  | Level 1 Pass  | Level 1 Pass  | Level 1 Pass  | Grade<br>Awarded |
| <b>AC2.1</b><br>Draw plans                | A limited range of plans<br>are drawn with limited<br>detail and some<br>accuracy,<br>demonstrating some<br>application of single<br>point perspective<br>Assessor comments | A range of plans are<br>drawn which are mainly<br>neat, demonstrating<br>some application of<br>single point perspective.<br>There may be some<br>inaccuracies and detail | A range of plans that are<br>mainly accurate, are<br>neatly drawn. A limited<br>range of plans show<br>single point perspective<br>applied accurately with<br>some detail | Accurately and neatly<br>draws a range of plans in<br>single point perspective<br>with detail |                  |
| Draw elevations constructions drawn accur | A limited range of<br>elevations of<br>construction design are<br>drawn with some<br>accuracy   | A range of elevations of<br>construction designs are<br>drawn which are mainly<br>neat. There may be<br>some inaccuracies.  | A range of elevations of<br>construction designs are<br>drawn which are mainly<br>accurate and neat.  |   |                  |
|   | Assessor comments   |   |   |   |                  |

| Assessment<br>Criteria               | Performance bands  |  |   |              | Grade   |
|--------------------------------------|--|--|---|--------------|---------|
|                                      | Level 1 Pass   | Level 1 Pass   | Level 1 Pass  | Level 1 Pass | Awarded |
| AC2.3<br>Use language<br>of drafting | Uses a limited range of<br>symbols, standards and<br>conventions in a limited<br>range of drawings.<br>There may be some<br>inaccuracies and<br>omissions. | Uses mainly appropriate<br>symbols, standards and<br>conventions in a range of<br>drawings. There may be<br>inaccuracies and<br>omissions. | Accurately uses<br>appropriate symbols,<br>standards and<br>conventions in a range<br>of drawings. There may<br>be some minor<br>inaccuracies and<br>omissions. |              |         |
|                                      | Assessor comments  |  |   |              |         |
| <b>AC3.1</b><br>Draw 2D plans        | Computer software is used to draw 2D plans   | Computer software is used to draw 2D plans of  |   |              |         |
| of construction<br>designs           | of construction designs.<br>There may be some<br>inaccuracies  | construction designs.<br>Drawings are mainly<br>accurate   |   |              |         |
|                                      | Assessor comments  |  |   |              |         |

| Assessment<br>Criteria  | Performance bands  |  |  |   | Grade   |
|---|--|--|--|---|---------|
|   | Level 1 Pass   | Level 1 Pass   | Level 1 Pass   | Level 1 Pass  | Awarded |
| AC3.2<br>Draw 3D plans<br>of construction<br>designs                      | Computer software is<br>used to generate 3D<br>visualisation of<br>construction designs.<br>There may be<br>significant inaccuracies | Computer software used<br>to model 3D visualisation<br>of construction designs.<br>Modelling is mainly<br>accurate | Computer software used<br>efficiently to accurately<br>model 3D visualisation<br>of construction designs                   |   |         |
| <b>AC3.3</b><br>Add features to<br>3D plans of<br>construction<br>designs | A limited range of<br>features are added to<br>3D construction designs   | A range of features are<br>added to 3D construction<br>designs that are mainly<br>appropriate                      | A range of appropriate<br>features are added to<br>3D plans of construction<br>designs which enhance<br>their presentation | A wide range of<br>appropriate features are<br>added to 3D plans of<br>construction designs to<br>enhance their |         |
|   | Assessor comments  |  |  | presentation  |         |

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