CENTURY Digital Citizenship & AI Literacy (DCAIL) Checkpoints

Technical Manual

This manual covers the Digital Citizenship & AI Literacy Checkpoints available with CENTURY.

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This manual sets out the methodology shared across every Checkpoint in the suite.

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Enquiries: assessments@century.tech

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1. Introduction

1.1 Purpose

In around 20 minutes, a Digital Citizenship & AI Literacy Checkpoint shows a teacher where their students' strengths and areas for improvement lie. Each Checkpoint version is a set of 25 multiple-choice questions covering digital citizenship and artificial intelligence (AI) literacy, auto-marked, with detailed reporting at student and cohort level to provide teachers with insights about their students. The Checkpoints focus on the knowledge, understanding and critical thinking skills needed by students to reduce the risk to their safety when interacting with digital tools. They have been written with learners aged ten and above in mind, but are not limited to that group, and the reading age allows the Checkpoints to be accessible to younger learners. As a result, schools may set a Checkpoint for a given cohort at their own discretion.

Content coverage

The Checkpoints break down digital citizenship and AI literacy into four topics:

- Information & Data Literacy
- Understanding & Interacting with AI
- Communication & Collaboration
- Digital Security

The coverage of the Checkpoints is deliberately selective: they assess the knowledge, skills and understanding that research evidence identifies as a risk to students' safety, rather than attempting to assess every aspect of digital citizenship and AI literacy. Checkpoint performance should therefore be read as an indication of strengths and areas for improvement, not as a comprehensive measure of a learner's digital citizenship and AI literacy.

Intended use

The Checkpoint versions are separate, standalone and parallel. They can be set periodically, termly or yearly, for example.

A Checkpoint is intended to support teachers, subject leaders and senior leaders in:

- establishing each student's knowledge of digital citizenship and AI literacy
- identifying strengths and areas for improvement at a student and cohort level;
- informing curriculum planning, in-class teaching and targeted intervention;
- tracking change over time through re-assessment with a different Checkpoint version;
- providing evidence for school self-evaluation and reporting; and
- evidencing the school's provision for online safety.

Outputs

Reports are available at the assessment window level with both group and individual reports available, together with the raw and summary data in csv format. Reporting includes statistics such as an overall percentage score, % score at topic level, areas for improvement at question level and recommended nuggets.

1.2 Digital Citizenship & AI Literacy Checkpoints overview

Duration and format

Each Checkpoint version has 25 questions, taking around 20 to 25 minutes to complete. This makes it suitable to be completed within a single lesson or tutor period. Schools can choose which Checkpoint to set and when, so Checkpoints can be spaced across the year or used in different years according to their own plans.

Each Checkpoint version is linear: with every learner answering the same 25 questions, which allows comparison across the cohort.

Delivery

The Digital Citizenship & AI Literacy Checkpoints are available to assign within the Assessments area of CENTURY. Once a Checkpoint is scheduled in an assessment window and completed, questions are auto-marked, and the results are available to the teacher straight away.

The Digital Skills Secondary course can be assigned to students, providing students access to suitable support material, including the follow-up nuggets linked to the areas identified for

improvement (§4.1). A Digital Citizenship & AI Literacy course is currently in development to provide additional support materials.

Parallel-form design

Each Checkpoint version is designed to be a parallel form. Each Checkpoint version is built to the same blueprint and assesses the same 25 content statements, in the same topic and subtopic proportions. Each uses an entirely distinct set of questions with no question appearing in more than one Checkpoint version.

This design allows a cohort to be re-assessed without results being affected by familiarity with the questions used previously, allowing a school to measure change following intervention rather than the recall of a previous Checkpoint version.

1.3 Rationale and evidence base

In this context, digital citizenship and AI literacy is the knowledge and judgement a young person needs in order to act safely, responsibly and critically when using digital tools including AI, which is why online safety and critical thinking are the overriding themes of the Checkpoints. In England, it is usually not a standalone subject taught, and teaching is spread across various areas including: Computing, relationships, sex and health education, and a school's wider safeguarding and online safety provision. The statutory and advisory guidance cited in this manual is that of England. The research evidence on children's use of digital technology and generative AI is drawn more widely.

Digital citizenship

Digital citizenship is how a young person lives and engages with technology, not simply how skilfully they operate it, and digital literacy underpins it (§6.1). Digital citizenship has been included in the Checkpoints because of its important role in safeguarding children against the risks they face online. This is reflected, for example, in the following statutory guidance:

- *Keeping children safe in education* expects schools to take a whole-school approach to online safety (Department for Education, 2026, paras. 164–166), and names the UKCIS framework Education for a Connected World among the resources that may help schools understand and teach about safeguarding (Department for Education, 2026, para. 162). That framework covers aspects of digital literacy.

- Digital literacy is also taught within the statutory Computing curriculum (Department for Education, 2013).

The Checkpoints identify what learners know and where their gaps lie, and can contribute evidence towards a school's whole-school approach to online safety. AI is now embedded in the digital environments young people navigate, so digital citizenship increasingly depends on AI literacy.

AI literacy

Within artificial intelligence (AI) literacy, there is again a need to consider online safety and critical thinking. Children are using generative AI from a young age: 22% of 8 to 12-year-olds report having used it (Alan Turing Institute, 2025), and 79% of online 13 to 17-year-olds have done so, compared with 31% of adult users (Ofcom, 2023, cited in NSPCC, 2025). Parents and teachers are already concerned about potential harm: 82% of parents are concerned about their children's exposure to inappropriate information and 77% about inaccurate information; 76% of parents and carers indicated that their children "may be too trusting of the technology and not think critically about the information it provides" (Alan Turing Institute, 2025), while 72% of teachers are concerned about its effect on critical thinking (Alan Turing Institute, 2025).

Low digital literacy is itself identified in the NSPCC's 2025 review, *Viewing Generative AI and children's safety in the round* as a factor that can "heighten children's vulnerability to the risks associated with generative AI".

The statutory position in England has not kept pace. The Curriculum and Assessment Review found that the national curriculum "contains limited references to AI" (Curriculum and Assessment Review, 2025, p. 38). *Keeping children safe in education* names generative AI as a contact risk and AI-generated images as a conduct risk, within its four areas of online risk, but sets out no explicit requirement to teach about AI as a technology (Department for Education, 2026, para. 165). The UKCIS framework *Education for a Connected World* includes some AI-related statements, but its coverage is narrower (UK Council for Internet Safety, 2020) than what is covered within the Checkpoints. The AI content that maintained schools in England are statutorily required to teach is recent and narrower than the subject itself: the Computing curriculum makes no explicit reference to AI (Department for Education, 2013), and revised Relationships, Sex and Health Education guidance introduces AI content for secondary pupils from September 2026, though this is largely confined to named online risks rather than to understanding AI (Department for Education, 2025).

AI therefore sits within schools' online safety responsibilities, but with a narrower body of explicit statutory content behind it. The Checkpoints address this and provide evidence towards a whole-school approach to online safety and AI.

2. Development of the assessments

2.1 Development overview

The Digital Citizenship & AI Literacy Checkpoints have been developed by CENTURY. CENTURY's experienced teachers within the Curriculum and Assessment Development team created the Digital Citizenship & AI Literacy specification. The development process is summarised in the following stages: Digital Citizenship & AI Literacy specification creation, blueprint development, question authoring, internal review and proofing, internal user testing.

The detailed methodology for each stage is set out in §2.2 to §2.7 of this technical manual.

2.2 Digital Citizenship & AI Literacy specification

The defined specification was compiled by CENTURY's Curriculum & Assessment Development team, drawing on a range of sources rather than any single framework:

- DigComp 2.2, the European Commission's Digital Competence Framework for Citizens, which informed the topic structure
- the four dimensions of AI literacy used to build the GLAT, which informed the AI content of the specification (Ng et al., 2021, cited in Jin et al., 2025)
- the national standards for essential digital skills and the Essential Digital Skills Qualifications built on them (Department for Education, 2019; Gateway Qualifications, 2021)
- UKCIS *Education for a Connected World* (§1.3)
- statutory and advisory guidance, including *Keeping children safe in education* and the national curriculum for computing
- published research on children's use of, and exposure to, digital technology and generative AI
- the professional teaching experience of CENTURY's Curriculum & Assessment Development team

The specification is broader than any single Checkpoint. The content statements suitable for this Checkpoint family were selected, covering four topics and eight sub-topics. The selected content statements form the content of the blueprint (§2.3).

2.3 Blueprint development

The blueprint is the foundational design document for each Checkpoint. It is created before any questions are authored and specifies the structure, content and balance of the Checkpoints.

The topics, sub-topics and content statements sampled in each Checkpoint are shown in the structure diagram in Appendix A. Blueprints are owned and developed in-house by CENTURY's Curriculum and Assessment Development team, who hold the expertise for the Digital Citizenship & AI Literacy Checkpoints. Each blueprint is quality assured internally before being signed off by the relevant subject lead. Once signed off, the blueprint forms the basis for question authoring (§2.4) and internal review (§2.6).

2.4 Question authoring

Question format

Every question is multiple-choice: a single correct answer is selected from a fixed set of options, and distractors are designed to reflect common misconceptions where possible. Questions usually carry three options.

All questions are scored dichotomously: one mark for a fully correct response, zero otherwise. Each question contributes equally to the raw score.

Many questions are written to assess application and the skills needed for critical thinking. This design holds even where a content statement is itself expressed as recall, because those questions are set in an appropriate context and require the student to apply their knowledge to the situation presented.

Question style guide

A standard question style guide is applied across the Digital Citizenship & AI Literacy Checkpoints to ensure consistency of presentation and to control variance in difficulty that could be introduced by how a question is worded or presented. Key style requirements standardise command words, stem length, context, emphasis such as bold and italics, layout, fonts and table design.

Question difficulty

Each question is assigned an estimated difficulty on a four-point scale when it is authored. The estimate is a professional judgement made by the assessment experts within CENTURY’s Curriculum and Assessment Development team, based on three features of the question: the

contextual demand it places on the student, rated as an unapplied question, a familiar simple application, a novel simple application or a complex application; the cognitive demand implied by its command word, from retrieval through to evaluation; and the reading demand of the stem.

Reading demand is deliberately controlled, reducing the risk that a question assesses an alternative construct such as reading comprehension (see Reading age below).

The content statements have been mapped against the UKCIS framework *Education for a Connected World* as evidence of the level at which the Checkpoints are pitched. More than half map to the 7 to 11 band and more than a quarter to the 11 to 14 band, placing most of the assessed content at or below the expectations already set for learners of ten and above.

Reading age

Reading age is calculated from the Flesch-Kincaid grade level and expressed as a UK reading age. Each answer option is counted as a separate sentence, so the measure reflects what a learner actually reads rather than treating a question as continuous prose. All Checkpoint versions have an average reading age below 9 years.

Nugget linking

Where possible, relevant nuggets from CENTURY's Digital Skills Secondary course have been linked to questions, so that nuggets can be recommended after the Checkpoint to address areas for improvement. Every question will in addition be linked to an appropriate nugget in CENTURY's forthcoming Digital Citizenship & AI Literacy course, so that every area for improvement a Checkpoint identifies has follow-up learning available.

Accessibility

Questions are authored to be accessible to the full range of students likely to sit them:

- **Vocabulary:** controlled to meet the target reading age. Technical or subject-specific terms are introduced only where they form part of the content being assessed.
- **Cultural capital:** requirements outside the construct are consciously avoided. A question should be accessible on the basis of the content it is testing, not on the basis of prior knowledge of specific cultural references.
- **Colour:** checked for contrast against accessibility guidelines wherever it is used for a functional purpose.

2.5 Topics and weightings

Using digital tools and AI safely is a substantial feature of the assessment: approximately half of the questions, spanning three of the four topics, are deemed by CENTURY's Curriculum and Assessment Development team to assess safety-focused content.

The topics are drawn from the competence areas of the *European Digital Competence Framework for Citizens* (Vuorikari, Kluzer and Punie, 2022). The competence area of safety has been adapted to be Digital Security, and Understanding & Interacting with AI has been added as a further topic.

Information & Data Literacy

The topic carries 20% of the assessment, weighted heavily towards evaluation: four of its five questions assess the sub-topic Evaluate Information & Data, reflecting that the risks sit in judging information.

Information & Data Literacy is included because the ability to find, evaluate and manage digital information is a core of digital literacy, appearing in both the national curriculum for computing (Department for Education, 2013) and the national standards for essential digital skills (Department for Education, 2019).

Understanding & Interacting with AI

The topic carries the greatest weight in the assessment (40%), weighted towards application and critical thinking rather than recall about AI systems: five of its ten questions assess the sub-topic Interacting with AI and four assess Principles of AI Systems, with a single question on Knowledge of AI Systems.

Understanding & Interacting with AI is included to address the gap between children's use of generative AI and their understanding of it. This emphasis on applied use and the skills needed for critical thinking reflects Jin et al.'s account of generative AI literacy, which they describe as requiring more than knowledge of how the technology works: it also requires skill in writing prompts and in judging the outputs produced (Jin et al., 2025). The weighting also reflects the Curriculum and Assessment Review's conclusion that young people "should understand how [AI] works, its capabilities and its limitations" and "should learn how to use AI effectively, without becoming dependent on it" (Curriculum and Assessment Review, 2025, p. 38). The topic's sub-topics follow this division between understanding AI and using it.

Communication & Collaboration

The topic carries 12% of the assessment; its three questions all assess the single sub-topic Safe Use of Digital Tools.

Communication & Collaboration is included because communicating through digital tools is where students can be exposed to other users, and with them the contact and commerce risks that *Keeping children safe in education* expects a whole-school approach to online safety to cover (Department for Education, 2026, paras. 164–166; §1.3). Its single sub-topic, Safe Use of Digital Tools, assesses the knowledge students need to use digital tools safely when communicating with others.

Digital Security

The topic accounts for 28% of the assessment, divided between two sub-topics: Protecting Devices and Protecting Personal Data.

Digital Security is included because these practices protect learners' accounts, devices and personal information. Phishing and financial scams are named among the four areas of online risk that a school's whole-school approach to online safety is expected to cover (Department for Education, 2026, paras. 164–166). The topic's wider content corresponds to the UKCIS Privacy and security strand, which sets out "both behavioural and technical strategies to limit impact on privacy and protect data and systems against compromise" (UK Council for Internet Safety, 2020). Asked which digital skills students could improve on, respondents named "protecting yourself on the internet" most often, ahead of spotting misinformation (53% against 51%) (AQA, 2026), and the Curriculum and Assessment Review concludes that "safeguarding young people in a digital world demands clear, consistent, and compulsory coverage across the curriculum" (Curriculum and Assessment Review, 2025, p. 38). Digital Security is the topic most directly concerned with online safety, which, with critical thinking, is one of the two overriding themes of the Checkpoints (§1.3).

2.6 Internal review and proofing

Every question passes through a rigorous, layered quality assurance process before release, with each layer addressing a different class of fault and any failed layer repeated until no further faults are found. Review is carried out by automated checks and by multiple specialists from CENTURY's Curriculum and Assessment Development team, who bring professional teaching experience to the review. Only questions with a clear pass at every layer proceed to release.

2.7 Internal user testing

Before release, questions are tested internally within CENTURY by colleagues from outside CENTURY's Curriculum and Assessment Development team. Many of these reviewers also have teaching experience. The purpose of this pass is a final user-experience check. Questions that surface issues at this stage are revised and re-checked before release.

3. Validity

3.1 Approach to validity

Validity refers to the degree to which evidence and theory support the interpretations of the assessment output for its intended uses. Validity is a property of the uses of an assessment's output, not of the assessment itself.

The Digital Citizenship & AI Literacy Checkpoints are designed to support the uses set out in §1.1. This section documents the validity evidence currently available for those uses, presented under the headings:

- **Content validity (§3.2):** the extent to which the questions cover the content the Checkpoints are designed to measure.
- **Fairness (§3.3):** the extent to which the Checkpoints measure the construct equally well across different groups of students.

Validity evidence is cumulative. The evidence below will be extended as further evidence becomes available (§3.4).

3.2 Content validity

Content validity refers to the alignment between the questions in the Checkpoints and the content they are designed to measure.

For the Digital Citizenship & AI Literacy Checkpoints, content validity is established using the mechanisms below.

Blueprint-based design

Each Checkpoint is built against a blueprint that maps the content statements to topics and sub-topics, sets proportional weightings and specifies the question count, before any question is authored (§2.3).

Question-level mapping

Every question is mapped to a specific CENTURY content statement and, where the content is covered, to a corresponding Digital Skills Secondary nugget; every question will also be linked to a nugget in CENTURY's forthcoming Digital Citizenship & AI Literacy course. The blueprint records this mapping and is used to verify that every topic is represented in the final Checkpoint version in proportion to its planned weighting.

External comparison

External corroboration is available for some of the content statements assessed. The AI-specific content statements were compared with the retained items of the GLAT, a published instrument validated with higher education students. 40% assess essentially the same concept as a GLAT item, and a further 20% compare in part.

All twenty-five content statements have separately been mapped against *Education for a Connected World*, the UK Council for Internet Safety's framework for online education (§1.3). Nineteen map to at least one 'I can…' statement; the six that do not are AI-specific points that the framework, published in 2020, predates. Every content statement other than those six therefore has a counterpart in an externally published framework.

Both comparisons show that the Checkpoints assess content found in externally published frameworks. They do not show that the Checkpoints share those instruments' statistical properties: no evidence of reliability or item difficulty transfers from the GLAT (§5).

Specialist authoring and review

Questions are authored by experienced subject specialists from CENTURY's Curriculum and Assessment Development team and reviewed by different specialists within the team, with a further check by a CENTURY English specialist. No reviewer assesses a question they authored, so every question is judged by someone who did not write it. Questions are checked against the blueprint at review, including alignment to the intended topic, sub-topic and content statement.

Checkpoint version equivalence

Each Checkpoint version is parallel by design. Each question exists as a set of parallel versions, one in each Checkpoint version. Within each set, the following are held constant:

- the topic, sub-topic and content statement assessed;
- the question format, the number of options and the cognitive demand;
- the content statement being assessed;
- the reading demand, controlled to the same standard in every version (§2.4).

What varies between Checkpoint versions is surface content:

- the stem context, including the scenario and the concrete examples used;
- the wording of the question, paraphrased without altering demand.

Equivalence was monitored through structured review. Every version of a question was reviewed simultaneously, so that equivalence could be judged directly, and this was carried out across several internal review rounds. Automated checks were run across the Checkpoint versions to confirm that each set was structurally consistent and that the intended parallel features had been preserved. Reading demand is controlled rather than equated: the average reading age of each Checkpoint version falls within half a year of the others. Currently, there have not been any statistical procedures to establish empirical equivalence (§5).

3.3 Fairness

Fairness refers to the principle that the Checkpoints should measure the construct equally well across different groups of students, independent of any group-level differences in attainment.

Fairness currently rests on the development process: questions are authored to be accessible to the full range of students likely to sit them, through controls on vocabulary, cultural capital and colour contrast (§2.4).

CENTURY shall look to confirm fairness regularly using differential item functioning analysis when there is sufficient response data from a sample large enough to compare groups of the same ability (§5). Accessible authoring reduces the risk that a question creates a barrier unrelated to the content it assesses; the analysis should be used to identify if such a barrier remains.

3.4 Ongoing validity evidence

This technical manual records the validity evidence available at the date of publication. Further evidence is intended to be added as it becomes available, including evidence drawn from live administrations of the Checkpoints and any comparison of Checkpoint results with other measures of digital citizenship and AI literacy.

4. Score reporting and interpretation

4.1 Reports in the CENTURY ecosystem

The Checkpoints produce reports at two levels. The contents of each are summarised below; the full list of outputs is set out in §4.2 and §4.3.

- **Student-level reports,** providing each student's performance at topic and content statement level, a question breakdown, and personalised nugget recommendations for the areas identified for improvement.
- **Cohort-level reports,** aggregating performance across the class or year group at topic and content statement level, and recommended nuggets for the cohort.

Reports are available straight away to teachers and senior leaders through the CENTURY platform.

4.2 Interpreting individual scores

For an individual student, a Checkpoint produces:

- the percentage score;
- the time taken to complete the Checkpoint;
- the number of questions seen;
- the number of correct answers;
- a topic breakdown, giving the score within each topic;
- recommended nuggets;
- a question breakdown, showing which questions were answered correctly and incorrectly, and the topic each belongs to.

The overall percentage score indicates how much of the assessed content the student has secured, but it is not referenced to a national sample and does not carry a standardised scale. The topic and question (content statement) breakdowns should be interpreted as diagnostic information.

4.3 Interpreting cohort results

Cohort reports aggregate student-level results at the class or year-group level. Each report gives:

- the average score across the cohort;
- the average time taken to complete the Checkpoint;
- the percentage of questions seen;
- a topic breakdown, giving the average score within each topic;
- strengths: the questions the cohort answered correctly most often;
- areas for improvement: the questions the cohort answered incorrectly most often;
- recommended nuggets for the cohort.

The topic breakdown shows where the cohort is stronger and weaker across the four topics. Topic averages should be read as indicative of where to look rather than as precise measures. A topic average that is below the others may point to a topic warranting attention in curriculum planning.

Strengths and areas for improvement are reported at question level, and are the most directly actionable part of the report. Because each question assesses a single content statement, an area for improvement names a specific piece of content the cohort may not have secured.

Recommended nuggets follow from the areas for improvement, where a linked nugget exists in CENTURY's Digital Skills Secondary course. Not every question currently has one, particularly in the AI-focused content, so the recommendations do not yet cover every gap the report identifies. This will change when CENTURY's Digital Citizenship & AI Literacy course is released, as every question will then have a linked nugget (§5.2).

Cohort-level interpretation supports curriculum and department-level planning rather than individual intervention. Schools are best placed to interpret cohort results in the context of their own intake, prior teaching and the provision already in place.

4.4 Interpreting progress over time

The Checkpoint versions allow a student or cohort to be re-assessed on equivalent content without exposure to the same questions (§3.2). Re-assessment on a second Checkpoint version after a period of teaching or intervention gives a measure of change at overall, topic and content-statement level.

Changes between sittings should be considered against the limitations of the Checkpoints set out in §5.

4.5 Common use cases

The Checkpoints support a range of uses at student, class and cohort level. The most common are set out below:

- **Diagnostic use before teaching.** A Checkpoint sat before a unit of work establishes what students already know and which content statements need the most attention, so that teaching time can be directed accordingly.
- **Identifying whole-cohort gaps.** Cohort-level breakdowns identify content that a class or year group has not secured, informing curriculum planning and the sequencing of teaching.
- **Targeting follow-up resources.** Linked nuggets allow students to be directed to specific learning content in response to the gaps their Checkpoint identifies.
- **Measuring change after intervention.** Re-assessment on a different Checkpoint version after teaching indicates whether identified gaps have been addressed, subject to the cautions in §4.4.
- **Evidence for self-evaluation.** Cohort results provide consistent evidence of what a school's students know about digital citizenship and AI literacy, for use in self-evaluation and in accounting for the school's provision (§1.1).

4.6 Limits of interpretation

A Checkpoint has been designed to inform classroom and school-level decisions about teaching and intervention. When interpreting results:

- The overall percentage score describes performance against the content statements. It is not referenced to a national sample, carries no standardised scale, and does not locate a student or cohort relative to any external population.
- Topic and question breakdowns are diagnostic indicators rather than scores in their own right. Each topic is assessed by between three and ten questions and each content statement by a single question, so they should be used to highlight candidate areas for follow-up rather than to make precise judgements about relative strength.
- Differences between two sittings should be interpreted conservatively. A small change in overall score should not be treated as evidence of progress or decline; change is most safely read at topic level, where it is substantial, consistent across several questions, and corroborated by classroom evidence (§5).
- Results should be considered alongside other classroom evidence when teachers and schools draw conclusions about individual students or cohorts.

5. Limitations and ongoing development

The quality controls on the Checkpoints at this stage are design-based. Every question is built to a blueprint, authored and reviewed in layers by specialists from CENTURY's Curriculum and Assessment Development team, controlled for reading demand, and mapped to externally published frameworks where possible (§2, §3.2). What is not yet available is evidence drawn from student responses, which can only come from live use.

The questions have therefore not been trialled before release, and no psychometric analysis of student responses has been carried out to date.

Question quality is a matter of professional judgement by the assessment experts within CENTURY's Curriculum and Assessment Development team rather than measured performance. Questions were authored and reviewed against the blueprint and the style guide (§2.4, §2.6), but no evidence exists as to how difficult any question proved in practice, or how well it separated stronger from weaker students. A question that performs poorly would not be identified until it is in use, which is what the question-level monitoring described in §5.1 is designed to surface.

The topics within each Checkpoint should be treated as a content framework rather than as statistically separated abilities. They organise the assessment and set a deliberate emphasis towards particular areas; they are not a claim that each measures a distinct underlying ability.

The results currently carry no external reference point. They describe what a student or cohort has secured against the content assessed; in the future CENTURY hopes to provide a standardised score locating them relative to a national population and an age-related expectation.

Change between sittings cannot be quantified with confidence. The Checkpoint versions are parallel by design but have not been equated statistically (§3.2), so part of any difference may reflect residual differences between the Checkpoint versions.

A further limitation concerns the follow-up the reports can offer. Personalised recommendations depend on a question having a linked Digital Skills Secondary nugget, so a report may therefore identify a gap that it cannot direct the student to learning for. The limitation is expected to be temporary: every question will be linked to a nugget in CENTURY's forthcoming Digital Citizenship & AI Literacy course, whose release is among the development work set out in §5.2.

The derivation of the topics and content statements is evidence-informed: it draws on published research, existing guidance, existing qualifications and on the professional teaching experience of CENTURY's Curriculum and Assessment Development team. The specification is nonetheless CENTURY's own and is non-statutory: no external body defines, reviews or accredits the content the Checkpoints assess, so results describe performance against a framework CENTURY has defined rather than against an externally agreed standard.

5.1 Ongoing review

Live administration of the Checkpoints will, over time, provide the response data required for further statistical evidence to improve future reporting capabilities. The following are intended:

- Question-level statistics from live administrations will be monitored. Questions that a large majority of students answer correctly or incorrectly, or that behave inconsistently with the rest of the Checkpoint version, will be flagged for review and, where necessary, revised or replaced.

- Comparison of results across a Checkpoint family in live use would provide the first practical evidence as to what extent the Checkpoint versions behave equivalently (§3.2).

- The specification will be reviewed as technology, guidance and curriculum requirements change. The AI content in particular is expected to date faster than the rest, and content statements were excluded at drafting where they described rapidly evolving aspects of the technology.

The outcomes of these reviews will be recorded in future versions of this technical manual.

5.2 Future development

Further work intended for the Checkpoints includes:

- Psychometric analysis of live response data, including classical item statistics, measures of internal consistency, differential item functioning (§3.3), and factor analysis to examine whether the four topics are reflected in how students actually perform and whether the assumption of a single underlying construct holds. This becomes possible once sufficient live data has accumulated.

- Releasing CENTURY's Digital Citizenship & AI Literacy course, so that every question in a Checkpoint is linked to an appropriate nugget and every area for improvement can be directed to follow-up learning.

6. Glossary and references

6.1 Glossary

Blueprint. The design document for each Checkpoint, specifying its structure, content and balance.

Checkpoint. A single assessment, from any Checkpoint family, that a student can sit.

Checkpoint family. All the Checkpoints that assess the same content statements with different questions.

Checkpoints. Two or more Checkpoints.

Checkpoint versions. The Checkpoints in one family, for example Checkpoints A, B and C.

Cohort. A defined group of students sitting a Checkpoint together, such as a class or a year group.

Construct. The attribute an assessment is designed to measure. For the Checkpoints, the construct is digital citizenship and AI literacy, treated as a single attribute sampled across four topics.

Content statements. The statements in the specification that a Checkpoint assesses.

Differential item functioning (DIF). A property whereby an item has a higher or lower probability of being answered correctly by students from one group, compared with students of the same ability in another group.

DigComp 2.2. The European Commission's Digital Competence Framework for Citizens.

Digital citizenship. "...the ability to navigate our digital environments in a way that's safe and responsible and to actively and respectfully engage in these spaces" (MediaSmarts, 2026).
Digital Citizenship & AI Literacy Checkpoints. The CENTURY suite of assessments available for digital citizenship and AI literacy.

Digital literacy. "...the knowledge, behaviours and confidence required to use technologies and computer systems creatively, safely and effectively. It also involves the ability to make well-informed critical judgements about the implications, risks and impact of how digital technology is used" (Curriculum and Assessment Review, 2025, pp. 36–37).

Distractor. An incorrect option in a multiple-choice item.

Essential Digital Skills. The national standards for essential digital skills published by the Department for Education in 2019.

Factor analysis. A statistical method used to test whether responses to a set of items reflect one or more underlying dimensions.

GLAT. The Generative AI Literacy Assessment Test.

Item. A question or task presented to the student, together with its options and correct answer.

Multiple-choice question. An item type in which the student selects one correct answer from a set of options.

Nugget. A micro-lesson of learning content on the CENTURY platform.

Parallel form. A version of an assessment built to the same blueprint and matched on content, question format and cognitive demand, but containing different questions.

Parallel set. The versions of a single question, one in each Checkpoint version.

Raw score. The number of questions answered correctly on a Checkpoint.

Reading age. The approximate chronological age at which a typical reader could read a given text.

Specification. The Digital Citizenship & AI Literacy specification, CENTURY's internal document setting out the topics, sub-topics and content statements assessed.

Stem. The part of an item that presents the context and poses the question, excluding the options.

Sub-topic. A subdivision of a topic.

Suite of assessments. Every Checkpoint version in every Checkpoint family.

Topic. One of the four content areas across which the construct is sampled.

UKCIS. The UK Council for Internet Safety, publisher of *Education for a Connected World*.

Validity. The degree to which evidence and theory support the interpretations of scores from an assessment for its intended uses.

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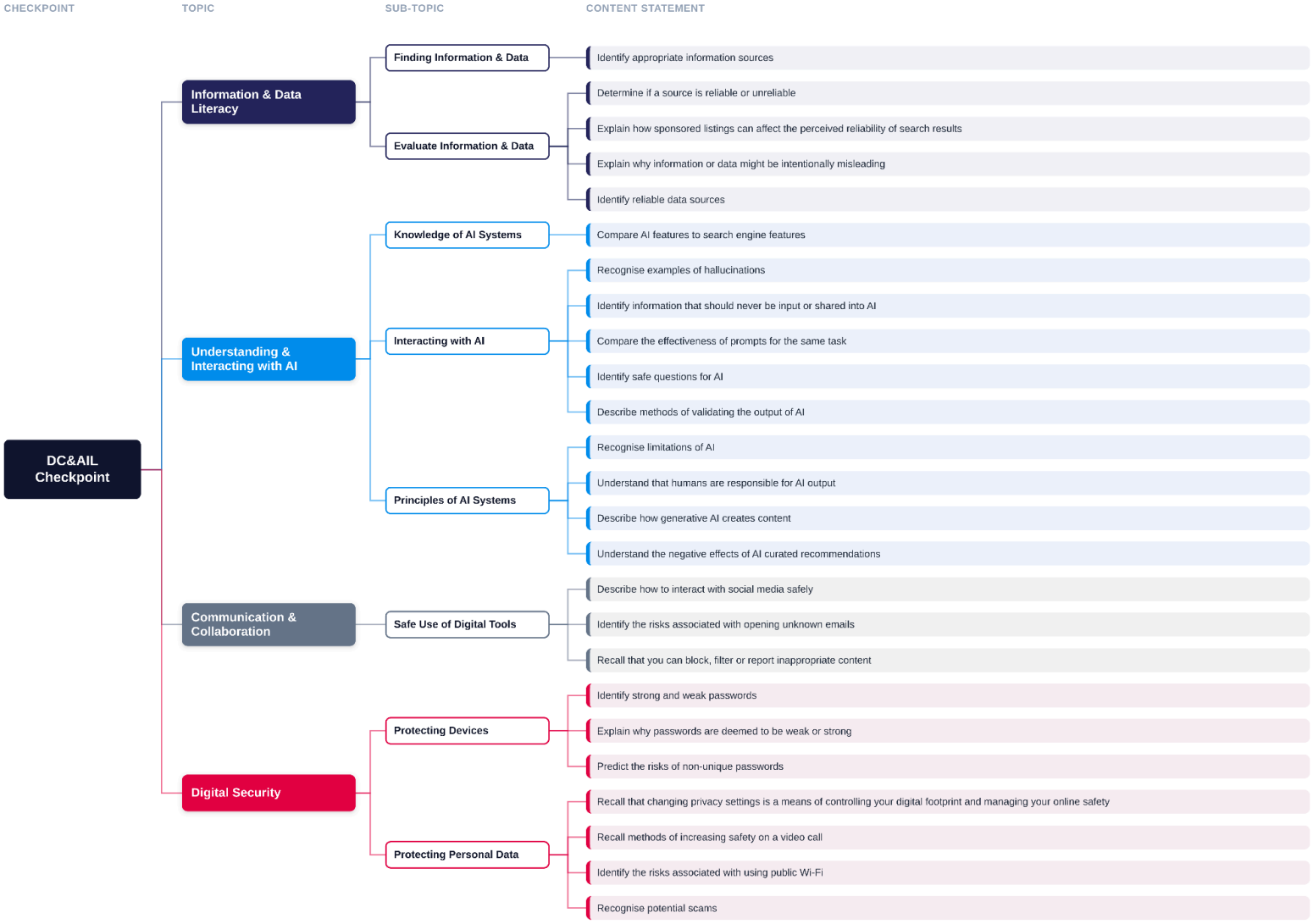
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Appendix A: Checkpoint structure


CHECKPOINT
TOPIC
SUB-TOPIC
CONTENT STATEMENT
DC&AIL Checkpoint
Information & Data Literacy
Finding Information & Data
Identify appropriate information sources
Evaluate Information & Data
Determine if a source is reliable or unreliable
Explain how sponsored listings can affect the perceived reliability of search results
Explain why information or data might be intentionally misleading
Identify reliable data sources
Understanding & Interacting with AI
Knowledge of AI Systems
Compare AI features to search engine features
Interacting with AI
Recognise examples of hallucinations
Identify information that should never be input or shared into AI
Compare the effectiveness of prompts for the same task
Identify safe questions for AI
Describe methods of validating the output of AI
Principles of AI Systems
Recognise limitations of AI
Understand that humans are responsible for AI output
Describe how generative AI creates content
Understand the negative effects of AI curated recommendations
Communication & Collaboration
Safe Use of Digital Tools
Describe how to interact with social media safely
Identify the risks associated with opening unknown emails
Recall that you can block, filter or report inappropriate content
Digital Security
Protecting Devices
Identify strong and weak passwords
Explain why passwords are deemed to be weak or strong
Predict the risks of non-unique passwords
Protecting Personal Data
Recall that changing privacy settings is a means of controlling your digital footprint and managing your online safety
Recall methods of increasing safety on a video call
Identify the risks associated with using public Wi-Fi
Recognise potential scams

Appendix B: Digital Citizenship & AI Literacy Terminology

Checkpoint terminology

LEVEL 1

Suite of assessments

Every Checkpoint

LEVEL 2

Checkpoint family

All Checkpoints that assess the same content statements

LEVEL 3

Checkpoint

One assessment a student can sit

= Checkpoint version

