

# Industrial Graphics Skills 2019 v1.0

Sample assessment instrument

July 2018

## Project — Residential drafting: Plans for a proposed house extension

### Information for teachers

This sample has been compiled by the QCAA to help and support teachers in planning and developing assessment instruments for individual school settings.

Schools develop internal assessments for each Applied subject, based on the learning and assessment described in the approved study plan.

### Purpose of the project

This technique assesses a response to a single task, situation and/or scenario in a module of work that provides students with authentic opportunities to demonstrate their learning in both 'Industry practices' and 'Drafting processes'. The student response will consist of a collection of at least two assessable components, demonstrated in different circumstances, places and times, and may be presented to different audiences and through different modes.

Further information about the specifications for this assessment technique can be found in the Assessment techniques section of the Industrial Graphics Skills syllabus.

### Assessment dimensions

This assessment instrument is used to determine student achievement in the following dimensions:

- Knowing and understanding
- Analysing and applying
- Producing and evaluating

In Industrial Graphics Skills, all objectives from each dimension must be assessed in each Project.

<b>Subject</b>	Industrial Graphics Skills
<b>Technique</b>	Project — Residential drafting: Plans for a proposed house extension
<b>Unit number and module number and name</b>	<b>Unit: 3</b> <b>Module: 3. Building and construction drafting</b>

<b>Conditions</b>	<b>Units 3–4</b>
<b>Product component</b>	Technical drawings and physical model
<b>Multimodal component</b>	
<ul style="list-style-type: none"> <li>• non-presentation</li> </ul>	8 A4 pages max (or equivalent)
<b>Further information</b>	
<b>Duration (including class time)</b>	9 weeks
<b>Individual/group</b>	Individual
<b>Resources available</b>	Access to building drafting software

#### Context

As a class, you have been exploring industry practices and drafting processes in the creation of technical drawings. This includes the processes and practices associated with drafting tasks in a building and construction context.

#### Task

Demonstrate, document and evaluate the creation of a set of detailed technical drawings and a physical model for a covered deck house extension, for submission to council for approval and to facilitate future construction.

The task includes two components.

- **Component 1: Product**  
Demonstrate fundamental drawing skills and procedures to create a set of detailed technical drawings. The drawings are to assist in receiving council approval and the future construction of a covered deck as specified on a basic sketch (including basic dimensions and angles) and house photograph (client specifications) that meets building industry requirements. Create a physical model of one construction detail. Use a suitable scale and material to adequately display the construction detail.
- **Component 2: Multimodal**  
Maintain a digital portfolio (planning journal) to document and evaluate your use of industry practices and production processes when developing the technical drawings and physical model.

#### To complete this task, you must:

Component 1: Technical drawings and physical model

Select, apply and demonstrate fundamental drawing skills and procedures to create a set of technical drawings from industry requirements, including

- site plan
- floor plan (fully dimensioned)
- elevations
- services plan, including electrical and drainage information
- construction details (including one as a physical model)
- cross section.

### Component 2: Digital portfolio

Use annotations, drawings and other documentation to individually record and reflect on your work on the project, including evidence of the following industry practices and production processes used to create the set of detailed technical drawings. Your digital portfolio must include

- industry practices
  - document effective communication strategies with the client
  - describe the customer's expectations for a quality structure
  - describe the relevant building regulations
  - describe the quality standards and building materials used in the deck construction
- drafting processes
  - interpret and analyse a basic sketch, photograph and information drawn from client consultations
  - select drawing and modelling skills and procedures
  - organise information in technical drawings to facilitate the efficient and cost-effective construction of a quality deck structure as required by the client and building regulations
- evaluate the created set of deck technical drawings, including
  - industry practices
  - drafting processes
  - recommendations for improvement of the created set of deck technical drawings and your use of industry practices and drafting processes.

#### Checkpoints

- Term [X] Week [X]/[Date]: Discuss project progress and initial development of digital portfolio with your teacher
- Term [X] Week [X]/[X]: Discuss drafting progress and completion of initial drawings with continuing development of digital portfolio with your teacher
- [Due date]: Submit technical drawings, physical model and digital portfolio

#### Authentication strategies

Your teacher will use ways to check that the work you are assessed on is your own work.

- Discuss with your teacher or provide documentation of your progress towards the initial development of the digital portfolio and completion of initial drawings with continuing development of digital portfolio.
- Your teacher will observe you completing work in class.
- Take part in interviews or consultations with your teacher as you develop your response.
- Submit drafts and respond to teacher feedback.
- Acknowledge all sources used.
- Your results may be cross-marked by a teacher from another class.

## Stimulus

A basic sketch of a covered deck (including dimensions and angles) and a house photograph (client specifications) will be provided by the teacher.

# Instrument-specific standards matrix

	Standard A	Standard B	Standard C	Standard D	Standard E
Knowing and understanding	<p>The student work has the following characteristics:</p> <ul style="list-style-type: none"> <li>comprehensive description of industry practices in drafting and modelling tasks</li> <li>consistent and proficient demonstration of fundamental drawing skills</li> <li>informed and accurate interpretation of drawings and technical information.</li> </ul>	<p>The student work has the following characteristics:</p> <ul style="list-style-type: none"> <li>detailed description of industry practices in drafting and modelling tasks</li> <li>effective demonstration of fundamental drawing skills</li> <li>informed interpretation of drawings and technical information.</li> </ul>	<p>The student work has the following characteristics:</p> <ul style="list-style-type: none"> <li>description of industry practices in drafting and modelling tasks</li> <li>demonstration of fundamental drawing skills</li> <li>interpretation of drawings and technical information.</li> </ul>	<p>The student work has the following characteristics:</p> <ul style="list-style-type: none"> <li>statements about industry practices in tasks</li> <li>partial demonstration of aspects of fundamental drawing skills</li> <li>statements about drawings and technical information.</li> </ul>	<p>The student work has the following characteristics:</p> <ul style="list-style-type: none"> <li>inconsistent statements of industry practices</li> <li>minimal demonstration of aspects of fundamental drawing skills</li> <li>inconsistent statements of drawings and technical information.</li> </ul>
	Analysing and applying	<p>The student work has the following characteristics:</p> <ul style="list-style-type: none"> <li>thorough analysis of drafting tasks to proficiently organise information</li> <li>discerning selection and proficient application of drawing skills and procedures in drafting tasks</li> <li>coherent and succinct use of language conventions and features to communicate for particular purposes.</li> </ul>	<p>The student work has the following characteristics:</p> <ul style="list-style-type: none"> <li>effective analysis of drafting tasks to organise information</li> <li>relevant selection and purposeful application of drawing skills and procedures in drafting tasks</li> <li>effective use of language conventions and features to communicate for particular purposes.</li> </ul>	<p>The student work has the following characteristics:</p> <ul style="list-style-type: none"> <li>analysis of drafting tasks to organise information</li> <li>selection and application of drawing skills and procedures in drafting tasks</li> <li>use of language conventions and features to communicate for particular purposes.</li> </ul>	<p>The student work has the following characteristics:</p> <ul style="list-style-type: none"> <li>partial analysis of drafting tasks to organise some information</li> <li>partial application of aspects of drawing skills and procedures in drafting tasks</li> <li>vague use of language conventions and features to somewhat communicate.</li> </ul>

	Standard A	Standard B	Standard C	Standard D	Standard E
<b>Producing and evaluating</b>	The student work has the following characteristics:	The student work has the following characteristics:	The student work has the following characteristics:	The student work has the following characteristics:	The student work has the following characteristics:
	<ul style="list-style-type: none"> <li>• proficient construction of models from drawings</li> <li>• proficient creation of technical drawings that meet industry requirements</li> <li>• discerning evaluation of practices, processes and drawings, and valid recommendations made.</li> </ul>	<ul style="list-style-type: none"> <li>• methodical construction of models from drawings</li> <li>• methodical creation of technical drawings that meet industry requirements with minor variations</li> <li>• effective evaluation of practices, processes and drawings, and plausible recommendations made.</li> </ul>	<ul style="list-style-type: none"> <li>• construction of models from drawings</li> <li>• creation of technical drawings from industry requirements</li> <li>• evaluation of practices, processes and drawings, and recommendations made.</li> </ul>	<ul style="list-style-type: none"> <li>• partial construction of models from drawings</li> <li>• creation of incomplete technical drawings with obvious variation from industry requirements</li> <li>• superficial evaluation of practices, processes and drawings, and simple recommendations made.</li> </ul>	<ul style="list-style-type: none"> <li>• minimal construction of models</li> <li>• creation of aspects of technical drawings</li> <li>• statements about practices, processes or drawings.</li> </ul>