

Design marking guide and response

Sample external assessment 2020

Examination — design challenge (28 marks)

Assessment objectives

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

2. represent ideas, and a sustainable design concept using schematic sketching and/or ideation sketching in the develop phase
4. devise ideas using divergent thinking strategies in response to a redesign problem in the develop phase
5. synthesise ideas and sustainability information to propose a sustainable design concept in the develop phase
6. evaluate the strengths, limitations and implications of ideas against design criteria to make refinements.

Note: Objectives 1, 3 and 7 are not covered in this assessment.

Introduction

The Queensland Curriculum and Assessment Authority (QCAA) has developed mock external assessments for each General senior syllabus subject to support the introduction of external assessment in Queensland.

An external assessment marking guide (EAMG) has been created specifically for each mock external assessment.

The mock external assessments and their marking guides were:

- developed in close consultation with subject matter experts drawn from schools, subject associations and universities
- aligned to the external assessment conditions and specifications in General senior syllabuses
- developed under secure conditions.

Purpose

This document consists of an EAMG and an annotated response.

The EAMG:

- provides a tool for calibrating external assessment markers to ensure reliability of results
- indicates the correlation, for each question, between mark allocation and qualities at each level of the mark range
- informs schools and students about how marks are matched to qualities in student responses.

Mark allocation

Where a response does not meet any of the descriptors for a question or a criterion, a mark of '0' will be recorded.

Where no response to a question has been made, a mark of 'N' will be recorded.

External assessment marking guide (EAMG)

Extended response — Question 1 (28 marks)

Criterion: Devising ideas using divergent thinking in response to a redesign problem

The response:	M
<ul style="list-style-type: none">shows a wide range of ideas, from more than one point of view, perceptively devised with unique, credible and detailed attributes in response to the problem	9
<ul style="list-style-type: none">shows a range of ideas, from more than one point of view, perceptively devised with unique, credible and detailed attributes in response to the problem	8
<ul style="list-style-type: none">shows a wide range of ideas, from more than one point of view, purposefully devised with credible and detailed attributes in response to the problem	7
<ul style="list-style-type: none">shows a range of ideas, from more than one point of view, purposefully devised with credible and detailed attributes in response to the problem	6
<ul style="list-style-type: none">shows a range of ideas, purposefully devised with credible and detailed attributes in response to the problem	5
<ul style="list-style-type: none">shows a range of ideas, appropriately devised with credible attributes in response to the problem	4
<ul style="list-style-type: none">shows a range of ideas, appropriately devised with credible attributes in response to aspects of the problem <p style="text-align: center;">OR</p> <ul style="list-style-type: none">shows an idea with credible and detailed attributes in response to the problem	3
<ul style="list-style-type: none">shows a range of ideas, superficially devised in response to aspects of the problem <p style="text-align: center;">OR</p> <ul style="list-style-type: none">shows an idea with credible attributes in response to aspects of the problem	2
<ul style="list-style-type: none">shows one or more ideas in response to aspects of the problem	1
<ul style="list-style-type: none">does not satisfy any of the descriptors above.	0

Criterion: Evaluating ideas and making refinements

The response:	M
• shows discerning refinement of ideas based on judgments about the critical strengths, limitations and implications of attributes of ideas, using all design criteria	6
• shows effective refinement of ideas based on judgments about the logical strengths and limitations of ideas, using all design criteria	5
• shows adequate refinement of ideas based on judgments about the feasible strengths and limitations of ideas, using design criteria	4
• shows adequate refinement of ideas based on judgments about the feasible strengths and limitations of ideas, using some design criteria	3
• shows superficial refinement of ideas based on identified strengths or limitations of ideas, using some design criteria	2
• shows changes to ideas related to the design criteria	1
• does not satisfy any of the descriptors above.	0

Criterion: Synthesising to propose a design concept

The response:	M
<ul style="list-style-type: none"> • shows an innovative design concept that <ul style="list-style-type: none"> – includes a coherent and logical combination of attributes of multiple ideas and stimulus information – satisfies all design criteria 	7
<ul style="list-style-type: none"> • shows an innovative design concept that <ul style="list-style-type: none"> – includes a logical combination of attributes of multiple ideas and stimulus information – satisfies all design criteria 	6
<ul style="list-style-type: none"> • shows a credible design concept that <ul style="list-style-type: none"> – includes a logical combination of ideas and stimulus information – satisfies all design criteria 	5
<ul style="list-style-type: none"> • shows a credible design concept that <ul style="list-style-type: none"> – includes a simple combination of ideas and stimulus information – satisfies all design criteria <p style="text-align: center; margin: 10px 0;">OR</p> <ul style="list-style-type: none"> • shows an innovative design concept that <ul style="list-style-type: none"> – includes a simple combination of ideas and stimulus information – satisfies some design criteria 	4
<ul style="list-style-type: none"> • shows a design concept that <ul style="list-style-type: none"> – includes a simple combination of ideas and stimulus information – satisfies some design criteria 	3
<ul style="list-style-type: none"> • shows a design concept that <ul style="list-style-type: none"> – includes a simple idea and stimulus information – satisfies some design criteria 	2
<ul style="list-style-type: none"> • shows a partial design concept that satisfies some design criteria 	1
<ul style="list-style-type: none"> • does not satisfy any of the descriptors above. 	0

Criterion: Representing ideas and a design concept

The response:	M
<ul style="list-style-type: none"> • indicates sophisticated use of <ul style="list-style-type: none"> – elements and principles of visual communication to differentiate between critical and non-critical attributes in ideation and schematic sketching of ideas and a design concept – sequences of related sketches to easily and readily show the progression of understanding of ideas 	6
<ul style="list-style-type: none"> • indicates considered use of <ul style="list-style-type: none"> – elements and principles of visual communication to differentiate between attributes in ideation and schematic sketching of ideas and a design concept – sequences of related sketches to show the progression of understanding of ideas 	5
<ul style="list-style-type: none"> • indicates appropriate use of ideation and schematic sketching of ideas and a design concept with labels and either 1 of the following <ul style="list-style-type: none"> – elements and principles of visual communication to differentiate between attributes <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> – sketches to show the progression of understanding of ideas 	4
<ul style="list-style-type: none"> • indicates appropriate use of <ul style="list-style-type: none"> – ideation sketching and schematic sketching – labels 	3
<ul style="list-style-type: none"> • indicates cursory use of <ul style="list-style-type: none"> – ideation or schematic sketching – labels 	2
<ul style="list-style-type: none"> • indicates illogical use of unclear ideation or schematic sketching 	1
<ul style="list-style-type: none"> • does not satisfy any of the descriptors above. 	0