

ICT: essential guides for school governors





This guide aims to provide governors with information about ICT and assessment so they can:

- identify the key areas for their involvement in assessment
- act as 'critical friends' to the headteacher.

The publication summarises types of assessment and governors' statutory duties in this area and provides information on how ICT can help with assessment. It does not address the assessment of ICT as a subject.

Why ICT is important in assessment

Schools receive many demands for data that specifically refers to pupil performance and assessment, so there is a need to collect, keep, analyse and present data.

ICT can play a clear role in enabling data collection and manipulation to be carried out easily and efficiently. It can for example, be used to:

- analyse overall assessment data and set targets for the school
- analyse an individual pupil's attainment and set targets for that pupil
- prepare exam entry data
- summarise data to present to governors and parents.

Types of assessment

Governors need to be aware of three commonly used terms concerning assessment:

- Summative assessment
- Formative assessment
- Assessment for Learning (AFL).

Summative assessment generally takes place at the end of a course, module or lesson and is designed to summarise the performance and attainment at the time of testing.

It is an 'assessment of learning' which may involve judging pupils' performance against national standards and when carried out formally (in GCSEs and end of Key Stage National Assessments, for example), is used to inform teachers, school leaders, parents, governors, LEAs and Government on the standards that have been attained.

Formative assessment is used to feed back information to pupils and teachers to help the learner make progress. Formative assessment involves pupils in knowing where they are in their learning, where they are going and how to get there and assists teachers in taking further actions to strengthen the learning process.

Assessment for learning uses assessments to guide pupils' learning and raise their achievement. The Assessment Reform Group defines it as 'the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there'. It is based on the notion that pupils will improve most if they understand the aim of their learning, where they are in relation to this aim and how they can achieve the aim (or close the gap in their knowledge). Assessment is formative only if the information fed back to the learner is used by the learner in making improvements.

Assessment policy

A school should have an assessment policy identifying:

- the purposes of assessment
- the strategies involved
- the assessment process
- identification and target setting for pupils with special educational needs
- moderation
- reporting
- workforce training.
- record keeping
- target setting

Schools need coherent assessment systems that support summative and formative functions of assessment. Governors may well be involved in the formulation and monitoring of these systems.

Governors' involvement with assessment

Statutory duties

The governing body has statutory duties regarding the reporting of the outcomes of national assessments at each of the following stages:

Foundation Stage

This assessment takes place throughout the final year of the Foundation stage. A Foundation Stage Profile is drawn up for each pupil in the six areas of study for which Early Learning Goals have been specified. The governing body, jointly with the headteacher, has a duty to ensure that these assessments are carried out and that the Foundation Stage Profile results are forwarded to the LEA and, in due course, aggregated to a national level. This enables schools to compare themselves against the national average. The school must offer a reasonable opportunity for parents/carers to discuss the profile and scores.

End of Key Stage 1

Assessments are undertaken in English, maths and science. During the school year, teachers administer the National Curriculum tasks and tests in reading, writing and mathematics and use the outcomes to inform their own overall assessment of a child's progress. Governors, jointly with the headteacher, have a statutory duty to report to parents a teacher assessment level in speaking and listening, reading and writing, and an overall teacher assessment level in mathematics and science. Schools must report the information set out above, plus a level for each science attainment target, to their LEA.

End of Key Stage 2

Formal assessments are undertaken in English, mathematics and science against National Curriculum standards at the end of the Key Stage as well as separate teacher assessments in these core subjects. Governors have a duty to report on these assessments in the school prospectus and the governors' annual report to parents alongside national comparative figures.

End of Key Stage 3

The governing body is required to provide a summary of teacher assessment and test results in English, mathematics, ICT and science in the school prospectus and governors' annual report, alongside national comparative figures and LEA statistics.

End of Key Stage 4/GCSE

At the end of Key Stage 4, the GCSE/GNVQ is the main way of assessing pupils. Governors have a duty to report on these examination results in the school prospectus and the governors' annual report.

End of Key Stage 5

Assessment in post-16 education typically takes the form of A/S and A2 examinations. Governors have a duty to report on these examination results in the school prospectus and the governors' annual report.



Target setting

Governing bodies are required to set and publish targets for their pupils' performance in Key Stage 2 and 3 National Curriculum Tests and in public examinations.

Setting targets requires careful analysis of assessment data held by the school – and targets should be achievable as well as aspirational. The attainment of individual pupils can be aggregated into whole-school targets. The DfES provides free Pupil Achievement Tracker software to support this process [<http://www.standards.dfes.gov.uk/performance/>].

At some schools, certain children with special needs will not be able to meet these levels. In these cases, measurable performance targets should be set using the QCA P scales or other performance criteria where appropriate.

Targets need to be set by 31st December each year for performance five terms later (targets set in autumn 2004 are for performance by pupils in summer 2006, for example). Typically, the LEA link inspector, a member of the governing body and the headteacher meet to discuss assessment data and set targets. Each year, targets must be set for the percentage of pupils who will achieve, as appropriate:

At the end of Key Stage 2:

- Level 4 or above in National Curriculum tests in English and mathematics
- Level 5 or above in National Curriculum tests in English and mathematics.

At the end of Key Stage 3:

- Level 5 or above in National Curriculum tests in English, mathematics, science and ICT.

At Key Stage 4:

- There are several targets which include grades A* – C in five or more subjects in GCSE examinations, equivalent vocational qualifications, or a combination of both.

In addition, the school must set a target for the average point score for the school to be achieved by the end of the following school year in GCSE and vocational qualifications.

The governing body cannot change these targets once they are set. Schools are required to publish details of their targets in their governing body's annual report to parents.

How using ICT can help with assessment

ICT can play an important role in helping schools to record, analyse and communicate assessment data.

Most schools have a management information system (MIS) which has a part dedicated to assessment and analysis of data. This not only assists in systematic recording of pupils' attainment, both in formal tests and informal teacher assessments, it can often also support predictions of future attainment. Equally, it can support target setting and analysis of attainment against predictions – all tasks that are time consuming if done without ICT.

There are many assessment software packages on the market, and a list of some of those available can be found on the Becta site [<http://www.becta.org.uk/mis>]. Some schools use spreadsheet software to analyse the data. This has the advantage of customising the information for the needs of the school – but may also be limited by the ability of the person who designed the sheet, and problems of adapting it to changing needs.

Even with the aid of ICT, entering and analysing assessment data is time consuming, and if sound judgements are to be made on the basis of the data, schools must be confident that both the data and the analysis are robust. Governing bodies need to be aware that, under the national agreement on workforce remodelling, teachers are not expected to routinely enter data into computers. However, where teachers have ready access to ICT, many find it is just as easy to record the results electronically at the point of marking. Many secondary schools will have assessment clerks and managers whose roles vary from entering assessment data through to analysing it and producing reports.

ICT-based assessment

Usually referred to as e-assessment, ICT-based assessment is now part of government policy and is being progressively introduced. Rather than completing written tests, pupils will be expected to interact with on-screen tests on computer. In the next five years the following activities are proposed:

- All new qualifications must include an option for assessment on screen
- All awarding bodies should be set up to accept and assess e-portfolios
- All existing GCSEs, AS and A2 examinations should be available on screen, where appropriate
- National curriculum tests available on-screen for those schools that want to use them
- The first on-demand GCSE examinations.

The timescale for these developments is short. For example, in 2005, 75 per cent of basic and key skills tests will be delivered on screen; in 2006, each major examination board will offer live GCSE examinations in two subjects, and will pilot at least one qualification specifically designed for electronic delivery and assessment. In 2007, 10 per cent of

GCSE examinations will be delivered on screen; in 2008 there will be on-demand testing for GCSEs in at least two subjects. [<http://www.qca.org.uk/6995.html>]

E-portfolios

It is increasingly common for pupils to use ICT to create an electronic portfolio of work. This is particularly relevant where ICT is used as a tool in the subject concerned, and where it can be used to record stages in the development of work – such as designing in art and D&T, or in a digital video record of performance in drama. E-portfolios also offer a means of collecting evidence which directly relates to a formal assessment and qualification, usually an NVQ. E-portfolios can be accessed anywhere (from home, work, school or college) and if web based, they enable employers or verifiers to have continuous access, as well as broadening the range of evidence types which can be submitted. This type of portfolio is now widely recognised by examination boards. They will have increasing importance as schools address the 14–19 agenda, and consider alternatives to GCSE provision.

Performance and Assessment (PANDA) data

PANDAs are produced by Ofsted and issued annually to schools. The contents of each PANDA report are confidential between Ofsted, the school and the LEA, although schools are free to disseminate the information if they wish. The reports give an overview of each school's performance in relation to other schools using data from Ofsted, the DfES and QCA. The reports are designed as a management tool to help governing bodies and school leaders develop and implement plans to raise standards [<https://www.ofstedpandas.guide.net/>].

Software packages

Screening: There are

useful packages available to help teachers screen all pupils either at entry to the school or at different stages of their education. Such packages will highlight pupils' strengths and areas where extra support will be needed.

Target setting and assessment: There are a number of packages that governing bodies and school leaders can use to help with analysing a school's assessment data. They are used to produce targets, or likely outcomes, which can guide schools in setting targets. A list of commercial packages is available on the Becta site [<http://www.becta.org.uk/mis>].

Publication of results

The results of summative assessments are used for 'league tables' comparing one school with another on the basis of their results. This does not take into account the varying circumstances of different schools. To gain a more accurate comparison, results of cohorts within a school should also be matched against schools in similar circumstances. Further 'value added' comparisons can be made by looking at the progress pupils have made during a key stage.



Accessing and analysing data

Teachers need to have easy access to the data and/or analysis of the data which originates from the administration system. This means they should be able to access the information wherever is most appropriate within school, and from home. Giving teachers increased access to the data generally leads to its greater use to inform their classroom practice.

The data analysis should be thorough, and it is the use of this analysis to inform the learning and teaching which is important. Teacher time spent on looking at the data and making decisions about the future can be very productive.

Case study

Charlton School for pupils with physical and complex learning difficulties in London has developed the idea of digital video (DV) Profiles. The profiles are digital records of achievement and progress. Many students cannot use more conventional methods of communication and having their work captured in this 'cool' medium gives kudos and increases self-esteem. The process of producing a DV Profile is one that involves the students themselves and a range of other people. The profiles are used to support the Annual Review of Statement of Special Educational Needs, and provide clear evidence of achievements of targets and objectives specified in the student's Individual Education Plan. The DV Profiles are presented on a Tablet PC at the Annual Review for the students, parents, carers and other professionals involved, to review progress throughout the year.

What the Research Says

Becta encourages the transfer of knowledge between teachers and schools. Our research network allows the research community to connect with teachers and policy makers. Our award schemes help to identify models of excellent practice and use these to promote better practice more widely. For more information, visit the Becta Research website [<http://www.becta.org.uk/research/>] or email research@becta.org.uk.

Literature review of e-assessment

E-assessment assists better exemplification for teachers and students, by posting examples of work which meets certain standards [http://www.nestafuturelab.org/research/reviews/10_01.htm].

Future action points, ways forward and the development of the learning processes and the involvement of the learner are the real lessons that can be learnt. Use of targets and estimates of current performance with pupils can form a good basis for mentoring and pupil self-assessment and lead to pupils reflecting on their own learning and investigating ways of improving.

Pupil Achievement Tracker (PAT)

The DfES provides free software called 'Pupil Attainment Tracker' to help schools with the analysis of national assessment results.

Teachers can use it to:

- ask questions about the effectiveness of their classroom practice, looking at graphical data on the progress made by their pupils
- set pupil targets informed by the progress made by similar pupils nationally
- understand fully what pupils can achieve by the diagnostic analysis of test papers.

Headteachers and senior managers can view recent performance against other similar schools to:

- help set development priorities
- ask questions about the achievement of different groups within the school
- review the success of different initiatives.

These data comparisons can then be used in the headteacher's report to the governing body. [<http://www.standards.dfes.gov.uk/performance/pat>]

Useful information

Where can you go for further help regarding ICT?

Your own LEA team, particularly the ICT adviser, should be your first contact for advice on LEA policy decisions and directions regarding assessment. Your LEA's Governor Training section may be able to direct you to support.

Assessment Reform Group (ARG)
<http://www.assessment-reform-group.org.uk>

DfES Circular 11/98: Target Setting in Schools
http://www.dfes.gov.uk/publications/guidanceonthelaw/11_98/summary.htm

DfES Standards site
<http://www.standards.dfes.gov.uk/ts/>

GovernorNet
<http://www.governor.net.co.uk/>
There are many references within the site to Assessment and the involvement of the governing body including Target Setting in Schools.
<http://www.governor.net.co.uk/cropArticle.cfm?topicAreaId=1&contentId=49&mode=bg>

The National Assessment Agency (NAA)
Helps to develop and deliver high-quality national curriculum tests and supervise the delivery and modernisation of GCSE and A level examinations.
<http://www.naa.org.uk/>

The Qualifications and Curriculum Authority (QCA)

Maintains and develops the National Curriculum, associated assessments, tests and examinations; and accredits and monitors qualifications in colleges and at work. Also provides information on P scales.
<http://www.qca.org.uk/index.html>

Teachernet

The A to Z contains a wide range of topics relevant to school leaders and managers including target setting and assessment.
<http://www.teachernet.gov.uk/management/atoz/t/targetsetting>

Examples of commercial packages:

Curriculum, Evaluation and Management Centre (CEM) produces a number of resources for institutions on providing performance indicators and target setting.
<http://www.cemcentre.org/>

NFER Nelson produces a cognitive abilities test (CAT) used to predict results that pupils will obtain at National Curriculum Levels (or GCSE grades).
<http://www.nfer-nelson.co.uk/cat/>

Fischer Family Trust (FFT): The FFT Performance Data project aims to provide analyses and data which help LEAs and schools to make more effective use of pupil performance data.
<http://www.fischertrust.org/performance.htm>

This document is one of a series, published during Autumn 2004, by Becta to support school governors. Each guide, together with supporting material, will be made available for downloading in the Governor Support area of Becta's website [<http://www.becta.org.uk/leaders/display.cfm?section=13>].

department for
education and skills



Becta is the Government's key partner in the strategic development and delivery of its information and communications technology (ICT) and e-learning strategy for the schools and the learning and skills sectors.

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