

Retrospective

2017 Queensland Core Skills Test

Appendixes (Part 5 of 5)



For all Queensland schools

Appendixes

Appendix 1: The 49 Common Curriculum Elements

Descriptors and Notes

Note: The numbering system given for the testable Common Curriculum Elements is that used within the QCS Test Unit. Readers should not be perturbed to find that, while the list is in numerical order, there are numbers missing. All 49 elements appear in the list.

1 Recognising letters, words and other symbols

2 Finding material in an indexed collection:

Note: Examples of an indexed collection are — a dictionary, an encyclopaedia, a library catalogue, a road map, an art catalogue, an instruction booklet, a share register, a classified advertisement column.

3 Recalling/remembering:

Note: Consult Test Specifications Section 2.3 to establish what might reasonably be regarded as assumed knowledge, i.e. ‘an elementary level of general knowledge, and a knowledge of vocabulary and mathematical operations at a level of sophistication consistent with a sound general Year 10 education ... basic arithmetic operations involved in calculation, also include fundamental mathematical concepts such as simple algebra, percentage, ratio, area, angle and power of ten notation.’

4 Interpreting the meaning of words or other symbols

5 Interpreting the meaning of pictures/illustrations

6 Interpreting the meaning of tables or diagrams or maps or graphs

7 Translating from one form to another:

Expressing information in a different form

Note: Translation could involve the following forms:

verbal information (in English)

algebraic symbols

graphs

mathematical material given in words

symbolic codes (e.g. Morse code, other number systems)

pictures

diagrams

maps.

9 Using correct spelling, punctuation, grammar

10 Using vocabulary appropriate to a context

11 Summarising/condensing written text:

Presenting essential ideas and information in fewer words and in a logical sequence

Note: Simply listing the main points in note form is not acceptable, nor is ‘lifting’ verbatim from the given passage.

12 Compiling lists/statistics:

Systematically collecting and counting numerical facts or data

13 Recording/noting data:

Identifying relevant information and then accurately and methodically writing it down in one or more predetermined categories

Note: Examples of predetermined categories are — female/male; odd/even; mass/acceleration.

- 14 Compiling results in a tabular form:**
Devising appropriate headings and presenting information using rows and/or columns
- 15 Graphing:**
Note: Students will be required to construct graphs as well as to interpret them (see CCE 6).
- 16 Calculating with or without calculators**
- 17 Estimating numerical magnitude:**
Employing a rational process (such as applying an algorithm, or comparing by experience with known quantities or numbers) to arrive at a quantity or number that is sufficiently accurate to be useful for a given purpose
- 18 Approximating a numerical value:**
Employing a rational process (such as measuring or rounding) to arrive at a quantity or number that is accurate to a specified degree
- 19 Substituting in formulae**
- 20 Setting out/presenting/arranging/displaying**
- 21 Structuring/organising extended written text**
- 22 Structuring/organising a mathematical argument:**
Generating and sequencing the steps that can lead to a required solution to a given mathematical task
- 26 Explaining to others:**
Presenting a meaning with clarity, precision, completeness, and with due regard to the order of statements in the explanation
- 27 Expounding a viewpoint:**
Presenting a clear convincing argument for a definite and detailed opinion
- 28 Empathising:**
Appreciating the views, emotions and reactions of others by identifying with the personalities or characteristics of other people in given situations
- 29 Comparing, contrasting:**
Comparing: displaying recognition of similarities and differences and recognising the significance of these similarities and differences
Contrasting: displaying recognition of differences by deliberate juxtaposition of contrary elements
- 30 Classifying:**
Systematically distributing information/data into categories that may be either presented to, or created by, the student
- 31 Interrelating ideas/themes/issues**
- 32 Reaching a conclusion which is necessarily true provided a given set of assumptions is true:**
Deducing
- 33 Reaching a conclusion which is consistent with a given set of assumptions:**
Inferring
- 34 Inserting an intermediate between members of a series:**
Interpolating
- 35 Extrapolating:**
Logically extending trends or tendencies beyond the information/data given

- 36 Applying strategies to trial and test ideas and procedures**
- 37 Applying a progression of steps to achieve the required answer:**
Making use of an algorithm (that is already known by students or that is given to students) to proceed to *the* answer
- 38 Generalising from information:**
Establishing by inference or induction the essential characteristics of known information or a result
- 41 Hypothesising:**
Formulating a plausible supposition to account for known facts or observed occurrences
The supposition is often the subject of a validation process.
- 42 Criticising:**
Appraising logical consistency and/or rationally scrutinising for authenticity/merit
Note: also critiquing – critically reviewing
- 43 Analysing:**
Dissecting to ascertain and examine constituent parts and/or their relationships
- 44 Synthesising:**
Assembling constituent parts into a coherent, unique and/or complex entity
The term ‘entity’ includes a system, theory, communication, plan, set of operations.
- 45 Judging/evaluating:**
Judging: applying both procedural and deliberative operations to make a determination
Procedural operations are those that determine the relevance and admissibility of evidence, whilst deliberative operations involve making a decision based on the evidence.
Evaluating: assigning merit according to criteria
- 46 Creating/composing/devising**
- 48 Justifying:**
Providing sound reasons or evidence to support a statement
Soundness requires that the reasoning is logical and, where appropriate, that the premises are likely to be true.
- 49 Perceiving patterns:**
Recognising and identifying designs, trends and meaningful relationships within text
- 50 Visualising:**
*Note: Examples of aspects of this element that might be tested include:
visualising spatial concepts (e.g. rotation in space)
visualising abstractions in concrete form (e.g. kinetic theory – the movement of molecules)
visualising a notion of a physical appearance from a detailed verbal description.*
- 51 Identifying shapes in two and three dimensions**
- 52 Searching and locating items/information:**
*Note: This element as it occurs in syllabuses usually refers to field work. As these conditions are plainly impossible to reproduce under QCS Test conditions, testing can only be performed at a ‘second order’ level.

In the sense of looking for things in different places, ‘searching and locating items/information’ may be taken to include quoting, i.e. repeating words given in an extract in the stimulus material.*

53 Observing systematically:

Note: This element as it occurs in syllabuses usually refers to laboratory situations. As these conditions are plainly impossible to reproduce under QCS Test conditions, testing can only be performed at a 'second order' level.

55 Gesturing:

Identifying, describing, interpreting or responding to visual representations of a bodily or facial movement or expression, that indicates an idea, mood or emotion

Note: This element as it occurs in syllabuses refers to acting and other forms of movement. It is possible to test only the interpretation of movement and expression. It is understood that there are cultural variations relating to the meanings of particular gestures.

57 Manipulating/operating/using equipment:

Displaying competence in choosing and using an implement (in actual or representational form) to perform a given task effectively

60 Sketching/drawing:

Sketching: executing a drawing or painting in simple form, giving essential features but not necessarily with detail or accuracy

Drawing: depicting an object, idea or system pictorially, such as in a clearly defined diagram or flowchart.

Note: Sketching/drawing does not include the representation of numerical data as required in CCE 14 and CCE 15.

Appendix 2: CCEs

1	α	Recognising letters, words and other symbols
2	α	Finding material in an indexed collection
3	α	Recalling/remembering
4	α	Interpreting the meaning of words or other symbols
5	α	Interpreting the meaning of pictures/illustrations
6	α	Interpreting the meaning of tables or diagrams or maps or graphs
7	α	Translating from one form to another
9	π	Using correct spelling, punctuation, grammar
10	π	Using vocabulary appropriate to a context
11	π	Summarising/condensing written text
12	α	Compiling lists/statistics
13	α	Recording/noting data
14	π	Compiling results in a tabular form
15	π	Graphing
16	ϕ	Calculating with or without calculators
17	ϕ	Estimating numerical magnitude
18	ϕ	Approximating a numerical value
19	ϕ	Substituting in formulae
20	π	Setting out/presenting/arranging/displaying
21	β	Structuring/organising extended written text
22	β	Structuring/organising a mathematical argument
26	π	Explaining to others
27	π	Expounding a viewpoint
28	α	Empathising
29	β	Comparing, contrasting
30	β	Classifying
31	β	Interrelating ideas/themes/issues
32	θ	Reaching a conclusion which is necessarily true provided a given set of assumptions is true
33	θ	Reaching a conclusion which is consistent with a given set of assumptions
34	θ	Inserting an intermediate between members of a series
35	θ	Extrapolating
36	β	Applying strategies to trial and test ideas and procedures
37	ϕ	Applying a progression of steps to achieve the required answer
38	β	Generalising from information
41	θ	Hypothesising
42	θ	Criticising
43	θ	Analysing
44	θ	Synthesising
45	θ	Judging/evaluating
46	π	Creating/composing/devising
48	θ	Justifying
49	β	Perceiving patterns
50	β	Visualising
51	α	Identifying shapes in two and three dimensions
52	α	Searching and locating items/information
53	α	Observing systematically
55	α	Gesturing
57	α	Manipulating/operating/using equipment
60	π	Sketching/drawing

Appendix 3: CCEs grouped by baskets

α	Comprehend and collect
1	Recognising letters, words and other symbols
2	Finding material in an indexed collection
3	Recalling/remembering
4	Interpreting the meaning of words or other symbols
5	Interpreting the meaning of pictures/illustrations
6	Interpreting the meaning of tables or diagrams or maps or graphs
7	Translating from one form to another
12	Compiling lists/statistics
13	Recording/noting data
28	Empathising
51	Identifying shapes in two and three dimensions
52	Searching and locating items/information
53	Observing systematically
55	Gesturing
57	Manipulating/operating/using equipment
β	Structure and sequence
21	Structuring/organising extended written text
22	Structuring/organising a mathematical argument
29	Comparing, contrasting
30	Classifying
31	Interrelating ideas/themes/issues
36	Applying strategies to trial and test ideas and procedures
38	Generalising from information
49	Perceiving patterns
50	Visualising
θ	Analyse, assess and conclude
32	Reaching a conclusion which is necessarily true provided a given set of assumptions is true
33	Reaching a conclusion which is consistent with a given set of assumptions
34	Inserting an intermediate between members of a series
35	Extrapolating
41	Hypothesising
42	Criticising
43	Analysing
44	Synthesising
45	Judging/evaluating
48	Justifying
π	Create and present
9	Using correct spelling, punctuation, grammar
10	Using vocabulary appropriate to a context
11	Summarising/condensing written text
14	Compiling results in a tabular form
15	Graphing
20	Setting out/presenting/arranging/displaying
26	Explaining to others
27	Expounding a viewpoint
46	Creating/composing/devising
60	Sketching/drawing
ϕ	Apply techniques and procedures
16	Calculating with or without calculators
17	Estimating numerical magnitude
18	Approximating a numerical value
19	Substituting in formulae
37	Applying a progression of steps to achieve the required answer

Appendix 4: Glossary of terms used in relation to the QCS Test

acceptable minimum standards: the description of a marking process whereby markers are required to use their assessment skills to interpret a student response and match it to a standard in each performance domain being tested by the item. Predetermined trade-offs are already incorporated. Markers then award a grade for that performance domain for that item.

adjacent grades: on a short response marking scheme, a pair of available grades in direct proximity, e.g. *A* and *B*, *D* and *E*, *N* and *O* (see **grade**)

assumed knowledge: the benchmark of students' required learning in terms of QCS testing; taken to be the possession of both an elementary level of general knowledge and a knowledge of vocabulary and mathematical operations at a level of sophistication consistent with that of a student with a sound general Year 10 education

batched items: a group of items which relate to the same stimulus material

built-in trade-off: a property of a marking scheme that ensures that the performance domains contribute to the grade in a manner reflective of their hierarchical position in that item

calibration: a routine process aimed at controlling reliability loss by removing irregularities in a marker's judgment 'gauge' before that marker is free to 'gauge standards', i.e. to mark

check marking: a process involving scrutiny by marking supervisors (WT), immersers (SR) and unit managers (SR) of grades awarded by markers

closed response item: a short response item which involves the student in the production of an answer and requires the marker to assess the accuracy of the response. This type of item usually produces a definite number of response types.

common curriculum element (CCE): one of the 49 generic skills that are common to at least two subjects in the Queensland senior curriculum, testable in the current format of the QCS Test, and within the learning opportunities of a high proportion of students

creditable response: a response (to a short response item) that is awarded one of the available grades, *A* to *E*, and thus attracts credit

criterion (also called basket): macroskill. The QCS Test measures achievement in five criteria, each of which is symbolised by a letter of the Greek alphabet:

- α comprehend and collect
- β structure and sequence
- θ analyse, assess and conclude
- π create and present
- ϕ apply techniques and procedures.

The 49 common curriculum elements can be distributed among these five criteria, each criterion representing a set of related CCEs.

cue: an instruction attached to a short response item, situated next to the space provided for the student response. The cue gives students a clear idea of what is required of them, sometimes providing essential further information on how to respond.

curriculum element: identifiable coherent activity specified by a syllabus as relevant to the pursuit of the aims and objectives of that syllabus

denotation: descriptor and/or notes related to a CCE, which represent the meaning of that CCE for the purpose of the QCS Test. Denotations are circulated to the appropriate audiences.

descriptor: see **standard descriptor**

desirable feature: item-specific characteristic of a student's short response that demonstrates achievement and therefore contributes to the determination of attainment in a particular performance domain

dimension: one of nine defined characteristics of a test item. Each item can be classified in terms of each of these nine dimensions. This classification is used for assessing range and balance in the test.

discrepant marker: a marker whose marking differences (compared with other markers) are either not acceptably small or not apparently random

dissonant markings: binders whose items have been given significantly different marks by different markers

essential equipment: 'tools of the trade' listed in the *Student Information Bulletin* and in *Directions* on the cover of the testpaper, and which the student must provide in order to complete the test, namely:

- pens (black ink)
- pencil (for drawing and sketching, but not for writing)
- protractor
- drawing compass
- eraser
- coloured pencils
- ruler
- calculator with spare batteries.

exemplar: example of a response included in the marking scheme as an indication to markers of the acceptable standard for the award of an A-grade

flyer: a written mechanism by which unit managers and immersers can communicate to markers any decisions regarding the treatment of scripts made after marking has commenced

footnote: additional information provided at the end of the relevant piece of stimulus material, with reference to the stimulus material via a superscript. It may take various forms such as a commentary on word usage or sourcing of an extract.

gloss: definition of a term that students are not expected to know. When substantive vocabulary of a high level of sophistication, whose meaning cannot be determined from the context is used, a meaning or explanation is provided at the end of the relevant passage. Reference to the passage is made via a superscript.

grade (response grade): a measure of performance on a short response item on the basis of a student's response. Grades are consecutive letters, with A denoting the grade pertaining to the highest performance level. The number of grades may vary from item to item. The lowest available grade identifies the threshold for creditable performance.

hierarchy: a ranking of the performance domains of an item, indicating their relative contributions to the award of the grades

immerser (SR): a person who trains markers to apply the prescribed marking schemes and standards for each item; conducts check marking and refocusing sessions as determined by quality control; supports markers with advice on marking; and maintains the standards of the marking

immersion: instruction to acquaint markers with details and subtleties of the marking schemes for the items in an allocated unit, discussion of common response types and marking of real student responses

immersion notes: unit-specific script prepared by immersers for use in training markers

immersion session: a set period of time when immersers train markers in the marking scheme and provide them with guided assistance in practice marking. Verbal instructions which form part of the marking prescription may be given at this time.

incline of difficulty: the sequencing of units within a testpaper in such a way that units tend to become progressively more difficult towards the end of the testpaper

introduction: a block of text at the beginning of a unit that, when necessary, gives a reference for the stimulus material and items to follow

item: comprises the stem, cue and response area

item-specific: pertaining to a particular item. Usually, item-specific documents contain information that can only pertain to one of the items on a particular subtest.

item writer: a person who writes and develops items for inclusion in the itembank. Test specifications are heeded in the writing of items.

key term: one of a list of verbs used in the stems of short response items as commands or task setters, and for which clear definitions are appropriately circulated to students and markers for the purposes of the QCS Test. The key terms include the following:

account for	draw (cf. sketch)	illustrate/exemplify	show (calculations)
approximate	estimate	indicate	sketch (cf. draw)
argue	evaluate	justify	state
comment on	explain	list	substitute in
compare	expound	outline (in words)	suggest
contrast	express	present	summarise
derive	extrapolate	prove	transcribe
describe	find	rank	verify
determine	generalise	refer	
discuss	identify	quote	

line numbers: numbers situated in the left-hand margin of some passages of stimulus material to help students locate details mentioned in associated items

marker training: a process which occurs during the days immediately preceding the marking proper, and consists of a pretraining/administration session and an immersion session in an allocated marking unit, together with preliminary marking and feedback sessions

marking history: a collection of marking schemes for all items in the unit in which a marker is trained to mark, together with the marker manual. Running rules and flyers are sometimes added to the folio during the course of the marking operation.

marking grid: an item-specific sheet, accompanying the marking scheme, designed to assist markers' decision making when the application of descriptors is particularly complex. The use of such grids may be either compulsory or non-compulsory.

marking pool: the total group of markers selected from the register of markers to be involved in the marking operation for a given year

marking scheme: the item-specific criteria and standards schema from which markers can determine grades; the marking scheme may not include all of the instructions to the markers. Most marking schemes are presented as a table in which the cells of each column give the descriptors of standards for the grade shown in that column's heading.

marking supervisor (WT): a person who trains markers to apply the prescribed criteria and standards; conducts check marking and refocusing sessions as determined by quality control; supports markers with advice on marking; and maintains the standards of marking.

marking unit: a collection of items that is to be marked using a single marksheet. An individual marking unit may include items from more than one test unit. The items of an individual test unit may be spread over more than one marking unit.

marksheet: a pre-printed sheet markers use to record information about marking

mathematical operations: at the level of QCS testing, the basic operations involved in calculation (addition, subtraction, multiplication, division), as well as fundamental mathematical concepts such as simple algebra, percentage, ratio, area, angle, and power of ten notation

miniature SR paper: an A3 sheet containing abbreviated versions of the items in the testbook. Students may retain this at the conclusion of the test.

model response: an example of a response that demonstrates the highest level of performance and would invariably be awarded the highest grade

monitoring (marker monitoring): comparison of markers (many pairings) to identify responses to be re-marked, markers who require refocusing, and aspects of marking schemes which need attention during calibration

non-contributory: term applied to the grade given to a short response item when a response is unintelligible or does not satisfy the requirements for any other grade (*N*), or when the item is omitted (*O*)

notes: a note on a marking scheme that clarifies features of the item; defines, qualifies or explains terms used in the descriptors; and gives additional information about the treatment of particular types of response

omit: label given to that category of response to a test item where the student fails to provide a response, i.e. the student makes no apparent attempt to respond to the task set and leaves the response space completely blank

open-ended response item: a short response item that involves the student in generative thinking and requires the marker to assess the quality of the response. No exhaustive list of desirable features can be identified *a priori* to describe a given response type.

optional equipment: 'tools of the trade' (other than *essential equipment*) normally used in a course of study, which students may choose to provide for the test, e.g.

- set square
- correction fluid
- sharpener.

pathological response: one of the 2% or less of different or unpredictable responses not covered directly by the descriptors in the marking scheme, and discovered after marking commences

performance domain/s: common curriculum element/s tested by a particular item. For items that are associated with more than one CCE, the influence of each CCE is clearly evident in the marking scheme.

practice effect: an increase in marking speed as the marker gains experience in reading student responses and grading them with the marking scheme

practice set: booklet of authentic student responses given to markers within an immersion session to reinforce learning

preliminary marking: mandatory initial session of actual marking conducted under normal conditions with grades to stand. Preliminary marking usually occurs immediately after immersion and before the feedback session.

primary marking: the totality of the first two independent markings of all items on the testpaper

The number of marker judgments in the primary marking is $2N \sum_{i=1}^n p_i$, where N = number of students, n = number of items on the testpaper, and p_i = number of performance domains for the i th item.

refocusing: a one-on-one counselling session between an immerser and a marker who is experiencing problems with his/her marking, as identified by quality-control procedures

referee marking: an independent third marking of a student response, which occurs when two independent markers disagree to an extent that is regarded as significant for that item

registered marker: a marker who has successfully completed a recruitment session

reliability: the degree to which measurements are consistent, dependable or repeatable; i.e. the degree to which they are free of errors

reliability of grades: the degree to which there is marker agreement as to the grade awarded (although some grades are truly borderline)

response: the student's work on an item as communicated to the marker. In writing, drawing, calculating and so on in the case of a short response item. By blackening a circle corresponding to the selected response option in the case of a multiple choice item.

response alternative: one of four options from which students choose the best response for a multiple choice item. Students record their responses on a mark-sensitive sheet which is computer scanned for scoring.

response area: the space provided in the short response testbook where students give their response. It may be a ruled area or grid or a designated space in which to write, draw, complete a diagram, fill in a table, or other task.

richness: a property of a test item whereby the item can provide more than the usual single piece of information about student achievement. In the case of a rich short response item, markers are required to award a grade in more than one, usually two, performance domains.

running rules: decisions made by unit managers and immersers after the marking has commenced to supplement the application of marking schemes

sample response: authentic student response used for the purposes of training

second guessing: anticipating the grade selected by other markers by considering 'What will other markers do?' rather than by applying the marking scheme

standard: a reference point for describing the quality of student responses in performance domains (see **marking scheme**)

standard descriptor: a statement or list of statements that succinctly conveys the standard or features required in a response to be awarded that grade in a particular performance domain

star-value: a rating for a short response item relative to other items on the short response paper, in terms of worth/effort, from [*] lowest to [****] highest. The star-value is printed beside the item number.

stem: that part of the item that indicates the task set or the question to be answered

stimulus material: verbal, numerical, pictorial, tabular, or graphical material that sets the context for the item/s to follow with the aim of promoting students' responses

testbook (testpaper): the booklet provided to a student for the SR subtest; the cover carries directions to students; the booklet contains items arranged within units. The booklet also contains spare pages (in case the student needs extra response space, or decides to rewrite a response after cancelling the initial attempt) and a fold-out section inside the back cover containing the item and star-value distribution.

training: see **marker training**

unit: a part of a test consisting of stimulus material and associated items, and often an introduction

unit manager (SR): a person who trains the immersers of a particular unit so that they can train the markers with due regard to the construct of the test. Unit managers direct, assist and monitor the performance of immersers; provide clarification of marking schemes when required; and assist with check marking, referee marking and other quality-control procedures.

validity: the extent to which an assessment instrument measures what it is claimed to measure

validity of grades: the extent to which the item and marking scheme measure achievement in the designated CCE/s

verbal instructions: information given to markers by immersers to acquaint them with the details and subtleties of marking schemes, and with common response types gleaned from a sample of student responses