Subject report: Endorsement

Chemistry — 2026 cohort

This resource identifies strengths and opportunities to improve the development and submission of internal assessment instruments for Chemistry (General subject). Refer to *QCE and QCIA policy and procedures handbook v7.0*, Section 9.5.

Summary of endorsement for the 2026 cohort

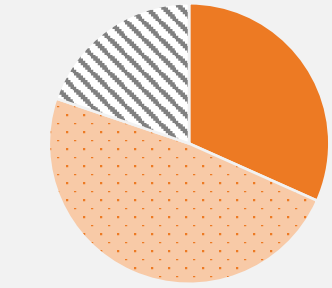
Number of internal assessment (IA) instruments submitted for endorsement

IA1	IA2	IA3
428	428	427

Note: Number of instruments may vary due to changes in schools offering the subject after the endorsement process started.

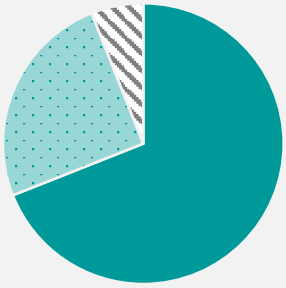
Percentage of instruments endorsed at Applications 1 and 2

IA1: Data test



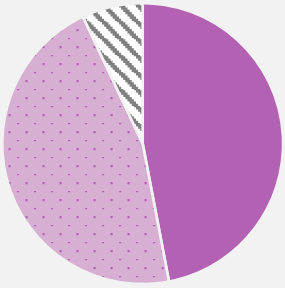
- Application 1: 32%
- Application 2: 49%
- Intervention: 20%

IA2: Student experiment



- Application 1: 69%
- Application 2: 25%
- Intervention: 6%

IA3: Research investigation



- Application 1: 47%
- Application 2: 46%
- Intervention: 7%

Note: Percentages have been rounded to whole numbers and, therefore, may not add up to 100%.

Validity: Reasons for non-endorsement at Application 1 by assessment priority

IA1		IA2		IA3	
Alignment	219	Alignment	102	Alignment	162
Authentication	0	Authentication	25	Authentication	21
Authenticity	6	Authenticity	38	Authenticity	9
Item construction	144	Item construction	14	Item construction	20
Scope and scale	79	Scope and scale	0	Scope and scale	0

Accessibility: Reasons for non-endorsement at Application 1 by assessment priority

IA1		IA2		IA3	
Bias avoidance	43	Bias avoidance	0	Bias avoidance	0
Language	83	Language	2	Language	15
Layout	79	Layout	1	Layout	4
Transparency	81	Transparency	14	Transparency	86

Note: A priority may be identified more than once in the endorsement decision for an assessment instrument.

Advice for assessment design

Endorsement is the quality assurance process based on the attributes of validity and accessibility. The following advice is based on the endorsement process for the 2026 completion year. In acknowledging effective practices and areas for refinement, it offers schools timely and evidence-based guidance to further develop valid and accessible assessment.

IA1: Data test (10%)

Effective practices

Assessment instruments demonstrated validity and accessibility when they:

- required students to use the provided quantitative/qualitative dataset to respond to a given question **(alignment)**
- explicitly allocated marks that aligned to the expected response in the associated marking scheme, e.g. for a 2–mark acid strength calculation question, 1 mark was allocated to calculating K_a and 1 mark to calculating pK_a **(scope and scale)**
- used whole marks rather than part marks, to support students with identifying the scope and scale of the required response and to ensure the scale across the paper **(scope and scale)**
- provided tables and/or graphs that were clear and unambiguous, and included appropriate scales and gridlines, to allow students to access and analyse the dataset to respond to questions **(layout)**.

Practices to strengthen

Schools can improve the validity and accessibility of assessment instruments by:

- intentionally choosing cognitive verbs to
  - reduce the number of repetitions of a cognitive verb across the instrument, to allow students the opportunity to demonstrate a full range of skills
  - align the cognitive verb with the relevant objective and the nature of the student response, e.g. questions categorised as Objective 4 using the cognition ‘determine’ require students to draw a conclusion from the analysis of data in datasets; in Objective 2, ‘determine’ may be used to identify an unknown scientific quantity (syllabus, p. 44, Questions specifications table) **(alignment)**
- constructing datasets that allow opportunities for students to predict or extrapolate using the analysis of data in the dataset rather than the application of theory, e.g. Le Châtelier’s principle **(alignment)**
- removing unnecessary or distracting information, including
  - explicit scaffolding, to allow students the opportunity to identify aspects of the dataset required to respond to the questions
  - introductions or contexts to datasets that contain additional or arbitrary information **(item construction)**
- checking instruments for appropriate formatting, including quality assurance of spelling, grammar, punctuation and consistent scientific conventions for chemical formulas **(language)**.

IA2: Student experiment (20%)

Effective practices

Assessment instruments demonstrated validity and accessibility when they:

- clearly identified specific aspects that could be completed in groups, e.g. using an asterisk or separate heading (syllabus, p. 48) **(item construction)**
- maintained consistent conditions for group work across the task, e.g. provided strategies to support the authentication of individual work where group work was allowed **(authentication)**
- provided scaffolding that supported students in developing unique responses **(authentication)**
- were free from typographical errors, used appropriate language, grammar and spelling, and were appropriately formatted, e.g. used bullet points for the task specifications **(layout)**.

Practices to strengthen

Schools can improve the validity and accessibility of assessment instruments by:

- ensuring the task includes all specifications from the syllabus (p. 47) **(alignment)**
- providing appropriate checkpoints, clearly indicating that only one complete or near complete draft is to be submitted for feedback **(authentication)**
- avoiding repetition of information in different sections of the instrument **(alignment)**
- providing clear information about appropriate scientific genres, e.g. removing references to a conference presentation in the task specifications when the task only allows for written responses **(transparency)**.

IA3: Research investigation (20%)

Effective practices

Assessment instruments demonstrated validity and accessibility when they:

- provided claims that were clearly worded, direct and linked to only one context, thus avoiding 'and/or' options **(item construction)**
- provided checkpoints indicating that only one near complete draft was to be submitted **(authentication)**.

Practices to strengthen

Schools can improve the validity and accessibility of assessment instruments by:

- ensuring the task includes all specifications from the syllabus (pp. 51–52) **(alignment)**
- providing claims that are clearly aligned with Unit 4 subject matter and
  - create opportunities to generate multiple research questions, e.g. claims that avoid leading students to heat of combustion, enthalpy and bonding in fuels from Unit 1 and Unit 2 **(alignment)**
  - cue students to analyse and interpret research evidence about the properties and structure of organic materials or chemical synthesis and design rather than environmental, economic, biochemical and biological issues **(item construction)**
- providing clear information about appropriate scientific genres, e.g. providing genre information in scaffolding that is consistent with the appropriate scientific genres listed in the task specifications and mode in the conditions section **(transparency)**.

Additional advice

- Before submitting an instrument, check the formatting using the Print preview function in the Endorsement application (app). This helps ensure assessment instruments are accessible with appropriate page breaks, legible grid lines in graphs and other formatting features.
- If an instrument is not endorsed at Application 1, consider consulting with the lead endorser before submitting the revised instrument at Application 2. These consultations are supportive and provide feedback to school communities to strengthen the endorsement process.