

# Cambridgeshire Progression in Computing Capability

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## Assessing Computing Capability

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Since changes were made to the National Curriculum and the assessment framework in September 2014 (most notably, the removal of National Curriculum levels), all schools have been challenged to find an effective way of assessing their pupils' progress in all curriculum areas, *including Computing*.

The DfE conducted a public consultation on primary assessment and accountability (Autumn 2013) and the summary, along with further guidance, was published by the DfE (August 2014) and can be found [here](#). This includes information on end of Key Stage and end of year assessment procedures and subject specific guidance from expert groups.

Different organisations have produced guidance on how best to implement *an system for assessing computing* which clearly shows where a pupil is at, and where they need to go next. These vary from thought provoking-guidance about the challenges this raises to quite specific lists of 'I can' statements for teacher, peer and self-assessment.

This presents an obvious challenge for schools:

### **How should I manage the assessment of computing in my school?**

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The answer probably depends on a number of additional questions:

- What approach have you chosen for delivering the Computing Curriculum? Is it working for you? Is there an obvious assessment system which supports it?
- What is your school's chosen approach to assessment in other curriculum areas? Can Computing be assessed in line with this?
- How much evidence does your school require to support teachers' judgements? Are names on a grid enough, or do you need a collection of evidence to 'prove' these?
- Is the subject knowledge amongst your teachers high enough for them to be able to make a judgements accurately? For example, do they know what debugging should look like in Y1? What about in Y5?



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**This document aims to support you in thinking through some of the challenges presented by assessing computing, and share an overview of how the approach suggested in the *Cambridgeshire's Progression in Computing Capability Materials* could work for you.**

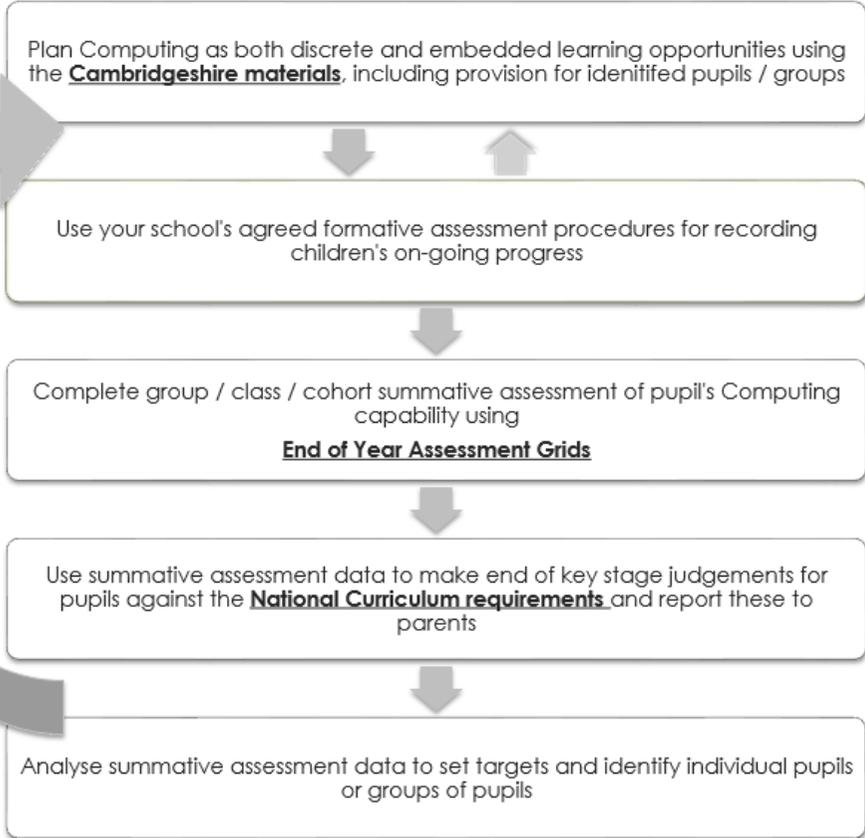
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# Cambridgeshire's End of Year Assessment Grids

Cambridgeshire County Council's Education ICT Service have our own suggested approach to the Computing Curriculum ([The Cambridgeshire Progression in Computing Capability Materials](#)) and have also produced assessment guidance to support the use of these materials. The approach is aimed at simplifying the assessment process, whilst allowing schools to apply their own established practices in ensuring their judgements are reliable...

The grid (below) is designed to provide an 'at a glance' record of pupils' achievement against the Cambridgeshire Progression in Computing Capability materials. Highlight the year group(s) you are assessing in the columns below and then complete the final 3 columns to show those pupils who have not yet achieved expected levels or have achieved over the expected levels. In the middle column, add the range of learning experiences pupils have had over the year. You can find the grid at <http://www.ccc-computing.org.uk/assessment>.

The following is one suggested process for assessing and recording pupils' ICT capability, although much will depend on your school's choices around 'assessment without levels'.



# Assessment vs Tracking

## 'Assessment' vs 'Tracking'

When thinking about the assessment of computing, it's important that teachers understand and recognise the difference between assessing pupils and tracking progress. Under the guidance issued by the DfE, schools have much more choice over both the ongoing assessment of pupils' Computing capability, including their day-to-day formative assessment strategies, and the ways in which they track pupils' progress such as through their choice of Management Information Systems.

Regardless of how comprehensive a schools' tracking system is, if teachers' subject knowledge is low, if they do not feel confident with assessing the **learning process** pupils have gone through when completing an activity (rather than just the outcome) or if they do not build an evidence base which they can use to inform their judgements (see *over the page*) any data collected and entered will lack validity. Much of this style of evidence collection may already be present in the school, particularly in the Foundation Stage or in subjects such as PE or music. Any good practice elsewhere in the school should be shared throughout the school.

Getting the process of **accurately** assessing pupils' against end of Key Stage expectations is crucial in the early stages of

Keeping pupils' work in individual folders and linking to a selection of folders to help you 'benchmark' pupils

Pupils keeping reflective blogs / journals of their learning experiences, especially when programming

## Formative Assessment

The DfE document 'Primary assessment and accountability under the new national curriculum' (July 2013) clearly states that 'schools will be able to introduce their own approaches to formative assessment'. Whilst this is designed to provide schools with the freedom to find solutions which work for them, it also leaves them with the dilemma of which assessment strategies will work best. This is particularly noticeable in Computing as this is a subject in which staff often lack confidence and where the need to assess the learning process is often greater than the need to assess the end product (e.g. when building a game in Scratch or creating a stop-frame animation).

Further national guidance is available from the [Computing at Schools Guide for Primary Schools](#) and the DfE funded [Quickstart Computing toolkit](#).

Conducting observations of specific pupils or with a specific assessment focus in mind...

Using open ended questions in the classroom, during group / 1:1 'interviews', with the teacher / peers / a 'grandma' figure...

# Effective Questioning

Whichever approach schools choose to adopt, appropriate and targeted questioning should continue to form an essential part of the assessment process in helping pupils to articulate their learning. The following sample questions and statements are designed to support teachers in using effective, open ended questions to collect evidence about what their pupils have learned.

What will you do differently next time? Why?

What do you do to keep your personal details as safe online as they are in the real world?

How will that choice effect your 'audience'?

Why did you choose that image / font / sound / video?

What did you notice when...?

How else could you solve that problem?

Tell me how this works.

How will you know that you've chosen the best music for your film?

What new words did you learn / use today?

What made you think of that solution / change / way of working?

What differences are there between your approach and your friend's?

Tell me more about what you've learned today.

What do you think might happen? What will you do if it doesn't happen that way?